#### THIS CIRCULAR IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION

If you are in any doubts to any aspect of this circular or as to the action to be taken, you should consult your licensed securities dealer, registered institution in securities, bank manager, solicitor, professional accountant or other professional adviser.

If you have sold or transferred all your shares in Minmetals Resources Limited (the "Company"), you should at once hand this circular to the purchaser or the transferee or to the bank, licensed securities dealer, registered institution in securities or other agent through whom the sales or transfer was effected for transmission to the purchaser or the transferee.

Hong Kong Exchanges and Clearing Limited and The Stock Exchange of Hong Kong Limited take no responsibility for the contents of this circular, make no representation as to its accuracy or completeness and expressly disclaim any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this circular.

This circular appears for information purposes only and does not constitute an invitation or offer to acquire, purchase or subscribe for securities of the Company.



(Incorporated in Hong Kong with limited liability)
(Stock code: 1208)

# (1) VERY SUBSTANTIAL ACQUISITION AND CONNECTED TRANSACTION IN RELATION TO THE ACQUISITION OF THE ENTIRE ISSUED SHARE CAPITAL OF ALBUM RESOURCES PRIVATE LIMITED

- (2) PROPOSED INCREASE IN AUTHORISED SHARE CAPITAL
  - (3) SPECIFIC MANDATE TO ISSUE NEW SHARES

#### **AND**

#### (4) PROPOSED APPOINTMENT OF DIRECTORS

Financial adviser to

## Minmetals Resources Limited ROTHSCHILD

Independent financial adviser to the Independent Board Committee and the Independent Shareholders of

#### **Minmetals Resources Limited**



A letter from the Board is set out from pages 16 to 41 of this circular. A letter from the Independent Board Committee containing its advice to the Independent Shareholders in connection with the Acquisition pursuant to the terms of the Share Sale Deed is set out on pages 42 and 43 of this circular. A letter from Somerley containing its advice to the Independent Board Committee and the Independent Shareholders in connection with the Acquisition pursuant to the terms of the Share Sale Deed is set out from pages 44 to 98 of this circular.

A notice convening the extraordinary general meeting of the Company to be held at 10:30 a.m. on Thursday, 9 December 2010 at Fanling Room, Lower Level I, Kowloon Shangri-La Hotel, 64 Mody Road, Tsimshatsui East, Kowloon, Hong Kong or any adjournment is set out from pages EGM-1 to EGM-3 of this circular. Whether or not you are able to attend the meeting in person, you are requested to complete and return the accompanying form of proxy to the Company's share registrar, Computershare Hong Kong Investor Services Limited at 17M Floor, Hopewell Centre, 183 Queen's Road East, Hong Kong, as soon as possible and in any event not less than 48 hours before the time appointed for the holding of the extraordinary general meeting of the Company. Completion and return of the form of proxy shall not preclude you from attending and voting at the extraordinary general meeting of the Company should you so wish.

This circular will remain on the "Listed Company Information" page of the website of the Stock Exchange and the website of the Company for at least seven days from the date of its posting.

## **MMG's Operating Mines**

- MMG is a significant producer of zinc, copper, lead, gold and silver
- MMG has a proven track record of delivering growth through its four Operating Mines:

#### Century (Queensland, Australia)

- One of the world's largest zinc mines, Australia's largest open pit zinc mine
- Producing 500ktpa of zinc



#### Golden Grove (Western Australia)

- Zinc concentrate, copper concentrate, and lead and precious metals concentrates
- Produced 57kt zinc, 31kt copper, 29koz gold in 2009



#### Sepon (Laos)

- Copper cathode and gold doré
- Currently producing ~70ktpa of copper, expansion programme to >80ktpa



#### Rosebery (Tasmania, Australia)

- Zinc concentrate, copper concentrate, lead concentrate and gold and silver doré
- In operation since 1936, potential to extend mine life beyond 2020



#### **IMPORTANT**

This circular is not an offer of securities for sale or solicitation of an offer to purchase securities. The securities described herein have not been and will not be registered under the US Securities Act of 1933 (the "US Securities Act"), and may not be offered or sold in the United States absent registration under the US Securities Act, or an applicable exemption from the registration requirements thereof. There will be no public offering of the securities described herein in the United States.

This circular is being made by the Company. The financial adviser to the Company nor any of its directors, supervisors, officers, employees, advisers, consultants or agents makes any representation or warranty, express or implied, as to the accuracy, reliability or completeness of the information in this circular, or shall be responsible for the accuracy, reliability or completeness of any such information and nothing in this circular is, or shall be relied upon as, a promise or representation by the financial adviser to the Company or any of its directors, supervisors, officers, employees, advisers, consultants or agents.

#### Forward-looking information

Certain information contained in this circular constitutes forward-looking information. Investors and Shareholders are cautioned that forward-looking information is inherently uncertain and involves risks and uncertainties that could cause actual results, performance or achievements of the Group or the Target Group to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information. These forward-looking statements include, without limitation, statements relating to the Completion and terms of the Acquisition, the proposed strategies of the Group following Completion, the Placings and the use of proceeds from the Placings. Factors that could cause actual results to differ materially include, without limitation, the ability to complete the Acquisition, changes in the price of commodities generally or zinc, copper, lead, gold, silver and nickel specifically, and changes in Hong Kong and other relevant securities markets. In addition, specific reference is made to the section headed "Risk factors" in this circular. There can be no assurance that future developments affecting the Group or the Target Group will be those anticipated by the management. While the Company may elect to update the forward-looking information at any time, the Company does not undertake to update it at any particular time or in response to any particular event. Investors and Shareholders should not assume that any forward-looking information in this circular represents the management's estimate as at any date other than the date of this circular.

#### Currency and exchange rates

In this circular, for the purpose of illustration only, unless otherwise specified, conversion of US\$ into HK\$ is based on the exchange rate of US\$1.00 = HK\$7.80. No representation is made and there is no assurance that US\$ or HK\$ can be purchased or sold at such rate.

#### CONTENTS

	Page
Definitions	1
Glossary	9
Expected timetable	12
Letter from the Chairman	13
Letter from the Board	16
Letter from the Independent Board Committee	42
Letter from Somerley	44
Risk factors	99
Industry overview	109
Legal and regulatory regime in which the Target Group operates	140
Information of the Target Group	193
Strategies and competitive strengths of the Enlarged Group	236
Proposed Directors and senior management of the Target Group	240
Appendix I — Financial information of the Target Group	I-1
Appendix II — Financial information of the Group	II-1
Appendix III — Unaudited pro forma financial information of the Enlarged Group	III-1
	IV-1
Appendix V — Valuation Report	V-1
Appendix VI — General information	VI-1
Notice of EGM	EGM-1

In this circular, the following terms shall have the meanings set out below unless the context requires otherwise:

"A\$" Australian dollar(s), the lawful currency of Australia

"Acquisition" the proposed acquisition of the entire issued share capital of

the Target Company pursuant to the Share Sale Deed (which is conditional upon, among others, the relevant Shareholders as required under the Listing Rules having approved the proposed increase in the authorised share capital of the Company and the grant of the Specific Mandate by resolution

at an EGM)

"Album Enterprises" Album Enterprises Limited, a company incorporated on

19 January 2005 in Hong Kong with limited liability and

wholly-owned by CMN

"Album Investment" Album Investment Private Limited, a company incorporated

on 8 April 2009 in Singapore with limited liability and

wholly-owned by the Target Company

"All Glorious" All Glorious Limited, a company incorporated on

8 September 2010 in the British Virgin Islands with limited liability and wholly-owned by the Company. All Glorious was used by the Company as a special purpose vehicle for the

Acquisition

"associate" has the meaning ascribed to it under the Listing Rules

"Australia" the Commonwealth of Australia

"Australian Government" the Government of Australia

"Board" the board of Directors

"Business Day" a day on which banks are open for business in Hong Kong and

Singapore, other than a Saturday, Sunday or public holiday in

Hong Kong or Singapore

"C\$" Canadian dollar(s), the lawful currency of Canada

"CAGR" compound annual growth rate

"CEO" chief executive officer

"CFO" chief financial officer

"Chapter 18 Valuation" a valuation on the Target Company as at 30 June 2010

conducted by Grant Samuel as Competent Evaluator in

compliance with Chapter 18 of the Listing Rules

"CIS" the Commonwealth of Independent States

"CMC" 中國五礦集團公司(China Minmetals Corporation), formerly

known as 中國五金礦產進出口總公司 (China National Metals and Minerals Import and Export Corporation), a State-owned enterprise incorporated on 7 April 1950 under the laws of the PRC and the ultimate controlling shareholder

of the Company

"CMC Group" CMC and its subsidiaries other than the Group

"CMN" 五礦有色金屬股份有限公司 (China Minmetals Non-Ferrous

Metals Company Limited), a joint stock limited company incorporated on 27 December 2001 under the laws of the PRC and owned as to approximately 91.57% by CMC as at the Latest Practicable Date. CMN is a controlling Shareholder, holding approximately 63.39% of the issued share capital of

the Company as at the Latest Practicable Date

"Companies Ordinance" the Companies Ordinance (Chapter 32 of the Laws of Hong

Kong)

"Company" Minmetals Resources Limited, a company incorporated on

29 July 1988 in Hong Kong with limited liability, the Shares

of which are listed and traded on the Main Board

"Competent Evaluator" has the meaning ascribed to it under Chapter 18 of the Listing

Rules

"Competent Person" has the meaning ascribed to it under Chapter 18 of the Listing

Rules

"Competent Person's Report" has the meaning ascribed to it under Chapter 18 of the Listing

Rules

"Completion" the completion of the sale and purchase of the Sale Shares

pursuant to the Share Sale Deed

"Completion Date" the date on which the Completion occurs, which date shall be

the fifth Business Day after all the conditions precedent set out in the paragraph headed "Letter from the Board — The Acquisition — Conditions" in this circular have been satisfied in full or waived, or such other place, time and date as the

Company may agree in writing

DEFINITIONS			
"connected person"	has the meaning ascribed to it under the Listing Rules		
"Consideration Share(s)"	the new Share(s) to be allotted and issued to Album Enterprises or its nominee to satisfy part of the Purchase Price		
"controlling shareholder"	has the meaning ascribed to it under the Listing Rules		
"Conversion Price"	HK\$3.45 per Share, being the initial conversion price of the PSCS (subject to adjustment in accordance with the terms of the PSCS)		
"Conversion Share(s)"	the new Share(s) to be issued upon conversion of the PSCS		
"Current Market Price"	means, in respect of a Share at a particular date, the arithmetic average of the closing prices for one Share (being a Share carrying a full entitlement to dividends) for the 20 consecutive trading days ending on the trading day immediately preceding such date		
"Cut Off Date"	31 March 2011, or such other date as agreed between the parties in writing		
"DEEDI"	Queensland Department of Employment, Economic Development and Innovation		
"Development Projects"	(i) the High Lake zinc project located in Canada;		
	(ii) the Izok Lake zinc project located in Canada;		
	(iii) the Dugald River zinc project located in Queensland, Australia; and		
	(iv) the Avebury nickel project located in Tasmania, Australia		
"Director(s)"	the director(s) of the Company		
"EBIT"	profit before net financing expenses and income tax		
"EBIT margin"	EBIT divided by revenue		
"EBITDA"	profit before depreciation and amortisation expenses, net financing expenses and income tax		
"EBITDA margin"	EBITDA divided by revenue		

"EGM" the extraordinary general meeting of the Company to be held

at 10:30 a.m. on Thursday, 9 December 2010 at Fanling Room, Lower Level I, Kowloon Shangri-La Hotel, 64 Mody Road, Tsimshatsui East, Kowloon, Hong Kong for the purpose of considering and, if thought fit, passing the relevant resolutions to approve the Share Sale Deed and the transactions contemplated thereby including, but not limited to, the proposed increase in the authorised share capital of the Company and the grant of the Specific Mandate and any adjournment thereof a notice of which is set out at the end of

this circular

"Enlarged Group" the Group immediately after Completion

"EPM" means an exploration permit for minerals issued pursuant to

the MRA

"Escrow Deed" the escrow deed dated 17 October 2010 entered into between

the Company, Album Enterprises, All Glorious and Freehills

Singapore

"FATA" the Foreign Acquisitions and Takeovers Act 1975 (Cth)

"GBP" pound sterling, the lawful currency of the United Kingdom

"GDP" gross domestic product

"Grant Samuel" Grant Samuel and Associates Pty Ltd, the Competent

Evaluator appointed by the Company in respect of the

Acquisition

"Group" the Company and its subsidiaries from time to time

"HK\$" or "HK cent(s)" Hong Kong dollar(s) or cent(s), the lawful currency of Hong

Kong

"Hong Kong" the Hong Kong Special Administrative Region of the People's

Republic of China

"HPM" high precious metal

"Independent Board Committee" a committee of the Board comprising all the independent

non-executive Directors, namely, Mr. Li Dongsheng, Mr. Ting Leung Huel, Stephen and Mr. Loong Ping Kwan

"Independent Financial Adviser" or "Somerley"	Somerley Limited, a licensed corporation under the SFO for carrying out Type 1 (dealing in securities), Type 4 (advising on securities), Type 6 (advising on corporate finance) and Type 9 (asset management) regulated activities, the independent financial adviser appointed to advise the Independent Board Committee and the Independent Shareholders in respect of the Acquisition, including, but not limited to, the proposed increase in the authorised share capital of the Company and the grant of the Specific Mandate
"Independent Shareholders"	the shareholders of the Company, except CMN and its associates
"Independent Third Parties"	parties which are independent of and not connected with any director, chief executive or substantial shareholder of the Company or any of its subsidiaries or any of their respective associates within the meaning of the Listing Rules
"JORC Code"	the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2004 edition), as published by the Joint Ore Reserves Committee, as amended from time to time
"Laos"	the Lao People's Democratic Republic
"Last Trading Date"	18 October 2010, being the last trading date for the Shares before the date of Share Sale Deed
"Last Trading Date"  "Latest Practicable Date"	
	before the date of Share Sale Deed  18 November 2010, being the latest practicable date prior to the printing of this circular for ascertaining certain
"Latest Practicable Date"	before the date of Share Sale Deed  18 November 2010, being the latest practicable date prior to the printing of this circular for ascertaining certain information contained herein
"Latest Practicable Date"  "LME"	before the date of Share Sale Deed  18 November 2010, being the latest practicable date prior to the printing of this circular for ascertaining certain information contained herein  the London Metal Exchange  the loan agreement dated 19 October 2010 entered into between All Glorious (as borrower), the Company (as
"Latest Practicable Date"  "LME"  "Loan Agreement"	before the date of Share Sale Deed  18 November 2010, being the latest practicable date prior to the printing of this circular for ascertaining certain information contained herein  the London Metal Exchange  the loan agreement dated 19 October 2010 entered into between All Glorious (as borrower), the Company (as guarantor) and Album Enterprises (as lender)  the Rules Governing the Listing of Securities on the Stock

DEFINITIONS		
"MEPA"	a Mineral Exploration and Production Agreement dated 15 June 1993 entered into between MMG Laos Holdings Limited with the Government of Laos (as amended by the Memorandum of Understanding dated 30 November 2004)	
"MMG"	Minerals and Metals Group, being the collective brand name of the portfolio of international mining assets held by the Target Group	
"MMG Century"	MMG Century Limited, a company incorporated on 25 November 1986 in Australia with limited liability and a member of the Target Group	
"MRA"	the Mineral Resources Act 1989 (Queensland)	
"NASDAQ"	the National Association of Securities Dealers Automated Quotations	
"NGO"	non-governmental organisation	
"Nyrstar"	Nyrstar Sales & Marketing AG, a company incorporated in Switzerland and an Independent Third Party	
"Operating Mines"	(i) the Sepon copper/gold mine located in Laos;	
	(ii) the Century zinc/lead/silver mine located in Queensland, Australia;	
	(iii) the Golden Grove copper/zinc/lead/precious metals mine located in Western Australia, Australia; and	
	(iv) the Rosebery lead/zinc/copper/precious metals mine located in Tasmania, Australia	
"Oxiana"	Oxiana Limited, a company incorporated in Australia and which acquired Zinifex on 1 July 2008 to form OZL	
"OZL"	OZ Mineral Limited, previously known as Oxiana. Oxiana changed its name to OZL on 18 July 2008 subsequent to the acquisition of Zinifex by Oxiana on 1 July 2008	
"p.a."	per annum	
"Parity Securities"	in respect of the Company, any security issued or guaranteed by the Company which ranks or is expressed to rank pari passu with the PSCS	

	DEFINITIONS
"Placing(s)"	one or more potential share placement(s) to be conducted by the Company, where new Shares to be issued will be covered by the Specific Mandate
"Purchase Price"	an aggregate amount of US\$1,846,000,000 (equivalent to approximately HK\$14,398,800,000), being the consideration payable by All Glorious or its nominee to Album Enterprises for the purchase of all of the Sale Shares pursuant to the Share Sale Deed
"PRC"	the People's Republic of China (for the purpose of this circular, excluding Hong Kong, the Macau Special Administrative Region of the PRC and Taiwan)
"PSCS"	the perpetual subordinated convertible securities to be issued by the Company to satisfy part of the Purchase Price
"PSCS Holder(s)"	(in relation to the PSCS) means the person(s) in whose names the PSCS are registered
"Repatriation"	the repatriation of US\$340,000,000 (equivalent to approximately HK\$2,652,000,000) from the Target Group to Album Enterprises, the details of are set out in the paragraph headed "Letter from the Board — The Acquisition — Repatriation" in this circular
"S\$"	Singapore dollar(s), the lawful currency of Singapore
"Sale Shares"	488,211,901 ordinary shares in the share capital of the Target Company, representing all of the issued and paid-up share capital of the Target Company amounting to S\$488,211,901 as at the Latest Practicable Date
"Senior Creditors"	means, with respect to the Company, all creditors (including subordinated creditors) of the Company other than the PSCS Holder(s), the holder(s) of any Parity Securities and the holder(s) of any class of shares of the Company
"SFO"	the Securities and Futures Ordinance (Chapter 571 of the

"SFO" the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong)

"Share(s)" the ordinary share(s) of HK\$0.05 each in the issued share capital of the Company

"Share Sale Deed"

the conditional share sale deed dated 19 October 2010 entered into between Album Enterprises (as seller), All Glorious (as buyer) and the Company (as guarantor and issuer of the Consideration Shares and the PSCS) in relation to the Acquisition

"Shareholder(s)" holder(s) of the Shares

"Specific Mandate" a specific mandate for the Directors to issue up to

2,700,000,000 new Shares, the issue of the new Shares pursuant to which will be conditional upon Completion and further details of which are set out in the paragraph headed "Letter from the Board — Specific Mandate" in this circular

"Stock Exchange" The Stock Exchange of Hong Kong Limited

"subsidiary" has the meaning ascribed to it under the Companies Ordinance

"Target Company" Album Resources Private Limited, a limited liability company

incorporated on 8 April 2009 under the laws of Singapore and

wholly-owned by Album Enterprises

"Target Group" or "MMG" the Target Company and its subsidiaries

"Top Create" Top Create Resources Limited, a company incorporated on

22 January 2004 in the British Virgin Islands with limited

liability and wholly-owned by CMN

"trading day" a day on which the Shares are traded on the Stock Exchange

"Treasurer" the Federal Treasurer of the Commonwealth of Australia

"US\$" or "US¢" United States dollar(s) or cents(s), the lawful currency of the

United States of America

"Valuation Report" has the meaning ascribed to it under Chapter 18 of the Listing

Rules

"Wood Mackenzie/Brook Hunt

Report"

the industry report issued by Wood Mackenzie under the

brand name, Wood Mackenzie/Brook Hunt

"Zinifex" Zinifex Limited, a company incorporated on 9 August 2002

and which was acquired by Oxiana on 1 July 2008 to form

OZL

"%" percentage

#### **GLOSSARY**

This glossary of technical terms contains terms used in this circular in connection with the Enlarged Group. As such, these terms and their meanings may not correspond to standard industry meaning or usage of these terms

"¢/lb"

US cents per pound

"g/t" grams per tonne

"ha" hectare(s)

"km" kilometre(s)

"koz" thousand ounces

"kt" thousand tonnes

"ktpa" thousand tonnes per annum

"kV" kilovolt

"lb" pound(s)

"m" metre(s)

"Mt" million tonnes

"moz" million ounces

"oz" ounce(s)

"t" tonne(s)

"Zn" zinc

"CIF" cost, insurance and freight, a term of sale whereby the seller

quotes a price that includes the price of the goods, insurance

and freight charges to the buyer's destination

"FOB" free on board, a term of sale which means that the seller

fulfils its obligation to deliver goods when the goods pass over the ship's (or other mode of transport) rail at the named point of shipment after which the buyer has to bear all shipping and other costs and risks in respect of loss of, or

damage to, the goods from that point

#### **GLOSSARY**

"Indicated Resources"

as defined under the JORC Code, that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed

"Inferred Resources"

as defined under the JORC Code, that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity

"Measured Resources"

as defined under the JORC Code, that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity

"Mineral Resources"

as defined under the JORC Code, a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into inferred, indicated and measured categories

#### **GLOSSARY**

"Ore Reserves"

as defined under the JORC Code, the economically mineable part of a Measured Resource and/or Indicated Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are subdivided into Probable Ore Reserves and Proved Ore Reserves

"Probable Ore Reserve"

as defined under the JORC Code, the economically mineable part of an Indicated, and in some circumstances, a Measured Resource

"Proved Ore Reserve"

as defined under the JORC Code, the economically mineable part of a Measured Resource

"Sx-Ew"

solvent extraction - electrowinning

#### **EXPECTED TIMETABLE**

Set out below is the expected timetable, Shareholders should note that the timetable is subject to change

Despatch of this circular on
Latest time for lodging forms of proxy for the EGM (Note 1)
EGM to be held on
Announcement of results of the EGM on Friday, 10 December 2010
Expected Completion Date no later than 7 April 2011
Announcement of Completion
Expected Completion Date

#### Notes:

- 1. In order to be valid, forms of proxy must be lodged with the Company's share registrar, Computershare Hong Kong Investor Services Limited, by hand or by post, at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong, as soon as possible and in any event not later than 48 hours before the time appointed for holding the EGM or any adjournment thereof. Completion and return of the proxy form for the EGM will not preclude a Shareholder from attending, and voting in person at the EGM or any adjournment thereof if he so wishes. In such event, the returned form of proxy will be deemed to have been revoked.
- 2. All references in this circular to times and dates are references to Hong Kong times and dates.

#### LETTER FROM THE CHAIRMAN



(Incorporated in Hong Kong with limited liability)
(Stock code: 1208)

22 November 2010

To the Shareholders

Dear Sir or Madam,

I am writing to invite you to vote to support the creation of a powerful new force in international resources mining. We believe that the Acquisition of Minerals and Metals Group (known as MMG) from Album Enterprises, a wholly-owned subsidiary of CMN, will provide the Company with a suite of high quality international base metals assets that can transform the Company and its subsidiaries from a commodities-trading focused group into a leading internationally diversified upstream base metals group.

I truly believe that the Acquisition is in the interests of the Company and the Shareholders as a whole and I hope that you will support us, as the Independent Board Committee and Independent Financial Adviser do, by voting in favour of this transaction.

#### Benefits to Shareholders

I believe that the growth potential that the Acquisition brings to the Company is good for all our Shareholders. It is expected that the Acquisition will, in particular, enable the Company to:

- Derive an immediate substantial earnings and cashflow contribution from MMG;
- Deliver a more diversified and significant portfolio of assets, development projects and future growth opportunities;
- Reposition the Company as CMC Group's flagship international upstream base metals platform;
- Expand institutional investors' interest to support a market re-rating; and
- Combine capable and experienced boards and management teams.

#### LETTER FROM THE CHAIRMAN

#### About MMG

MMG, which is the collective brand name of the mining assets held by Album Resources, a wholly-owned subsidiary of CMN, holds a large portfolio of international mining assets and is a significant producer of zinc, copper, lead, gold and silver. It currently operates four producing mines in Australia and Laos, with a revenue for the six months ended 30 June 2010 of US\$844.7 million (approximately HK\$6,588.7 million) and EBITDA of US\$403.9 million (approximately HK\$3,150.4 million), representing an EBITDA margin of approximately 48%. It also has several other early-stage development and exploration projects in Australia, Indonesia and Canada.

#### **Board and management**

Mr. Andrew Michelmore, the current managing director and CEO of MMG, and Mr. David Lamont, the current CFO of MMG, will be joining the Board as an executive Director and CEO, and an executive Director and CFO, respectively, upon completion of the Acquisition. At the same time, Dr. Peter Cassidy, the current independent non-executive director of MMG and Mr. Jiao Jian, currently a non-executive director of MMG (and the president of CMN), will also join the Board, respectively, as an independent non-executive Director and non-executive Director.

The four appointments will bring to the Company a unique and complementary mix of PRC and international corporate expertise, insight into the base metals market of the PRC, as well as significant experience in managing mining operations and assessing and executing international mergers and acquisitions opportunities.

Additionally, the senior management team of MMG will also become part of the Company, bringing to the Enlarged Group many years experience in mining exploration, development and operational management.

As we bring the two businesses together, integration and growth initiatives will be driven with a sharp focus on shareholder value and what is best for the Enlarged Group.

#### EGM proposal

Subject to Independent Shareholders' approval at the EGM on 9 December 2010, as well as pending regulatory approval(s), the Company will acquire MMG for US\$1,846.0 million (approximately HK\$14,398.8 million) which will be satisfied through a combination of cash, and the issuance of Consideration Shares and PSCS.

At the EGM, Independent Shareholders will be asked to vote on the following important proposal that will enable the Acquisition to go ahead. The ordinary resolution (which will be voted on together through one resolution at the EGM) concerns approval by the Independent Shareholders of the Acquisition under the terms of the Share Sale Deed, which include:

(i) a proposed increase in the authorised share capital of the Company from HK\$300.0 million to HK\$900.0 million; and

#### LETTER FROM THE CHAIRMAN

(ii) the granting of a specific mandate to issue not more than 2,700,000,000 new Shares

If you are the Shareholder on record of the Shares, and whether or not you are able to attend the meeting in person, please complete and sign the accompanying form of proxy and turn the form in the enclosed pre-paid envelope to the Company's share registrar, Computershare Hong Kong Investor Services Limited by no later than 10:30 a.m. on 7 December 2010.

#### **Further information**

Please refer to the "Letter from the Board", the "Letter from the Independent Board Committee", the "Letter from Somerley" and the information set out in this circular for further information.

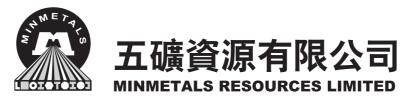
I hope you share my enthusiasm and confidence about the future prospects of the Enlarged Group and I look forward to reporting to you on our progress in the coming years.

Yours faithfully,

Li Fuli

Chairman

Minmetals Resources Limited



(Incorporated in Hong Kong with limited liability)
(Stock code: 1208)

Chairman:

LI Fuli (Non-executive Director)

Executive Directors: HAO Chuanfu ZHAN Wei

Non-executive Directors:
SHEN Ling
WANG Lixin
ZONG Qingsheng
XU Jiqing
LI Liangang

Independent Non-executive Directors: LI Dongsheng TING Leung Huel, Stephen LOONG Ping Kwan Registered Office:
12th Floor
China Minmetals Tower
79 Chatham Road South
Tsimshatsui
Kowloon
Hong Kong

22 November 2010

To the Shareholders

Dear Sir or Madam,

# (1) VERY SUBSTANTIAL ACQUISITION AND CONNECTED TRANSACTION IN RELATION TO THE ACQUISITION OF THE ENTIRE ISSUED SHARE CAPITAL OF ALBUM RESOURCES PRIVATE LIMITED

- (2) PROPOSED INCREASE IN AUTHORISED SHARE CAPITAL
  - (3) SPECIFIC MANDATE TO ISSUE NEW SHARES

#### AND

#### (4) PROPOSED APPOINTMENT OF DIRECTORS

#### INTRODUCTION

On 19 October 2010, the respective boards of directors of CMN and the Company announced that Album Enterprises (as seller), All Glorious (as buyer), a wholly-owned subsidiary of the Company, and the Company (as guarantor and issuer of the Consideration Shares and the PSCS) entered into the

Share Sale Deed, pursuant to which All Glorious conditionally agreed to buy, and Album Enterprises conditionally agreed to sell, the Sale Shares, representing all of the issued share capital of the Target Company, at the Purchase Price of US\$1,846,000,000 (equivalent to approximately HK\$14,398,800,000).

#### THE ACQUISITION

#### Share Sale Deed dated 19 October 2010

#### **Parties**

Seller : Album Enterprises, a wholly-owned subsidiary of CMN, a non-ferrous

metals resource enterprise, which in turn is a controlling shareholder of the Company holding approximately 63.39% of the issued share capital of the Company as at the Latest Practicable Date. Album Enterprises is

an investment holding company;

Buyer : All Glorious; and

Guarantor and issuer of

the Consideration
Shares and the PSCS

: the Company.

#### Assets to be acquired

The Sale Shares, representing all of the issued share capital of the Target Company. The Target Company is an investment holding company incorporated on 8 April 2009. The Target Company holds a portfolio of international mining assets known as MMG. The Sale Shares are to be acquired free and clear of all encumbrances. Please refer to the section headed "Information of the Target Group" in this circular for further information.

#### **Purchase Price**

The Purchase Price of US\$1,846,000,000 (equivalent to approximately HK\$14,398,800,000) was arrived at after arm's length negotiations between the Company, All Glorious and Album Enterprises and was determined with reference to the range of the Market Valuation and adjusted by the parties for expectations on working capital changes until 31 December 2010, including, but not limited to, the repatriation of US\$340,000,000 (equivalent to approximately HK\$2,652,000,000) from the Target Group to Album Enterprises by way of dividend and has reflected the facts that subsequent to the acquisition of the Operating Mines, the Development Projects and various exploration projects (which are currently held through the Target Company) by CMN and its subsidiaries in June 2009, MMG has undertaken significant additional capital expenditure at these assets and that there has also been a general increase in commodity prices. Please refer to the paragraph headed "Letter from the Board — The Acquisition — Repatriation" below for further details on the repatriation.

The Company has appointed Grant Samuel as the Competent Evaluator and commissioned Grant Samuel to conduct the Chapter 18 Valuation and the Market Valuation. The Market Valuation, which was prepared using methodologies in line with international market practices, is based primarily on a discounted cashflow analysis on the estimated life of mine operational parameters, including, but not limited to, Ore Reserves and Mineral Resources estimates, production profiles, operating and capital costs, potential for reserve extension and future outlook of commodity prices, with secondary consideration given to alternative valuation methodologies based on multiples of Ore Reserves and Mineral Resources, comparable company analysis and comparable transaction analysis. The Market Valuation seeks to evaluate the full market value of MMG and, accordingly, reflects the value associated with Inferred Resources and the exploration potential of the Target Group's assets, which are specifically excluded from the Chapter 18 Valuation as required by the Listing Rules.

The Market Valuation differs from the Chapter 18 Valuation in the following aspects:

- (i) the value of Inferred Resources has, in compliance with Rule 18.30(3) of the Listing Rules, been excluded from the Chapter 18 Valuation. However, a portion of the value of the Inferred Resources is included in the Market Valuation if the Competent Person is of the view that such portion of the Inferred Resources have a reasonable likelihood of being mined in the future;
- (ii) the value of a portion of the Measured Resources and Indicated Resources which cannot be assumed to convert to mineable resources according to the requirements of Chapter 18 of the Listing Rules has been excluded from the Chapter 18 Valuation. However, the value of such portion of Measured Resources and Indicated Resources is included in the Market Valuation as the Competent Person is of the view that such portion of Measured Resources and Indicated Resources have a reasonable likelihood of being mined in the future;
- (iii) the value of a portion of the current Ore Reserves is excluded from the Chapter 18 Valuation, as the exclusion of Inferred Resources caused such Ore Reserves to become theoretically uneconomically viable to extract due to mine scheduling constraints. However, the value of such portion of Ore Reserves is included in the Market Valuation;
- (iv) the Chapter 18 Valuation attributes no value to near-mine exploration, whereas some level of success in near-mine exploration and the associated value have been included in the Market Valuation; and
- (v) the Chapter 18 Valuation attributes no value to the exploration and development projects currently operated by MMG due to an absence of a currently-stated Ore Reserve. However, some value has been ascribed to such exploration and development projects in the Market Valuation.

Given the different assumptions and methods adopted in deriving the Chapter 18 Valuation and the Market Valuation to which the Purchase Price was referenced, the value of the Inferred Resources cannot be deduced by way of a simple mathematical deduction and an approximate proportion of the Purchase Price which relates specifically to the Inferred Resources cannot be ascertained.

The Valuation Report on the Chapter 18 Valuation of the Target Company's equity as set out in Appendix V to this circular provides a valuation in the range of US\$1,533 million to US\$1,741 million (equivalent to approximately HK\$11,957 million to HK\$13,580 million). This valuation has been updated for changes, including, but not limited to, changes in commodity prices, changes in foreign exchange rates and any material changes in the operational prospects for the relevant assets, since the draft Competent Evaluator's Chapter 18 Valuation of the Target Company's equity in the range of US\$1,472 million to US\$1,681 million (equivalent to approximately HK\$11,482 million to HK\$13,112 million) as disclosed in the announcement of the Company dated 19 October 2010. The Chapter 18 Valuation is based on the net debt position of the Target Company as at 30 June 2010 and has not been adjusted for any distributions or working capital changes until 31 December 2010, including, but not limited to, the repatriation of US\$340 million (equivalent to approximately HK\$2,652 million) from the Target Group to Album Enterprises by way of dividend.

The Purchase Price shall be satisfied in the following manner:

- (i) Cash:
  - (A) as to US\$100,000,000 (equivalent to approximately HK\$780,000,000) in cash, from All Glorious or its nominee to Album Enterprises, payable as follows:
    - 1. where the Completion Date falls on or prior to 31 December 2010, payment shall be made on either (a) 31 December 2010 or (b) a date falling after the Completion Date and prior to 31 December 2010, as may be agreed in writing between All Glorious and Album Enterprises; or
    - 2. where the Completion Date falls after 31 December 2010, payment shall be made on the Completion Date; and
  - (B) as to US\$694,161,888 (equivalent to approximately HK\$5,414,462,726), from the proceeds from a loan from Album Enterprises to All Glorious under the Loan Agreement, payable on Completion;
- (ii) Consideration Shares: as to US\$361,838,112 (equivalent to approximately HK\$2,822,337,274) through the issuance by the Company of 940,779,090 Consideration Shares to Album Enterprises or its nominee at an issue price of HK\$3.00 per Share on Completion; and
- (iii) PSCS: as to US\$690,000,000 (equivalent to approximately HK\$5,382,000,000) through the issuance by the Company of PSCS convertible into 1,560,000,000 Conversion Shares to Album Enterprises or its nominee at an initial conversion price of HK\$3.45 per Share on Completion.

#### Cash

- (A) Pursuant to the Share Sale Deed, US\$100,000,000 (equivalent to approximately HK\$780,000,000) will be satisfied by cash. The cash consideration will be funded from the internal resources of the Group and will be paid by All Glorious or its nominee as follows:
  - where the Completion Date falls on or prior to 31 December 2010, payment shall be made on either (a) 31 December 2010 or (b) a date falling after the Completion Date and prior to 31 December 2010, as may be agreed in writing between All Glorious and Album Enterprises; or
  - 2. where the Completion Date falls after 31 December 2010, payment shall be made on the Completion Date.

#### (B) The Loan Agreement

The principal terms of the Loan Agreement are set out below:

Borrower : All Glorious

Guarantor : Company

Lender : Album Enterprises

Principal amount of

the loan

US\$694,161,888 (equivalent to approximately HK\$5,414,462,726)

Funding date : the Completion Date

Maturity date : the date falling five years from the Completion Date

Interest rate : for any date falling within a period specified in the table below, the rate per cent per annum shown in the table below for that period:

Period commencing on (and including)	Period ending on (but excluding)	Fixed interest rate
the Completion Date	the date falling one year after the Completion Date	2% per annum
the date falling one year after the Completion Date	the date falling two years after the Completion Date	2% per annum
the date falling two year after the Completion Date	the date falling three years after the Completion Date	3% per annum

Period commencing on (and including)	Period ending on (but excluding)	Fixed interest rate
the date falling three years after the Completion Date	the date falling four years after the Completion Date	4% per annum
the date falling four years after the Completion Date	the maturity date (or, if later, the first date on which all outstanding moneys have been fully repaid)	5% per annum

All Glorious shall pay accrued interest to the lender at 12-monthly intervals in arrears (or such shorter period that ends on the maturity date)

Early repayment option

The Company, at its sole discretion, may repay the loan under the Loan Agreement, in whole or in part, subject to prior written notice of three business days. The minimum repayment amount is

US\$500,000 or multiples thereof

Guarantee The obligations of All Glorious under the Loan Agreement are

guaranteed by the Company

Conditions precedent Conditions precedent include each condition precedent to the

> Acquisition as set out in the Share Sale Deed (except any condition precedent relating to the payment of the Purchase Price) being satisfied or waived in writing prior to the proposed funding date

Freehills Singapore held the Loan Agreement in escrow pursuant to the Escrow Deed. The Loan Agreement was dated and released on 19 October 2010 pursuant to receipt by Freehills Singapore of the relevant release notice.

#### **Consideration Shares**

Pursuant to the Share Sale Deed, the Company will allot and issue 940,779,090 Consideration Shares at an issue price of HK\$3.00 per Share to Album Enterprises or its nominee on Completion. Assuming no changes in the shareholding in the Company from the Latest Practicable Date other than those contemplated under the Share Sale Deed, the 940,779,090 Consideration Shares represent approximately 46.43% of the existing issued share capital of the Company as at the Latest Practicable Date, approximately 31.71% of the enlarged issued share capital of the Company immediately after Completion (assuming no conversion of the PSCS), approximately 20.78% of the enlarged issued share capital of the Company immediately after Completion (assuming full conversion of the PSCS) and approximately 13.02% of the enlarged issued share capital of the Company immediately after Completion (assuming full conversion of the PSCS) and the issuance of all the new Shares under the Specific Mandate.

The issue price of the Consideration Shares of HK\$3.00 per Share represents:

(i) a discount of approximately 48.6% to the price per Share as quoted on the Stock Exchange

of HK\$5.84 per Share as at the Latest Practicable Date;

(ii) a discount of approximately 52.2% to the price per Share as quoted on the Stock Exchange

of HK\$6.28 per Share on the Last Trading Date;

(iii) a discount of approximately 37.2% to the price per Share as quoted on the Stock Exchange

of HK\$4.78 per Share on 24 September 2010, being the last trading day for the Shares immediately before the date of the announcement in relation to price-sensitive information

regarding the Acquisition issued on 27 September 2010;

(iv) a discount of approximately 19.6% to the average closing price of HK\$3.73 per Share as

quoted on the Stock Exchange for the last 30 consecutive trading days up to and including

24 September 2010;

(v) a discount of approximately 4.5% to the average closing price of HK\$3.14 per Share as

quoted on the Stock Exchange for the last 90 consecutive trading days up to and including

24 September 2010;

(vi) a slight discount of approximately 0.7% to the average closing price of HK\$3.02 per Share

as quoted on the Stock Exchange for the last 180 consecutive trading days up to and

including 24 September 2010;

(vii) a premium of approximately 6.8% over the average closing price of HK\$2.81 per Share as

quoted on the Stock Exchange for the last one year up to and including 24 September 2010;

(viii) a price earnings ratio of 33.56 times the earnings per Share of HK8.94 cents for the year

ended 31 December 2009; and

(ix) a price to book value of 1.09 times the net asset value per Share of HK\$2.75 as at 30 June

2010.

The PSCS

The principal terms of the PSCS are set out below:

Issuer : The Company

Maximum aggregate : US\$690,000,000 (equivalent to approximately HK\$5,382,000,000)

principal amount of

the PSCS

Status and subordination

The PSCS constitutes direct, unsecured and subordinated obligations of the Company and rank *pari passu* without any preference or priority among themselves

In the event of the winding-up of the Company, the rights and claims of the PSCS Holders shall (i) rank ahead of those persons whose claims are in respect of any class of share capital (including preference shares) of the Company, (ii) be subordinated in right of payment to the claims of all other present and future Senior Creditors of the Company, and (iii) *pari passu* with each other and with claims of holders of Parity Securities

Issue price : 100% of principal amount of the PSCS

Form and denomination

The PSCS will be issued in registered form in the denomination of US\$500,000 each

Distribution(s) : The PSCS confers a right to receive distribution(s) from and including the date of issue of the PSCS at the rate of distribution payable annually in arrears on 31 July each year, subject to the

terms of the PSCS

Rate of distribution : 1% per annum on any outstanding principal amount

Optional deferral of distributions

The Company may, at its sole discretion, elect to defer a distribution pursuant to the terms of the PSCS

Expected issue date : Upon Completion

Maturity date : There is no maturity date

Conversion period : Any time from the date of issue of the PSCS, subject to certain

conditions as provided in the terms of the PSCS

Conversion price : Initially HK\$3.45 per Share, subject to adjustment as provided for

in the terms of the PSCS

Restriction on conversion

A holder of the PSCS may only convert such number of PSCS as would not cause the Company to contravene the minimum public float requirement under the rules and regulations of the stock exchange on which the Shares are listed following conversion

Fractional Shares : Fractions of Shares will not be issued on conversion and no cash

adjustments will be made in respect thereof but (except in certain cases where any such cash payment equals to or is less than US\$10.00) a cash payment will be made to the PSCS Holder(s) in

respect of such fraction

Conversion Price adjustment

The Conversion Price will be subject to adjustment for, among other things, subdivision, reclassification or consolidation of Shares, bonus issues, rights issues, capital distributions, distributions and other dilutive events

Issuer's option to force conversion

On or at any time after 12 months after the date of issue of the PSCS, the Company may, at its sole discretion and subject to the terms of the PSCS, elect to convert the PSCS in whole but not in part into Shares. No such conversion may be made unless the volume-weighted average price of the Shares as determined on the terms of the PSCS for each of the 30 consecutive trading days ending on a date which is no more than three business days immediately prior to the date upon which notice of such conversion is given (translated into US\$ at the prevailing exchange rate set out in the terms of the PSCS), was at least 200% of the applicable Conversion Price then in effect (translated into US\$ at the fixed exchange rate set out in the terms of the PSCS). The Issuer's right to force conversion will only apply to such portion of the PSCS of a PSCS Holder that if converted, would not cause the Company to contravene the minimum public float requirement under the rules and regulations of the stock exchange on which the Shares are listed

Voting

The PSCS Holder(s) will not be entitled to receive notice of, attend or vote at general meetings of the Company by reason only of its being a PSCS Holder

Transferability

Subject to the terms of the PSCS, a PSCS may be transferred by delivery of the certificate issued in respect of that PSCS, with the form of transfer in the agreed form as set out in the terms of the PSCS duly completed and signed, to the registered office of the Company or the specified office of any registrar which the Company may appoint. Upon a transfer of the PSCS, a new certificate will be issued to the transferee. Where only part of a principal amount of the PSCS in respect of which a certificate is issued is to be transferred, a new certificate in respect of the PSCS not so transferred will be issued to the transferor. No transfer of a PSCS will be valid unless and until entered on the register of PSCS Holder(s)

Pre-emption right

Not more than 20 nor less than 15 business days (as defined in the terms of the PSCS) prior to the PSCS Holder delivering a certificate under the terms of the PSCS to the Company or the registrar (as the case may be) for the transfer of a PSCS, the PSCS Holder must notify the Company of the PSCS Holder's intention to transfer the PSCS in writing. Following the receipt by the Company of such notice, the Company may by no later than 15 business days (as defined in the terms of the PSCS) after it has received the notice, elect to purchase and cancel all or some of the PSCS the subject of the relevant notice at the price specified in the notice. The Company must complete the purchase of the relevant PSCS within 15 business days (as defined in the terms of the PSCS) of it informing the PSCS Holder that it has elected to purchase the PSCS. The periods specified for the Company to elect to purchase the relevant PSCS and to complete the purchase and cancellation of the relevant PSCS shall be extended by any period during which the Company is prohibited from doing so pursuant to the requirements of any applicable laws and/or regulations

If the Company does not elect to purchase, or fails to complete the purchase after so elected, the PSCS the subject of the notice referred to above, the PSCS Holder may transfer those PSCS to the purchaser specified in the above-mentioned notice for the purchase price specified in the notice in accordance with the terms of the PSCS

Based on the initial conversion price of HK\$3.45 and assuming no changes in the shareholding in the Company from the Latest Practicable Date other than those contemplated under the Share Sale Deed, the Company will allot and issue 1,560,000,000 Conversion Shares credited as fully paid upon full conversion of the PSCS. The 1,560,000,000 Conversion Shares represent approximately 76.99% of the existing issued share capital of the Company as at the Latest Practicable Date, approximately 52.58% of the enlarged issued share capital of the Company immediately after Completion (assuming no conversion of the PSCS), approximately 34.46% of the enlarged issued share capital of the Company immediately after Completion (assuming full conversion of the PSCS) and approximately 21.59% of the enlarged issued share capital of the Company immediately after Completion (assuming full conversion of the PSCS) and the issuance of all the new Shares under the Specific Mandate.

The initial Conversion Price of HK\$3.45 per Share of the PSCS represents:

- (i) a premium of 15% over the issue price of the Consideration Shares;
- (ii) a discount of approximately 40.9% to the price per Share as quoted on the Stock Exchange of HK\$5.84 per Share as at the Latest Practicable Date;
- (iii) a discount of approximately 45.1% to the price per Share as quoted on the Stock Exchange of HK\$6.28 per Share on the Last Trading Date;

- (iv) a discount of approximately 27.8% to the price per Share as quoted on the Stock Exchange of HK\$4.78 per Share on 24 September 2010, being the last trading day for the Shares immediately before the date of the announcement in relation to price-sensitive information regarding the Acquisition issued on 27 September 2010;
- (v) a discount of approximately 7.5% to the average closing price of HK\$3.73 per Share as quoted on the Stock Exchange for the last 30 consecutive trading days up to and including 24 September 2010;
- (vi) a premium of approximately 9.9% over the average closing price of HK\$3.14 per Share as quoted on the Stock Exchange for the last 90 consecutive trading days up to and including 24 September 2010;
- (vii) a premium of approximately 14.2% over the average closing price of HK\$3.02 per Share as quoted on the Stock Exchange for the last 180 consecutive trading days up to and including 24 September 2010;
- (viii) a premium of approximately 22.8% over the average closing price of HK\$2.81 per Share as quoted on the Stock Exchange for the last one year up to and including 24 September 2010;
- (ix) a price earnings ratio of 38.59 times the earnings per Share of HK8.94 cents for the year ended 31 December 2009; and
- (x) a price to book value of 1.25 times the net asset value per Share of HK\$2.75 as at 30 June 2010.

#### Application for listing

An application has been made by the Company to the Listing Committee of the Stock Exchange for the listing of, and permission to deal in, the Consideration Shares and the Conversion Shares to be issued pursuant to the PSCS.

No application will be made by the Company for the listing of the PSCS.

#### **Conditions**

Completion is subject to the following conditions having been satisfied or waived (as the case may be):

(i) Approval by the Australian Government under the FATA

The Company receiving the appropriate form of approval from the Australian Government under the FATA which allows the Acquisition to proceed under the conditions and undertakings that are to the reasonable satisfaction of the Company;

(ii) The Australian Government agreeing to release CMN from its existing undertakings in relation to MMG on and from Completion;

#### (iii) Shareholder approval

Such requisite majority of relevant shareholders of the Company as required under the Listing Rules having approved by resolution at an EGM of the Company, the entry by the Company into the Share Sale Deed and the transactions contemplated by the Share Sale Deed, including, but not limited to, the proposed increase in the authorised share capital of the Company from HK\$300,000,000 to HK\$900,000,000 and the granting of the Specific Mandate to the Directors;

#### (iv) Approval from shareholders of CMN

The necessary approvals from the shareholders of CMN having been obtained for the entry by Album Enterprises into the Share Sale Deed and the transactions contemplated by the Share Sale Deed;

#### (v) Approvals

The Company having obtained such approval and consents from the Stock Exchange as are reasonably necessary or appropriate in connection with the transactions contemplated by the Share Sale Deed, including the Listing Committee of the Stock Exchange granting the listing of, and permission to deal in, the Consideration Shares and the Conversion Shares;

#### (vi) Approval from regulatory authorities in the PRC

Album Enterprises obtaining such approvals, authorisations and consents from the relevant PRC regulatory authorities as are reasonably necessary or appropriate in connection with the transactions contemplated by the Share Sale Deed (if any);

#### (vii) Consent from certain existing creditors of the Target Group

Certain existing creditors of the Target Group having consented to the transactions contemplated under the Share Sale Deed pursuant to the terms of their existing facility agreements with the Target Group;

#### (viii) Loan Agreement

Each condition precedent to the funding of the loan as set out under the Loan Agreement (other than any condition that is conditional on Completion) having been satisfied or waived; and

(ix) No material adverse effect on the market value of the Sale Shares or the members of the Target Group occurs between the date of the Share Sale Deed and the date on which all the conditions precedent set out in paragraphs (i) to (vii) above having been satisfied or waived.

In the event that any of the conditions above (a) has not been fulfilled or waived on or before the Cut Off Date, or (b) becomes incapable of satisfaction or the parties agree that any of such conditions cannot be satisfied, the parties shall not be bound to proceed with Completion and either party may terminate the Share Sale Deed by not less than two Business Days' notice to the other, except for any antecedent breaches of the terms of the Share Sale Deed.

The conditions set out in paragraphs (i) and (ix) may only be partly or entirely waived by written notice from All Glorious to Album Enterprises. The conditions set out in paragraphs (ii), (iv) and (viii) may only be partly or entirely waived by written notice from Album Enterprises to All Glorious. The condition set out in paragraph (vii) may only be partly or entirely waived by written agreement between All Glorious and Album Enterprises.

#### Repatriation

Prior to Completion, the relevant entity in the Target Group must have completed each of the relevant steps required to complete the repatriation of US\$340,000,000 (equivalent to approximately HK\$2,652,000,000) from the Target Group to Album Enterprises by way of dividend, and the repatriation shall have occurred so long as such repatriation does not effect the validity or enforceability (by any party) of the Share Sale Deed.

#### Completion

Subject to the fulfilment or waiver (as the case may be) of the relevant conditions above, Completion shall take place on the Completion Date.

#### Guarantee

The obligations of All Glorious under the Share Sale Deed are guaranteed by the Company in favour of Album Enterprises.

#### No variation to remuneration of sole director of All Glorious

There will be no variation to the aggregate of the remuneration payable to and benefits in kind receivable by the sole director of All Glorious as a consequence of the Acquisition.

#### PROPOSED INCREASE IN AUTHORISED SHARE CAPITAL

The authorised share capital of the Company is HK\$300,000,000 comprising 6,000,000,000 Shares, of which 2,026,216,799 Shares are in issue as at the Latest Practicable Date. As part of the terms of the Acquisition, the Board proposes to increase the authorised share capital of the Company from HK\$300,000,000 to HK\$900,000,000 by the creation of an additional 12,000,000,000 unissued Shares to rank *pari passu* in all respects with the existing Shares in the capital of the Company. The increase in authorised share capital of the Company is conditional upon the passing of an ordinary resolution by the Shareholders at the EGM.

#### SPECIFIC MANDATE

The Board proposes to seek a Specific Mandate from the Independent Shareholders at the EGM to issue not more than 2,700,000,000 new Shares (representing approximately 133.25% of the existing issued share capital of the Company as at the Latest Practicable Date, approximately 91.00% of the enlarged issued share capital of the Company immediately after Completion (assuming no conversion of the PSCS), approximately 59.64% of the enlarged issued share capital of the Company immediately after Completion (assuming full conversion of the PSCS), and approximately 37.36% of the enlarged issued share capital of the Company immediately after Completion (assuming full conversion of the PSCS) and the issuance of all the new Shares under the Specific Mandate. The major terms of the proposed Specific Mandate are as follows:

- (i) to issue not more than 2,700,000,000 new Shares;
- (ii) the new Shares will be issued at a discount of not more than 20% to the higher of:
  - (a) the closing price on the date of any relevant placing agreement or other agreement involving the proposed issue of securities under the Specific Mandate; and
  - (b) the average closing price in the five trading days immediately prior to the earlier of:
    - (A) the date of announcement of the placing or the proposed transaction or arrangement involving the proposed issue of securities under the Specific Mandate;
    - (B) the date of the placing agreement or other agreement involving the proposed issue of securities under the Specific Mandate; and
    - (C) the date on which the placing or subscription price is fixed;
- (iii) the grant of the Specific Mandate is part of the terms of the Acquisition and conditional upon the passing of an ordinary resolution by the Independent Shareholders at the EGM approving such grant. As set out in the paragraph headed "Letter from the Board The Acquisition Conditions" above in this circular, the granting of the Specific Mandate to the Directors is a condition to Completion;
- (iv) the issue of the new Shares pursuant to the Specific Mandate will be conditional upon Completion; and
- (v) the proposed Specific Mandate is for the period from the passing of the relevant resolutions at the EGM up to the earlier of: (a) 31 July 2011; or (b) the revocation or variation of the authority given under the relevant resolution(s) at the EGM by ordinary resolution(s) of the Independent Shareholders in a general meeting.

Depending on market conditions, the Directors may or may not exercise the proposed Specific Mandate, if granted, to issue new Shares and, where the proposed Specific Mandate is exercised, may issue less than 2,700,000,000 new Shares. It is currently intended that the Specific Mandate sought will cover new Shares to be issued pursuant to one or more potential Placing(s) to be conducted by the Company, subject to the then prevailing market conditions. If the Directors proceed to issue and place new Shares pursuant to the proposed Specific Mandate, the Company will make (a) separate announcement(s) as required by the Listing Rules.

Depending on market conditions, the Directors intend to raise net proceeds of up to US\$1,600 million (equivalent to approximately HK\$12,480 million) and apply such net proceeds from the potential Placing(s) for (i) the full repayment of the loan of US\$694,161,888 (equivalent to approximately HK\$5,414,462,726) under the Loan Agreement; and (ii) the remaining balance of US\$905,838,112 (equivalent to approximately HK\$7,065,537,274) for (a) the deployment of funding towards the exploration and development initiatives of the Target Group's projects, including, but not limited to, the development of the Dugald River zinc project located in Queensland, Australia (which is in the final stages of a feasibility study and has an estimated pre-production capital cost of approximately US\$790 million (equivalent to approximately HK\$6,162 million)), and (b) the other exploration initiatives of the Target Group. The proposed issue of new Shares under the potential Placing(s), if executed, will also enlarge each of the shareholder and capital bases of the Company and strengthen the financial position of the Enlarged Group.

Having regard to the Acquisition and the potential Placing(s), CMN is committed to remaining as the controlling shareholder of the Company and to hold no less than 51% of the issued share capital of the Company.

Should the Directors, upon obtaining the proposed Specific Mandate, proceed to exercise the proposed Specific Mandate to issue any new Shares, the Company will also apply to the Listing Committee for the listing of, and permission to deal in, the new Shares to be issued and placed pursuant to the potential Placing(s).

#### REASONS FOR AND BENEFITS OF THE ACQUISITION

The Board believes that there are strong commercial and strategic reasons for the Acquisition and is therefore of the view that the Acquisition represents an excellent opportunity for the Group to expand into other upstream base metals through the acquisition of a portfolio of quality international mining assets, and to become a major international upstream base metals group listed on the Stock Exchange. This is expected to enhance the Group's strategic position in the international mining sector and increase its overall competitiveness, business scale and shareholder value. The Board considers that the terms of the Acquisition have been entered into on normal commercial terms, are fair and reasonable and in the interest of the Company and the Shareholders as a whole.

It is expected that the Acquisition will enable the Group to:

#### (i) Derive an immediate substantial earnings and cash flow contribution from MMG

Through the Acquisition, the Company expects to derive an immediate substantial earnings and cash flow contribution from MMG. MMG produced significant quantities of base metals including 318kt of zinc in concentrate, 15kt of copper in concentrate, 34kt of copper cathode, 26kt of lead in concentrate, 4moz of silver and 92koz of gold in the six months ended 30 June 2010. Such production resulted in MMG reporting a gross revenue of approximately US\$844.7 million (equivalent to approximately HK\$6,588.7 million), EBITDA of approximately US\$403.9 million (equivalent to approximately HK\$3,150.4 million), representing an EBITDA margin of approximately 48% and net profit after tax attributable to its shareholder of approximately US\$222.6 million (equivalent to approximately HK\$1,736.3 million) for the six months ended 30 June 2010.

### (ii) Deliver a more diversified and significant portfolio of assets, development projects and future growth opportunities

(a) MMG is a unique internationally diversified upstream base metals group with exposure to multiple commodities, including zinc, copper, lead, gold, silver and nickel

MMG possesses a diversified portfolio of base metals projects in Australia, Asia and North America, with producing assets in Australia and Laos. It is one of the world's largest producers of zinc as well as a substantial producer of copper, lead, gold and silver. Through the Acquisition, the Company will acquire this diversified and significant portfolio of quality assets. It is expected that the Acquisition will allow the Enlarged Group to deliver consistency and growth in returns.

(b) MMG has a strong pipeline of prospective and sizeable projects to support organic growth including on-going expansion programmes in existing assets and planned exploration and development activities in Australia, Indonesia, and Canada

MMG has a portfolio of advanced and early stage exploration projects throughout Australia, Indonesia and Canada. It is anticipated that these projects will provide attractive mineral deposits for MMG's future production.

MMG is also actively pursuing new opportunities globally. The strong pipeline of prospective and sizeable projects is expected to serve as a key driver of the organic growth of MMG and assist in building the Enlarged Group as a leading global diversified minerals and metals company.

### (iii) Reposition the Company as CMC Group's flagship international upstream base metals platform

Currently, the Group is one of the largest importers and suppliers of imported alumina in the PRC. The Group, together with its jointly-controlled companies, also engages in alumina production, aluminium fabrication, copper fabrication and plica tubes production. In addition, the Group also engages in port logistics services and other industrial operations.

The objective of CMC, the Company's ultimate controlling Shareholder, is to transform the CMC Group from a trading-focused group to a leading internationally diversified upstream base metals group. It is expected that the Acquisition provides a good opportunity for the Company to operate a more diversified and significant portfolio of producing and development projects, especially due to the fact that MMG is a unique internationally diversified base metals group with exposure to multiple commodities, including zinc, copper, lead, gold, silver and nickel across its various projects in Australia, Asia and North America. It is currently intended that the Enlarged Group will continue to pursue organic growth initiatives and acquisition opportunities to become a major international diversified upstream base metals group. The Acquisition is expected to contribute to the achievement of the CMC Group's strategic objective.

#### (iv) Expand institutional investors' interest to support a market re-rating

The Shares are currently characterised by relatively low levels of liquidity and institutional interest. MMG owns and operates a portfolio of world-class base metal mining operations, development projects and exploration fields. It is expected that the Acquisition represents a unique opportunity for investors in the Company to participate in a sizeable international upstream base metals mining group with a wide range of base metals, supported by one of the leading PRC state-owned enterprises as its ultimate controlling Shareholder. MMG has a significant Ore Reserves and Mineral Resources base, a reasonable range of mine lives, and one of the world's largest producers of zinc as well as a substantial producer of copper, lead, gold and silver.

It is believed that the scarcity of large international upstream base metals companies listed on the Stock Exchange will make the Shares appealing to both institutional as well as retail investors domestically and internationally.

#### (v) Combine capable and experienced boards and management teams

In connection with the Acquisition, so as to leverage on the expertise and experience of the Target Group's senior management team, the Company intends to adopt certain changes to the directors and senior management of the Company (set out in the section headed "Proposed Directors and senior management of the Target Group" in this circular). It is believed that such changes will result in a unique mix of PRC and international management qualifications and expertise in the senior management of the Company, providing the Enlarged Group with operational experience in MMG's international portfolio, insights into the base metals market of the PRC and significant experience in identifying and executing international mergers and acquisitions. This will provide the Enlarged Group with complementary human capital and enhance its talent pools.

### EFFECTS OF THE ACQUISITION ON THE COMPANY

### (i) Shareholding structure

Assuming no changes in the shareholding of the Company from the Latest Practicable Date other than those contemplated under the Share Sale Deed, the shareholding structures of the Company (a) as at the Latest Practicable Date, (b) immediately after Completion (assuming no conversion of the PSCS), and (c) immediately after Completion (assuming full conversion of the PSCS) and the issuance of all the new Shares under the Specific Mandate are illustrated as follows:

					Immediately a	ıfter
					Completion (as	suming
					full conversion	of the
			Immediately a	fter	PSCS) and	the
			Completion (as	suming	issuance of a	ll the
	As at the Lat	est	no conversion	of the	new Shares un	der the
Shareholder	Practicable D	ate	PSCS)		Specific Mai	ndate
	(No. of Shares)	(%)	(No. of Shares)	(%)	(No. of Shares)	(%)
$\mathrm{CMC}^{Note}$	1,284,467,826	63.39	1,284,467,826	43.29	1,284,467,826	17.77
Consideration Shares	_		940,779,090	31.71	940,779,090	13.02
Conversion Shares					1,560,000,000	21.59
Total CMC <sup>Note</sup>						
shareholding	1,284,467,826	63.39	2,225,246,916	75.00	3,785,246,916	52.38
Public Shareholders	741,748,973	36.61	741,748,973	25.00	741,748,973	10.26
Placees (which shall						
be Independent						
Third Parties)					2,700,000,000	37.36
Total	2,026,216,799	100.00	2,966,995,889	100.00	7,226,995,889	100.00

### Notes:

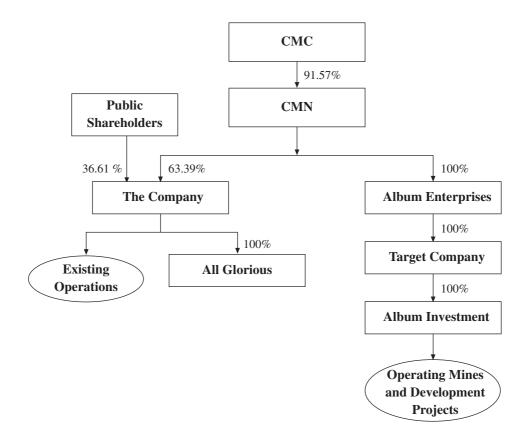
- 1. CMC holds approximately 91.57% of the issued share capital of CMN, which in turn holds the entire issued share capital of Top Create Resource Limited. Top Create Resource Limited holds approximately 63.39% of the issued share capital of the Company as at the Latest Practicable Date. The Consideration Shares and Conversion Shares are to be issued to Album Enterprises or its nominee. Album Enterprises is wholly-owned by CMN.
- 2. The table assumes that CMN will be Album Enterprises' nominee to subscribe for the Consideration Shares and to hold the PSCS. CMN may only convert such number of securities, where such conversion would not cause the Company to contravene the minimum public float requirement under the rules and regulations of the stock exchange on which the Shares are listed following the conversion.

As set out above, assuming no changes in the shareholding of the Company from the Latest Practicable Date other than those contemplated under the Share Sale Deed, there will not be any change in control of the Company immediately after Completion (assuming no conversion of the PSCS) and immediately after Completion (assuming full conversion of the PSCS) and the issuance of all the new Shares under the Specific Mandate.

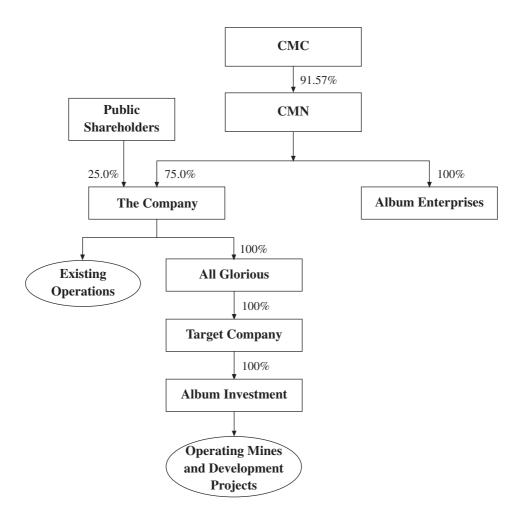
### (ii) Corporate structure

Assuming no changes in the shareholding in the Company from the Latest Practicable Date other than those contemplated under the Share Sale Deed, the charts below show the simplified corporate and shareholding structure of the Company (a) as at the Latest Practicable Date, and (b) immediately after Completion (assuming no conversion of the PSCS and that CMN will be Album Enterprises' nominee to subscribe for the Consideration Shares).

### (a) As at the Latest Practicable Date



(b) Immediately upon Completion (assuming no conversion of the PSCS and that CMN will be Album Enterprises' nominee to subscribe for the Consideration Shares)



# (iii) Pro forma financial effects of the Acquisition

The Target Company was incorporated on 8 April 2009 and hence the financial statements of the Target Group were prepared from the date of the Target Company's incorporation on 8 April 2009 to 30 June 2010. The Company did not prepare an accountants' report for each of the three financial years immediately preceding the issue of the circular for the entities comprising the Target Group as the Company was unable to prepare the same for the following key reasons:

- (a) The entities that comprise the Target Group were owned by OZL until the completion of the acquisition by CMN on 16 June 2009 (but with effect as of 1 June 2009). The accounts of the individual entities that comprise the Target Group did not reflect all the relevant costs related to those entities, as certain costs were incurred at the corporate level within OZL, and it was therefore not possible to create relevant accounts prior to 1 June 2009. In addition, further to the undertakings provided by CMN and OZL to the Australian Government on 17 April 2009, CMN is restricted from accessing information relating to certain assets of OZL which were not included in CMN's acquisition as a consequence of an Australian Government decision;
- (b) the changes in directors and senior executives during the period prior to the incorporation of the Target Company;
- (c) it would be inappropriate to use OZL's prior period financial statements as the basis to prepare the accountants' report of the Target Company because only some of OZL's assets and business structure were acquired by CMN; and
- (d) the underlying businesses of the Target Group do not have a complete set of books and accounts to prepare the relevant financial statements covering the period from 1 January 2007 to the date of completion of the acquisition by CMN of the entities that comprise the Target Group.

Set out below are key historical financial information of the Target Group during the relevant period:

	From 8 April 2009 to		Six months ended	
	31 Decem	ber 2009	30 June	2010
	(US\$ million) (HK\$ million)		$(US\$ \ million)$	$(HK\$\ million)$
Sales revenue	852.8	6,651.8	844.7	6,588.7
Net profit after tax	180.7	1,409.5	234.0	1,825.2
Net profit after tax attributable to				
shareholder of the Target				
Company	172.5	1,345.5	222.6	1,736.3

Source: MMG and Appendix I to this circular

The net asset values of the Target Group as at 31 December 2009 and as at 30 June 2010 are set out below:

As at 31 December 2009 As at 30 June 2010 (US\$ million) (HK\$ million) (US\$ million) (HK\$ million)

**Net asset value** 551.7 4,303.3 771.3 6,016.1

Source: MMG and Appendix I to this circular

Further details of the historical financial performance of the Target Group are set out in Appendix I to this circular.

Following Completion, the Target Company will become an indirect wholly-owned subsidiary of the Company and its financial information will be consolidated into the financial statements of the Company using merger accounting. It is noted in the unaudited pro forma consolidated balance sheet in Appendix III to this circular that a merger reserve of HK\$11,770,200,000 may be recognised, representing the excess amount from the consolidation entries for the elimination of investment cost of the Company in the Target Company against its share capital. Since the fair values of the Consideration Shares and the PSCS to be issued at Completion may be substantially different from their fair values used in preparing the unaudited pro forma financial information of the Enlarged Group, the amounts of the consideration and, accordingly, the amount of merger reserve at Completion may be different from this amount and the difference may be significant. While the merger reserve may reduce the amount of total equity substantially, it should be noted that it is solely due to the consolidation entries of accounting treatment which do not reflect or represent any financial performance or results of the Target Company or the Enlarged Group. For further information, please refer to Appendix III to this circular.

The following tables set out, for illustrative purposes only, the key financials of the Group and the unaudited pro forma financial information of the Enlarged Group for the six months ended 30 June 2010 assuming the Acquisition had taken place on 1 January 2010 and 30 June 2010, for the unaudited pro forma consolidated profit and loss accounts and the unaudited pro forma consolidated balance sheet of the Enlarged Group, respectively, as extracted from Appendix III to this circular:

For the six months ended 30 June 2010:

	Group	Enlarged Group	% change
Revenue (HK\$'000)  Net profit attributable to equity holders of the	5,403,696	11,992,356	122%
Company (HK\$'000)	423,980	1,423,666	236%
Basic earnings per Share (HK cents)	20.92	47.98	129%

As at 30 June 2010:

	Enlarged		
	Group	Group	% change
Net assets (HK\$'000)	5,578,730	2,097,107	(62%)
Net tangible assets (HK\$'000)	4,308,167	522,344	(88%)
Gearing	Net cash	660%	
Adjusted gearing (without merger reserves)	Net cash	100%	
Interest coverage	33.80 times	7.94 times	(77%)

### Notes:

- 1. The above should be read in conjunction with the assumptions set out in Appendix III to this circular.
- 2. The number of Shares in the computation of the basic earnings per Share of the Enlarged Group for the six months ended 30 June 2010 above is assumed to be 2,966,995,889 Shares, being the total number of Shares immediately after Completion (before conversion of any PSCS and the issuance of any new Shares under the Specific Mandate) since they are not directly attributable to the Acquisition and are related to future events.
- 3. Net gearing is defined as net debt divided by net asset value. Net debt is defined as total interest bearing borrowings less cash and cash equivalent (including pledged bank deposits and time deposits).
- 4. Interest coverage is defined as operating profit divided by the difference between finance costs and finance income.

### THE GROUP'S INTENTION CONCERNING ITS EXISTING BUSINESS

There is currently no intention to dispose of, terminate or scale down the existing business of the Group in the production of aluminium and the manufacture and distribution of aluminium and copper products and no agreement, arrangement, understanding or negotiation has been put in place to this effect.

### WORKING CAPITAL MANAGEMENT POLICY OF THE ENLARGED GROUP

The Enlarged Group will centrally manage the cash management requirements of individual operating entities within the Enlarged Group. Such cash management requirements include the short term investment of cash surpluses and the raising of funds to cover expected cash demands. The Enlarged Group will regularly monitor its liquidity requirements and its compliance with lending covenants to ensure that it maintains sufficient cash and cash equivalents or has available funding through an adequate amount of committed credit facilities to meet its working capital requirements.

### IMPLICATIONS UNDER THE LISTING RULES

As the applicable percentage ratios calculated pursuant to Rule 14.07 of the Listing Rules in respect of the Acquisition exceed 100%, the Acquisition constitutes a very substantial acquisition of the Company under Rule 14.06(5) of the Listing Rules.

In addition, since Album Enterprises is a wholly-owned subsidiary of CMN (the controlling Shareholder holding approximately 63.39% of the issued share capital of the Company as at the Latest Practicable Date), Album Enterprises is a connected person of the Company. Accordingly, the Acquisition constitutes a connected transaction of the Company under Chapter 14A of the Listing Rules and is subject to the Independent Shareholders' approval requirement under Rule 14A.48 of the Listing Rules. Accordingly, CMN and its associates are required to abstain from voting on the Acquisition at the EGM.

Mr. Xu Jiqing and Mr. Wang Lixin (being Directors) are directors of Album Enterprises. None of the Directors have a material interest in the Acquisition which prohibits him/her from voting on the Acquisition and therefore no Director abstained from approving the unanimously-passed relevant Board resolutions approving the Acquisition.

Immediately following Completion, any on-going transactions of the Enlarged Group with members of the CMC Group (including CMN) will constitute continuing connected transactions of the Company under the Listing Rules. The Company will comply with the relevant requirements under the Listing Rules as and when required.

The Independent Board Committee has been established to advise the Independent Shareholders in respect of the Acquisition. None of the members of the Independent Board Committee has any material interest in the Acquisition, the Specific Mandate or the proposed increase in the authorised share capital of the Company. Somerley has been appointed as the independent financial adviser to advise the Independent Board Committee and the Independent Shareholders in respect of the Acquisition, including, but not limited to, the proposed increase in the authorised share capital of the Company and the grant of the Specific Mandate. Somerley has reviewed and considered, among other things, the Competent Person's Report, the Valuation Report setting out the Chapter 18 Valuation, the report on the Market Valuation, and the basis and differences between the Market Valuation and the Chapter 18 Valuation in concluding their advice.

An application has been made to the Listing Committee of the Stock Exchange for the listing of, and permission to deal in, the Consideration Shares and the Conversion Shares. Should the Directors, upon obtaining the proposed Specific Mandate, proceed to exercise the proposed Specific Mandate to issue any new Shares, the Company will also apply to the Listing Committee for the listing of, and permission to deal in, the new Shares to be issued and placed pursuant to the potential Placing(s).

### **EGM**

A notice convening the EGM is set out on pages EGM-1 to EGM-3 of this circular. The EGM will be held at Fanling Room, Lower Level I, Kowloon Shangri-La Hotel, 64 Mody Road, Tsimshatsui East, Kowloon, Hong Kong on Thursday, 9 December 2010 at 10:30 a.m. or any adjournment thereof. An ordinary resolution will be proposed to consider and, if thought fit, approve, among other things, the Share Sale Deed and all the transactions contemplated thereunder, including, but not limited to, (i) the allotment and issuance by the Company of the Consideration Shares, (ii) the issuance by the Company of the PSCS, (iii) the increase in the authorised share capital of the Company from HK\$300,000,000 divided into 6,000,000,000 Shares to HK\$900,000,000 divided into 18,000,000,000 Shares by the creation of an additional 12,000,000,000 unissued Shares; and (iv) the grant of a specific mandate for the Directors to issue up to 2,700,000,000 new Shares for the period from the passing of the relevant resolution at the EGM up to the earlier of: (A) 31 July 2011 or (B) the revocation or variation of the authority given under the relevant resolution at the EGM.

A proxy form for use in the EGM and is enclosed. Whether or not you propose to attend the meeting, you are requested to complete the enclosed proxy form in accordance with the instructions printed thereon and return the same to the Company's share registrar, Computershare Hong Kong Investor Services Limited at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wan Chai, Hong Kong as soon as possible and in any event not later than 48 hours before the time appointed for holding of the EGM or any adjournment thereof. Completion and return of the proxy form for the EGM will not preclude you from attending, and voting in person at the EGM or any adjournment thereof should you so wish.

### RECOMMENDATION

The Directors (including the independent non-executive Directors) consider that the proposed ordinary resolution for approval of the Share Sale Deed and all the transactions contemplated thereunder, including, but not limited to, (i) the allotment and issuance by the Company of the Consideration Shares, (ii) the issuance by the Company of the PSCS, (iii) the increase in the authorised share capital of the Company from HK\$300,000,000 divided into 6,000,000,000 Shares to HK\$900,000,000 divided into 18,000,000,000 Shares by the creation of an additional 12,000,000,000 unissued Shares; and (iv) the grant of a specific mandate for the Directors to issue up to 2,700,000,000 new Shares for the period from the passing of the relevant resolution at the EGM up to the earlier of: (A) 31 July 2011 or (B) the revocation or variation of the authority given under the relevant resolution at the EGM, are in the interests of the Company and the Shareholders as a whole. Accordingly, the Directors (including the independent non-executive Directors) recommend the Shareholders to vote in favour of the Share Sale Deed and all the transactions contemplated thereunder, including, but not limited to, (i) the allotment and issuance by the Company of the Consideration Shares, (ii) the issuance by the Company of the PSCS, (iii) the increase in the authorised share capital of the Company from HK\$300,000,000 divided into 6,000,000,000 Shares to HK\$900,000,000 divided into 18,000,000,000 Shares by the creation of an additional 12,000,000,000 unissued Shares; and (iv) the grant of a specific mandate for the Directors to issue up to 2,700,000,000 new Shares for the period from the passing of the relevant resolution at the EGM up to the earlier of: (A) 31 July 2011 or (B) the revocation or variation of the authority given under the relevant resolution at the EGM.

# ADDITIONAL INFORMATION

Your attention is drawn to the information set out in the appendices to this circular.

By order of the Board

Minmetals Resources Limited

Hao Chuanfu

Executive Director and President

### LETTER FROM THE INDEPENDENT BOARD COMMITTEE



(Incorporated in Hong Kong with limited liability)

(Stock code: 1208)

22 November 2010

To the Independent Shareholders

Dear Sir/Madam,

# (1) VERY SUBSTANTIAL ACQUISITION AND CONNECTED TRANSACTION IN RELATION TO THE ACQUISITION OF THE ENTIRE ISSUED SHARE CAPITAL OF ALBUM RESOURCES PRIVATE LIMITED

# (2) PROPOSED INCREASE IN AUTHORISED SHARE CAPITAL

### **AND**

# (3) SPECIFIC MANDATE TO ISSUE NEW SHARES

We refer to the circular of the Company (the "Circular") dated 22 November 2010 of which this letter forms part. Terms defined in the Circular shall have the same meanings herein unless the context otherwise requires.

We have been appointed to establish the Independent Board Committee to give recommendations in respect of the Acquisition together with the proposed increase in the authorised share capital of the Company and the grant of the Specific Mandate as referred to in the Circular. Somerley has been appointed as the independent financial adviser to advise the Independent Board Committee and the Independent Shareholders in this regard.

Please refer to the letter from the Board set out on pages 16 to 41 of the Circular which contains, *inter alia*, information in respect of the Acquisition together with the proposed increase in the authorised share capital of the Company and the grant of the Specific Mandate and the letter from Somerley set out on pages 44 to 98 of the Circular which contains its advice in respect of the Acquisition together with the proposed increase in the authorised share capital of the Company and the grant of the Specific Mandate.

# LETTER FROM THE INDEPENDENT BOARD COMMITTEE

Having taken into account the opinion of Somerley, we consider that the Acquisition together with the proposed increase in the authorised share capital of the Company and the grant of the Specific Mandate, are on normal commercial terms which are fair and reasonable to the Independent Shareholders and that the Acquisition together with the proposed increase in the authorised share capital of the Company and the grant of the Specific Mandate, are in the interests of the Company and the Independent Shareholders as a whole. Accordingly, we recommend the Independent Shareholders to vote in favour of the ordinary resolution to be proposed at the EGM to approve the Acquisition together with the proposed increase in the authorised share capital of the Company and the grant of the Specific Mandate.

Yours faithfully,
For and on behalf of
the Independent Board Committee
Minmetals Resources Limited

Mr. Li Dongsheng, Mr. Ting Leung Huel, Stephen and Mr. Loong Ping Kwan
Independent non-executive Directors

The following is the text of a letter of advice dated 22 November 2010 to the Independent Board Committee and the Independent Shareholders from Somerley in respect of the Share Sale Deed and the transactions contemplated thereunder prepared for the purpose of incorporation in this circular.



### **SOMERLEY LIMITED**

10th Floor
The Hong Kong Club Building
3A Chater Road
Central
Hong Kong

22 November 2010

To: The Independent Board Committee and Independent Shareholders of Minmetals Resources Limited

Dear Sirs,

# (1) VERY SUBSTANTIAL ACQUISITION AND CONNECTED TRANSACTION IN RELATION TO THE ACQUISITION OF THE ENTIRE ISSUED SHARE CAPITAL OF ALBUM RESOURCES PRIVATE LIMITED

# (2) PROPOSED INCREASE IN AUTHORISED SHARE CAPITAL

### AND

# (3) SPECIFIC MANDATE TO ISSUE NEW SHARES

# INTRODUCTION

We refer to our appointment to advise the Independent Board Committee and Independent Shareholders in connection with the Acquisition together with the proposed increase in the authorised share capital of the Company and the grant of the Specific Mandate to the Directors (the "Transactions"). Details of the Transactions are contained in the circular to Shareholders dated 22 November 2010 (the "Circular"), of which this letter forms a part. As the grant of the Specific Mandate to the Directors forms an integral part of the Acquisition, we are also commissioned to provide an opinion to the Independent Board Committee and Independent Shareholders in this regard. Unless the context otherwise requires, capitalised terms used in this letter shall have the same meanings as those defined in the Circular.

The Acquisition constitutes a very substantial acquisition for the Company under the Listing Rules. As CMN is interested in 63.39% of the issued share capital of the Company as at the Latest Practicable Date and is accordingly a connected person of the Company under the Listing Rules, the Acquisition also constitutes a connected transaction for the Company. The Acquisition is subject to the Independent Shareholders' approval under the Listing Rules.

The Independent Board Committee, comprising the three independent non-executive Directors, namely Messrs. Mr. Li Dongsheng, Mr. Ting Leung Huel, Stephen and Mr. Loong Ping Kwan, has been established to make a recommendation to the Independent Shareholders on whether the terms of the Transactions are on normal commercial terms which are fair and reasonable to the Independent Shareholders and whether the Transactions are in the interests of the Company and the Independent Shareholders as a whole. We, Somerley Limited, have been appointed to advise the Independent Board Committee and the Independent Shareholders in this regard.

We are not associated with the Company, CMN, their respective substantial shareholders or associates, and accordingly, are considered eligible to give independent advice on the Transactions. Apart from normal professional fees payable to us by the Company in connection with this appointment, no arrangement exists whereby we will receive any other fees or benefits from the Company, CMN, their substantial shareholders or associates. In formulating our opinion and recommendation, we have reviewed, among other things, the Share Sale Deed, the Loan Agreement, the annual reports of the Company for two years ended 31 December 2009, the interim report of the Company for the six months ended 30 June 2010 (the "2010 Interim Report"), the Competent Person's Report, the Valuation Report, the report on the Market Valuation, financial information on the Target Group and the Enlarged Group. We have discussed with the management of the Group and the Target Group regarding the businesses and future prospects of the Enlarged Group. We have also visited the Sepon and Century mines of the Target Group.

In addition, we have relied on the information and facts supplied, and the opinions expressed, by the Directors and management of the Group and have assumed that they are true, accurate and complete and will remain true, accurate and complete up to the time of the EGM. We have also sought and received confirmation from the Directors that no material facts have been omitted from the information supplied and opinions expressed to us. We have no reason to believe that any material information has been withheld from us, or to doubt the truth or accuracy of the information provided. We have relied on such information and consider that the information we have received is sufficient for us to reach an informed view. We have not, however, conducted any independent investigation into the business and affairs of the Group or the Target Group. We note that the Board in determining the Purchase Price has made reference to the Market Valuation, which we have reviewed and considered in forming our overall opinion herein. We have discussed with Grant Samuel the bases, assumptions and methodology of the Market Valuation in the course of our review in assessing the fairness and reasonableness thereof, but no reliance has been placed by us on such Market Valuation in forming our overall opinion herein.

### PRINCIPAL FACTORS AND REASONS CONSIDERED

In formulating our opinion, we have taken into consideration the following principal factors and reasons:

### 1. History and business of the Group

The Company was incorporated in 1988 and its shares have been listed on the main board of the Stock Exchange since 1994. The Group, together with its jointly-controlled companies, is principally engaged in the manufacturing and sales of alumina, aluminium products, copper products and plica tubes. The Group also offers port logistics services and participates in other industrial operations.

The Company's ultimate controlling shareholder is CMC. CMC achieved revenue of US\$24.96 billion in 2009 and was ranked number 332 amongst the Fortune Global 500 by revenue in the year 2010. CMN is the intermediate holding company of the Company.

On 6 October 2005, the Company completed the acquisition of alumina and aluminium-related businesses from CMC, which allowed the Group to enlarge the scale of alumina and aluminium businesses and further integrate along aluminium supply chain, and also tap into other non-ferrous metals and resources businesses. The Company also completed the acquisition of a 33% equity interest in 廣西華銀鋁業有限公司 (Guangxi Huayin Aluminium Company Limited) ("Guangxi Huayin") at the end of April 2008. Guangxi Huayin is engaged in the up-stream bauxite resource exploration and alumina production. Its four production lines with total annual production capacity of 1,600,000 tonnes of alumina commenced operation in mid-2008.

The Group's business, including those of jointly-controlled entities, currently consists of three key pillars, namely trading, fabrication and resources exploration businesses.

### Trading

The Group is engaged in the trading of alumina and aluminium ingot, through 五礦鋁業有限公司 (Minmetals Aluminium Company Limited) ("Minmetals Aluminium"), a wholly-owned subsidiary of the Group. The Group imports alumina from both international and domestic suppliers as well as from jointly-controlled company of the Group. Such alumina imports are then supplied to the Group's customers, which include all major aluminium smelters in the PRC as well as overseas markets. Aluminium ingot is sourced from PRC aluminium smelters and sold to the Group's aluminium fabrication operation and other PRC customers.

### Fabrication

The Group's fabrication business is mainly carried out by 華北鋁業有限公司 (North China Aluminium Company Limited) ("North China Aluminium"), a 72.8%-owned subsidiary of the Group. This joint venture is co-invested by the Group, 中國鋁業有限公司 (Aluminium Corporation of China) and the Government of Hebei Province. North China Aluminium is principally engaged in the production and sale of aluminium foil, plate, strip and extrusions. Its products are used in packaging, transportation, construction, home appliances and printing sectors. Apart from aluminium fabrication, the Group, including its jointly-controlled entities is engaged in copper fabrication and plica tubes production through 常州金源銅業有限公司 (Changzhou Jinyuan Copper Company Limited) and 營口鑫源套管有限公司 (Yingkou Orienmet Plica Tube Company Limited) respectively. The former is a jointly-controlled company owned as to 36.3% while the latter is a Sino-foreign equity joint venture owned as to 51% by the Group according to the Company's website. The Group also holds a 20% stake in 青島美特容器有限公司 (Qingdao M.C. Packaging Limited), a Sino-foreign equity joint venture, which is engaged in the manufacturing and sale of aluminium cans in the PRC.

# Resources exploration

As mentioned in the above paragraph, the Group participates in the resources exploration and production business through its 33% equity interest investment in Guangxi Huayin, where Guangxi Huayin is one of the few integrated alumina plants in the PRC which has its own bauxite mine and is amongst the lowest-cost alumina refinery plants in the PRC. Guangxi Huayin is co-invested by the Group, 廣西投資集團有限公司 (Guangxi Investment Group Company Limited) and 中國鋁業股份有 限公司 (Aluminium Corporation of China Limited). The ownership in Guangxi Huayin enables the Group to move up-stream into bauxite resource exploration and alumina production thereby securing a stable supply of alumina, which benefits its trading business. An additional funding of approximately Chinese Renminbi 319.2 million (equivalent to approximately HK\$367.1 million based on the exchange rate of Chinese Renminbi 1.00 = HK\$1.15) have been used to finance the construction of infrastructure and technology enhancement projects in 2009 and early 2010 with an aim to drive improvements in energy-saving, wastage reduction and production efficiency. The additional funding can be seen as a way of reinforcing the Group's investment decision in Guangxi Huayin where the Directors are of the view that Guangxi Huayin provides the Group with access to (i) high-quality bauxite upstream assets; and (ii) a stable, sizeable and low-cost alumina refinery business revenue which serves to maximise returns as far as the Group and its Shareholder are concerned.

### 2. Recent financial results and position of the Group

Financial statements of the Group for the three and a half years ended 30 June 2010 are set out in Appendix II to the Circular, to which the Independent Shareholders' attention is drawn. Some principal points are summarised below.

### (a) Financial results of the Group

The following are summaries of the annual results of the Group for each of the two years ended 31 December 2009 and the interim results of the Group for the six months ended 30 June 2010 and 30 June 2009 respectively:

	For the six	months ended	For the year ended		
	30 June 2010 (unaudited)	30 June 2009 (restated)	31 December 2009 (audited and restated)	31 December 2008 (audited and restated)	
	HK\$ million	HK\$ million	HK\$ million	HK\$ million	
Turnover	5,403.7	2,140.0	6,215.8	8,450.3	
Profit attributable to the Shareholders for the period/year	424.0	310.6	338.5	137.7	
Earnings per Share for profit attributable to the Shareholders for the period/year	HK20.92 cents	HK15.33 cents	HK16.71 cents	HK6.70 cents	

The consolidated unaudited revenue and profit attributable to the Shareholders for the six months ended 30 June 2010 were approximately HK\$5,403.7 million and HK\$424.0 million respectively, representing period-over-period increases of 152.5% and 36.5% respectively as compared to that for the corresponding period in 2009. The improvements were a result of the recovery of the non-ferrous metals market prices since the second half of 2009 as the world recovered from the financial tsunami. Aluminium and alumina consumption in the PRC and overseas markets increased in the first half of 2010 to bring about growth in both trading volume as well as prices of alumina and non-ferrous metals, which led to the significant turnover and profit growth for the Group. In addition, alumina and aluminium prices, although not yet caught up with the pre-financial tsunami levels, rebounded significantly when compared to a year before.

Although not shown as the consolidated revenue of the Group, Guangxi Huayin made significant contribution to the Group's share of post-tax profits of its jointly-controlled companies for the six months period ended 30 June 2010. As shown from the 2010 Interim Report, Guangxi Huayin achieved a turnaround from a loss of approximately HK\$67.2 million for the corresponding period in 2009 into a profit of approximately HK\$199.1 million in the first half of 2010 since the full operation of Guangxi Huayin in September 2009. Such profit represents approximately 96.0% of the Group's total share of post-tax profits less losses of jointly-controlled companies. The significant profit contribution from Guangxi Huayin is a result of the rebound in alumina price and a lower unit production cost owing to full capacity utilisation.

Driven by the poor economic outlook as a result of the global financial crisis occurred in early 2009, the Group's revenue in 2009 dropped by 26.4% as compared to 2008. Profit attributable to the Shareholders increased from HK\$137.7 million in 2008 to HK\$338.5 million in 2009, which was largely due to the HK\$325.6 million pre-tax gain as a result of the disposal of its investment in Sino Gold Mining Limited, a Hong Kong listed gold mining company, in 2009.

Set out below is a breakdown of the segmental revenue and results for each of the six months ended 30 June 2009 and 2010.

	Tra	ding Alumin		fabrication	Other o	perations
		For the six months ended				
	30 June 2010 (unaudited)	30 June 2009 (restated)	30 June 2010 (unaudited)	30 June 2009 (restated)	30 June 2010 (unaudited)	30 June 2009 (restated)
	HK\$ million	HK\$ million	HK\$ million	HK\$ million	HK\$ million	HK\$ million
External revenue	4,354.2	1,332.4	892.4	646.1	157.1	161.5
Segment results	248.1	37.1	3.3	9.7	6.6	5.7

As shown in the 2010 Interim Report, the trading business recorded revenue to external parties of approximately HK\$4,354.2 million, which accounted for 80.6% (2009: 62.3%) of that of the Group for the six months ended 30 June 2010, while the fabrication business and other operations accounted for the rest. On a period-to-period comparison, the trading volume of alumina increased from approximately 620,000 tonnes in the first half of 2009 to approximately 988,300 tonnes in the first half of 2010 and that of aluminium ingots increased from approximately 10,400 tonnes in the first half of 2009 to approximately 110,600 tonnes in the first half of 2010. The aluminium fabrication business, contributing to a smaller share of the total turnover of the Company, also benefited from the recovery of the broader economy. The sales of aluminium fabrication products recorded an increase of 12.5% from approximately 36,900 tonnes in the first half of 2009 to approximately 41,500 tonnes in the first half of 2010, which translated into a period-to-period increase of 38.1% of the external revenue of the aluminium fabrication business.

# (b) Financial position of the Group

The following is a summary of the Group's balance sheet as at 30 June 2010 and 31 December 2009 as extracted from the 2010 Interim Report:

	As at 30 June	As at 31 December
	2010	2009 (audited and
	(unaudited)	restated)
	HK\$ million	HK\$ million
ASSETS		
Property, plant and equipment	475.9	503.5
Construction in progress	383.3	322.8
Alumina purchasing rights	1,060.5	1,091.7
Interests in jointly-controlled companies	1,513.1	1,219.6
Others	208.6	187.3
Total non-current assets	3,641.4	3,324.9
Inventories	712.8	959.7
Trade and bills receivables	1,395.9	814.0
Prepayments, deposits and other receivables	602.2	522.3
Time deposit and pledged bank deposits	878.4	254.1
Cash and cash equivalents	1,072.5	1,714.1
Others	44.2	11.2
Total current assets	4,706.0	4,275.4
Total assets	<u>8,347.4</u>	7,600.3
LIABILITIES AND EQUITY		
Bank borrowings	564.0	641.6
Others	50.3	46.7
Total non-current liabilities	614.3	688.3
Trade and bills payables	977.0	516.7
Accruals, receipts in advance and other payables	710.6	587.9
Bank borrowings	455.1	368.4
Others	11.7	287.8
Total current liabilities	2,154.4	1,760.8
Total liabilities	2,768.7	<u>2,449.1</u>
Working capital	2,551.6	2,514.6
Net assets	5,578.7	5,151.2
Net assets attributable to the Shareholders	5,375.5	4,950.9

As noted in the 2010 Interim Report, the Group has maintained sound liquidity and financial positions throughout the six-month period ended 30 June 2010. The non-current assets of the Group primarily include property, plant and equipment, construction in progress, alumina purchasing rights and interests in jointly-controlled companies. Alumina rights, representing the rights to purchase pre-determined quantities of alumina from an alumina supplier, has remained stable at HK\$1,060.5 million as at 30 June 2010 as compared to that as at 31 December 2009. Interests in jointly-controlled companies chiefly consisted of the 33% interest in Guangxi Huayin. The balance has increased by approximately 24.0% from HK\$1,219.6 million as at 31 December 2009 to HK\$1,513.1 million as at 30 June 2010 mainly due to the profit contribution from Guangxi Huayin. Current assets principally comprise inventories, trade and bills receivables as well as cash and bank deposits. Trade and bills receivables have increased from approximately HK\$814.0 million as at 31 December 2009 to approximately HK\$1,395.9 million as at 30 June 2010, representing an increase of 71.5% due to the significant increase in prices and trading volume of aluminium and alumina. The major categories of the liabilities of the Group are trade and bills payables, accrual, receipts in advance, other payables and banking borrowings.

The working capital of the Group, being the total current assets less total current liabilities, was stable as at 30 June 2010 when compared to the position as at 31 December 2009. In addition, as at 30 June 2010, the Group had net cash of approximately HK\$931.8 million, representing cash and bank deposits of approximately HK\$1,950.9 million less bank borrowings of approximately HK\$1,019.1 million, as compared to a net cash of approximately HK\$958.2 million as at 31 December 2009.

### 3. Outlook of the Group

The Group's trading business has improved considerably after the recent global financial crisis. The Group experienced robust demand from key aluminium customers in the PRC. The price of primary aluminium, based on London Metal Exchange's cash settlement price, has moved up from US\$1,905 per metric tonne at the end of 2005 to US\$2,293 per metric tonne at the end of 2009 with a compounded annual growth rate of around 4.7%. The increase was mainly the result of demand from China's wide application and usage of aluminium in various industries. It is generally perceived that the PRC's economic growth will continue its momentum in the short to medium term.

As mentioned in the 2010 Interim report, certain factors may offset the aforesaid growth and present uncertainties for the Group such as the further proliferation of refining capacity by local producers diluting the market share of imported alumina, the potential negative impact on global commodity prices as a result of the further worsening of the European sovereign debt crisis and the potential tightening of policy stance of the PRC Government towards the domestic property sector. In response to the aforesaid challenges, the Group will continue to implement flexible stocking of alumina from local producers and foreign producers, overseas sales and marketing, active monitoring of inventory level and liquidity management.

Coupled with Guangxi Huayin reaching its full production capacity since September 2009 and the significantly rebounding business environment of the non-ferrous metals industry after global financial crisis, the Group has been looking for both substantial organic and inorganic growth. As discussed with the management of the Group and as set out in the section headed "Reasons for and benefits of the Acquisition" below, it is the intention of the Group to further integrate upstream and to grow the business into more a diversified and significant portfolio with upstream mining assets, exploration projects and future developmental opportunities that have substantial earnings and cash flow generation ability. The Acquisition provides a good opportunity for the Company to reposition itself as CMC Group's flagship international upstream base metals platform. It was also stated in the annual report of the Company for 2009 and the 2010 Interim Report that one of the Group's strategies is to capitalise on its status as CMC's overseas platform for non-ferrous metals businesses and to gradually develop itself into an international metals and mining conglomerate.

### 4. Reasons for and benefits of the Acquisition

The Group is principally engaged in the trading of non-ferrous metals and the manufacturing and distribution of aluminium and copper products and, through its 33% interest in Guangxi Huayin, engaged in bauxite exploration and production of alumina.

As set out in the letter from the Board in the Circular, the Board believes that there are strong commercial and strategic reasons for the Acquisition and is therefore of the view that the Acquisition represents an excellent opportunity for the Group to expand into other upstream base metals through the acquisition of a portfolio of quality international mining assets, and to become a major international upstream base metals group listed on the Stock Exchange. This is expected to enhance the Group's strategic position in the international mining sector and increase its overall competitiveness, business scale and shareholder value. The Board considers that the terms of the Acquisition have been entered into on normal commercial terms, are fair and reasonable and in the interest of the Group and the Shareholders as a whole. Following Completion, the Target Company will be consolidated with the Group. It is expected that the Acquisition will enable the Group to: (i) derive an immediate substantial earnings and cash flow contribution from MMG; (ii) deliver a more diversified and significant portfolio of assets, development projects and future growth opportunities; (iii) reposition the Company as CMC Group's flagship international up-stream base metals platform; (iv) expand institutional investors' interest to support a market re-rating; and (v) combine capable and experience boards and management teams. Details of the reasons for and benefits of the Acquisition are set out in the letter from the Board in the Circular.

### 5. Industry outlook

The demand for base metals have been rising mainly driven by the domestic consumption in China, the world's largest consumer of copper, lead, nickel and zinc. It is generally anticipated that the demand for base metals consumption in various industries of China and other emerging economies will continue to grow in the long run. Nevertheless, the world economic recovery may lead to surplus of stock of certain metals as a result of the continuous development of new mines and expansion of existing or previously closed operations. Accordingly, it is considered that long-term metal prices and

market outlook to be cyclical and we concur with the Board's observations. Further information on the base metal industry, including the properties, usage, demand, consumption, supply and market outlook of certain base metals, gold and silver, are set out in the section headed "Industry overview" in the circular.

### 6. Principal terms of the Share Sale Deed

### (a) The Share Sale Deed

Date: 19 October 2010

**Parties** 

Seller: Album Enterprises, a wholly-owned subsidiary of CMN

Buyer: All Glorious, a special purpose vehicle wholly-owned by

The Company

the Company established for the purpose of the Acquisition

Guarantor and issuer of the Consideration

Shares and the PSCS:

### (b) Assets to be acquired

The Sale Shares, representing all of the issued share capital of the Target Company. The Target Company is an investment holding company incorporated on 8 April 2009. The Target Company holds a portfolio of international mining assets known as MMG. The Sale Shares are to be acquired free and clear of all encumbrances.

MMG is a significant producer of zinc, copper, lead, gold and silver. MMG currently operates four mines: (i) the Sepon copper and gold operations located in Laos; (ii) Century, one of the world's largest zinc mines, located in Queensland, Australia, also producing lead and silver; (iii) Golden Grove, a zinc, lead, copper and precious metals mine located in Western Australia; and (iv) Rosebery, a zinc, lead, copper and precious metals mine located in Tasmania, Australia. In addition, MMG owns the Avebury nickel mine in Tasmania, Australia (which is currently on care and maintenance) and has several other Development Projects and an active minerals exploration programme in Australia, Indonesia and Canada. Further details of MMG are set out in the sub-section headed "The Target Group's key assets" below in this letter and the section headed "Information of the Target Group" in the Circular.

### (c) Purchase Price

As stated in the letter from the Board in the Circular, the Purchase Price of US\$1,846.0 million (equivalent to approximately HK\$14,398.8 million) was arrived at after arm's length negotiations between the Company, All Glorious and Album Enterprises and determined with

reference to the range of the Market Valuation and was adjusted by the parties for expectations on working capital changes until 31 December 2010, including, but not limited to, the repatriation of US\$340.0 million (equivalent to approximately HK\$2,652.0 million) from the Target Group to Album Enterprises by way of dividend.

The Company has appointed Grant Samuel as the Competent Evaluator and commissioned Grant Samuel to conduct the Chapter 18 Valuation and the Market Valuation. The Market Valuation, which was prepared using methodologies in line with international market practices, is based primarily on a discounted cashflow analysis on the estimated life of mine operational parameters, including, but not limited to, Ore Reserves and Mineral Resources estimates, the production profiles, operating and capital costs, potential for reserve extension and future outlook of commodity prices, with secondary consideration given to alternative valuation methodologies based on multiples of Ore Reserves and Mineral Resources, comparable company analysis and comparable transaction analysis. The Market Valuation seeks to evaluate the full market value of MMG and accordingly, reflects the value associated with Inferred Resources and the exploration potential of the Target Group's assets, which are specifically excluded from the Chapter 18 Valuation as required by the Listing Rules. The Valuation Report, which is prepared in accordance with the requirements of the Chapter 18 of the Listing Rules, is set out in Appendix V to the Circular and our analysis thereof is set out in the section headed "Analysis of the Purchase Price" below.

The Purchase Price of US\$1,846.0 million (equivalent to approximately HK\$14,398.8 million) shall be satisfied in the following manner:

### (i) Cash:

- as to US\$100.0 million (equivalent to approximately HK\$780.0 million) in cash, from All Glorious or its nominee to Album Enterprises, payable on either (A) 31 December 2010 or (B) a date falling after the Completion Date and prior to 31 December 2010 if the Completion Date falls on or prior to 31 December 2010; or on the Completion Date if the Completion Date falls after 31 December 2010.
- as to approximately US\$694.2 million (equivalent to approximately HK\$5,414.5 million), from the proceeds of a loan from Album Enterprises to All Glorious under the Loan Agreement (the "Loan"), payable on Completion;

### (ii) Consideration Shares:

as to approximately US\$361.8 million (equivalent to approximately HK\$2,822.3 million) through the issuance by the Company of 940,779,090 Consideration Shares to Album Enterprises or its nominee at an issue price of HK\$3.00 per Share on Completion; and

### (iii) PSCS:

- as to US\$690.0 million (equivalent to approximately HK\$5,382.0 million) through the issuance by the Company of PSCS convertible into 1,560 million Conversion Shares to Album Enterprises or its nominee at an initial conversion price of HK\$3.45 per Share on Completion.

Detailed analysis of the payment structure and terms of the Purchase Price is set out in the section headed "Analysis of the payment structure" below.

# (d) Conditions precedent

Completion is subject to the approval of the Acquisition, and including the grant of the Specific Mandate to the Directors for the issue of up to 2,700 million new Shares, by the Independent Shareholders. Our opinion on the Specific Mandate is set out in the section headed "Specific Mandate" below. Completion is also subject to a number of regulatory approvals in Australia and the PRC and a number of other conditions having been satisfied or waived (as the case may be). Detailed conditions precedent are set out in the sub-section headed "Conditions" in the letter from the Board in the Circular.

### 7. Information on MMG

### (a) Background and business of MMG

The Target Company, a wholly-owned subsidiary of CMN, owns a portfolio of mining assets and exploration interests collectively known as MMG. CMN acquired MMG from OZL in June 2009. Completion of the acquisition by the CMN Group of the Operating Mines, the Development Projects and various exploration projects (which are currently held through the Target Company) took place on 16 June 2009 (but with effect as of 1 June 2009).

Although the Purchase Price is higher than the consideration paid by CMN, it should be noted that MMG has since undertaken significant additional capital expenditure at the Operating Mines, the Development Projects and the various exploration projects subsequent to its acquisition by CMN. More importantly, there has also been a considerable increase in the base metal prices since then. We therefore consider that the Purchaser Price, albeit higher than the consideration paid by CMN back in June 2009, is fair and reasonable based on our analyses as set out in the section headed "Analysis of the Purchase Price" below.

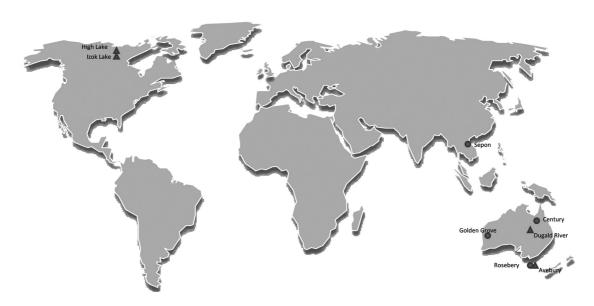
MMG owns and operates a portfolio of world-class base metal mining operations, development projects and exploration fields. MMG is one of the world's largest producers of zinc as well as a substantial producer of copper, lead, gold and silver.

### (b) The Target Group's key assets

The Target Group is the operator of the four Operating Mines and owner of the relevant mineral tenements of the four Operating Mines, through wholly-owned subsidiaries (other than the Sepon Project, where the Government of Laos holds a 10% shareholding in the relevant MMG subsidiary and that subsidiary is party to the MEPA with the Government of Laos). In addition to the mining operations located in Australia and Laos, the Target Group also has a large portfolio of advanced and early stage exploration projects located in Australia, Indonesia and North America. The Target Group's key assets include:

- (i) 90% interest in the Sepon copper/gold operations in Laos;
- (ii) 100% interest in the Century zinc/lead/silver mine in Queensland, Australia;
- (iii) 100% interest in the Golden Grove zinc/copper/gold/silver/lead metals mine in Western Australia;
- (iv) 100% interest in the Rosebery zinc/lead/copper/gold/silver metals mine in Tasmania, Australia;
- (v) 100% interest in the Avebury nickel project, currently on care and maintenance, in Tasmania, Australia;
- (vi) 100% interest in the Dugald River zinc/lead/silver project in Queensland, Australia; and
- (vii) various exploration projects in Australia, Indonesia and Canada.

Set out below is the geographical map and the key information on each of MMG's Operating Mines and Development Projects. Further information on the Operating Mines and the Development Projects are set out in the section headed "Information of the Target Group" in the Circular.





**Operating Mines** 



**Development Projects** 

Source: MMG

Operating Mine/ Development Project	Interest	Location	Status	Minerals	Estimated mine life
Sepon	90%	Sepon, Laos	producing	copper, gold	Copper: 2010 Gold: 2012 (pending further exploration)
Century	100%	Queensland, Australia	producing	zinc, lead, silver	2015
Golden Grove	100%	Western Australia, Australia	producing	zinc, copper, gold, silver, lead	2016
Rosebery	100%	Tasmania, Australia	producing	zinc, lead, copper, gold, silver	2020
Avebury	100%	Tasmania, Australia	care and maintenance	nickel	not applicable
Dugald River	100%	Queensland, Australia	project	zinc, lead, silver	not applicable
High Lake	100%	Nunavut, Canada	project	zinc, copper	not applicable
Izok Lake	100%	Nunavut, Canada	project	zinc, copper	not applicable

Source: MMG 2009 business review

### (c) MMG's Ore Reserves and Mineral Resources

The Ore Reserves and Mineral Resources (contained metal) of MMG as at 30 June 2009 and the production volume for the seven months ended 31 December 2009 and the six months ended 30 June 2010 (on the basis of a 100% interest in Sepon) are set out below:

### (i) Total MMG resources (contained metal)

	Zinc	Copper	Lead	Silver	Gold	Nickel
	(Mt)	(Mt)	(Mt)	(moz)	(moz)	(Mt)
Sepon	_	1.6	_	14.5	3.2	_
Century	5.1	_	0.6	47.3	_	_
Golden Grove	1.2	0.7	0.1	38.7	0.9	_
Rosebery	1.8	0.1	0.6	63.5	0.8	_
Avebury	_	_	_	_	_	0.2
Dugald River	6.6	_	1.0	61.9	_	_
Izok Lake	1.9	0.4	0.2	33.5	_	_
High Lake	0.6	0.4	0.1	38.9	0.5	
Total resources	17.1	3.2	2.5	298.3	5.4	0.2

Source: MMG

Note: Above figures are rounded according to JORC Code guidelines.

# (ii) Total MMG reserves (contained metal)

	Zinc	Copper	Lead	Silver	Gold
	(Mt)	(Mt)	(Mt)	(moz)	(moz)
Sepon	_	0.8	_	0.3	0.2
Century	3.4	_	0.3	19.3	_
Golden Grove	0.3	0.1	0.0	7.8	0.2
Rosebery	0.5	0.0	0.1	13.2	0.2
Total reserves	4.1	0.9	0.5	40.6	0.5

Source: MMG

 $Note: \ \ Above \ figures \ are \ rounded \ according \ to \ JORC \ Code \ guidelines.$ 

### (iii) Productions

	For the seven	For the six
	months ended	months ended
	31 December	30 June
Metal	2009	2010
	(000's)	(000's)
Zinc (tonnes)	266.6	318.2
Copper (tonnes)	56.4	49.1
Lead (tonnes)	25.7	25.9
Silver (oz)	3,010.6	4,025.0
Gold (oz)	94.6	91.5

Source: MMG

# (d) Financial information on the Target Group

### (i) Financial results of the Target Group

Set out below are the summarised consolidated audited financial results of the Target Company for the period from 8 April 2009 (date of incorporation) to 31 December 2009 and for the six months ended 30 June 2010 as extracted from the accountants' report of the Target Company as set out in Appendix I to the Circular. As the Target Company was only incorporated in April 2009 and the amalgamation of MMG from OZL was effective from 1 June 2009, the results for the period from 8 April 2009 to 31 December 2009 only reflected the performance of these operations for seven months (the "Reporting Period").

	For the period		
	For the six from 8 A		
	months ended	2009 to	
	30 June	31 December	
	2010	2009	
	(Audited)	(Audited)	
	US\$ (million)	US\$ (million)	
Revenue	844.7	852.8	
Cost of goods sold	(333.5)	(349.9)	
Gross profit	511.2	502.9	
Gross profit margin	60.5%	59.0%	
Depreciation and amortisation expenses	(124.0)	(158.3)	
Other expenses, net of income	(107.3)	(154.3)	
Profit before net financing expenses and income			
tax	279.9	190.3	
Net financing expenses	(23.4)	(20.5)	
Profit before income tax	256.5	169.8	
Income tax (expenses)/benefit	(22.5)	10.9	
Profit for the period	234.0	180.7	
Net profit margin	27.7%	21.2%	
Other comprehensive income for the period		0.2	
Total comprehensive income for the period	234.0	180.9	
Profit for the period attributable to:			
Shareholders of the Target Company	222.6	172.5	
Non-controlling interest	11.4	8.2	
	234.0	180.7	

### A. Revenue

Revenue represents sales of metals, mainly consist of zinc, lead, copper and gold, produced from four Operating Mines of MMG, namely Century, Sepon, Golden Grove and Rosebery. Revenue for the Reporting Period reached US\$852.8 million with gross margin of 59.0%. Revenue for the first half of 2010, as compared to the Reporting Period and on a pro rata basis, has increased mainly due to (i) a strengthening of the market prices of the base metals, in particular copper and zinc; and (ii) a lower production in the Reporting Period after a 11-week production shutdown at Century due to a pipeline failure. The gross margin also edged up to 60.5% mainly as a result of the higher commodity prices and higher output volume.

### B. Costs and expenses

Cost of goods sold mainly comprises employee wages, energy, stores and consumables costs. Taken together with the depreciation charge of the property, plant and equipment, they form the majority portion of the operating expenses.

# C. Income tax (expenses)/benefit

The Target Group has recorded an income tax benefit for the Reporting Period and a relatively low effective tax rate of approximately 8.8%, as compared to the standard corporate tax rate of 30.0% in Australia, for the six months ended 30 June 2010. The relatively low effective tax rate was mainly due to the recognition of significant deferred tax assets as a result of tax losses carried forward from prior year operations and considerable amount of accelerated depreciation charge in relation to the Target Group's fixed assets.

# D. Net profit

The consolidated net profit of the Target Company has increased from US\$180.7 million for the Reporting Period to US\$234.0 million for the six months ended 30 June 2010. The lower net profit for the previous period was partly attributable to the pipeline failure at Century which resulted in addition post-tax expenses of US\$38.3 million. Excluding the effects of this event, the net profit and its margin for the previous period would still be slightly below those for the six-month period ended 30 June 2010 mainly due to the strengthening base metal prices in general.

# (ii) Financial positions of the Target Group

Set out below are the summarised consolidated financial position of the Target Company as at 31 December 2009 and 30 June 2010 as extracted from the accountants' report of the Target Group as set out in Appendix I to the Circular.

	As at 30 June 2010	As at 31 December 2009
	US\$ (million)	US\$ (million)
Current assets		
Cash and cash equivalents	334.5	251.3
Inventories	215.6	177.5
Trade and other receivables, financial and other		
assets	170.9	112.3
	721.0	541.1
Non-current assets		
Deferred tax assets	95.1	65.5
Inventories, financial and other assets	24.9	23.5
Property, plant and equipment	1,490.3	1,493.7
	1,610.3	1,582.7
Current liabilities	,	,
Current tax payable	54.2	59.6
Trade and other payables, interest-bearing		
liabilities	140.2	144.8
Provisions	35.7	35.5
	230.1	239.9
Non-current liabilities		
Interest-bearing liabilities	1,099.2	1,100.8
Provisions	230.7	231.4
	1,329.9	1,332.2
Net assets	771.3	551.7
Titel disserts		
Equity		
Total equity attributable to shareholders of the		
Target Company	732.3	509.7
Non-controlling interest	39.0	42.0
	771.3	551.7
		= 331./

### A. Cash and cash equivalents

Cash and cash equivalents balance increased from US\$251.3 million as at 31 December 2009 to US\$334.5 million as at 30 June 2010. The increase was mainly generated from the operating activities of US\$334.5 million after payments for plant and equipment and available-for-sale financial assets.

### B. Inventories

Inventories comprise store and consumable, finished goods and consumable in relation to the operations of the various mines.

### C. Trade and other receivables, financial and other assets

The balance mainly includes trade and other receivables, prepayment and an investment in marketable securities. Based on the recent prevailing market price of such marketable securities, we note that their current market values are at premium over both their book value on the balance sheet as at 30 June 2010 and the valuations prepared by the Competent Evaluator.

### D. Property, plant and equipment

Property, plant and equipment were totalled US\$1,490.3 million as at 30 June 2010 and represented approximately 63.9% of the total assets. They mainly comprise plant and equipment, mine property and development as well as capitalised exploration and evaluation expenses and construction in progress directly related to the operations of the various mines.

# E. Interest-bearing liabilities and gearing

The interest-bearing liabilities mainly comprise bank borrowings of US\$1,095.0 million (equivalent to approximately HK\$8,541.0 million) carrying floating interest rates ranging from the London Interbank Offered Rate ("LIBOR") plus 1.2% to LIBOR plus 2.0%. These bank borrowings have tenors ranging from three to seven years and will mature partly in June 2012 and partly in June 2016.

The gearing, representing the net borrowings (cash and cash equivalent less interest-bearing liabilities) divided by the total equity, was 154.2% and 99.3% as at 31 December 2009 and 30 June 2010 respectively. The high gearings of the Target Company reflect the fact that the Target Company's acquisition of MMG assets in June 2009 was mainly funded by bank borrowings. The improvement in gearing level as at 30 June 2010 was mainly due to the increase in the total equity as a result of the profit generated from the mine operations for the six-month period ended on 30 June 2010.

### F. Provisions

Provisions relate mainly to estimated future expenses for mine rehabilitation, restoration and dismantling.

### G. Non-controlling interest

The non-controlling interest reflects the Lao government's 10.0% interest in Sepon mine.

Independent Shareholders are advised to read the management and discussion analysis of the Target Group as set out in Appendix I in the Circular for further information on the financial analysis of the Target Group.

# 8. Analysis of the Purchase Price

### (a) Chapter 18 Valuation

The Purchase Price is US\$1,846.0 million (equivalent to approximately HK\$14,398.8 million), which was arrived at after arm's length negotiations between the Company, All Glorious and Album Enterprises and determined with reference to the range of the Market Valuation and adjusted by the parties for projections of working capital changes until 31 December 2010, including, but not limited to, the Repatriation of US\$340.0 million (equivalent to approximately HK\$2,652.0 million) from the Target Group to Album Enterprises by way of dividend.

The Company has appointed Grant Samuel as the Competent Evaluator and commissioned Grant Samuel to conduct the Chapter 18 Valuation and the Market Valuation. The Market Valuation, which was prepared using methodologies in line with international market practices, is based primarily on a discounted cashflow analysis on the estimated life of mine operational parameters, including, but not limited to, Ore Reserves and Mineral Resources estimates, production profiles, operating and capital costs, potential for reserve extension and future outlook of commodity prices, with secondary consideration given to alternative valuation methodologies based on multiples of Ore Reserves and Mineral Resources, comparable company analysis and comparable transaction analysis. The Market Valuation seeks to evaluate the full market value of MMG and accordingly, reflects the value associated with Inferred Resources and the exploration potential of the Target Group's assets, which are specifically excluded from the Chapter 18 Valuation as required by the Listing Rules.

Based on our discussions with Grant Samuel, we understand that Grant Samuel has been instructed by the management of the Company to analyse and provide opinion on the market equity value of the Target Group (net of liabilities). The Target Group has been valued by Grant Samuel as at 30 June 2010 in the range of US\$1,533.0 million (equivalent to approximately HK\$11,957.4 million) to US\$1,741.0 million (equivalent to approximately HK\$13,579.8 million) based on the requirements of Chapter 18 of the Listing Rules but before deducting the Repatriation of US\$340.0 million (equivalent to approximately HK\$2,652.0 million) payable before Completion. The text of the Valuation Report in relation to MMG as at 30 June 2010 is set out in Appendix V to the Circular.

As shown in the Valuation Report set out in Appendix V to the Circular, MMG has been assessed by aggregating calculated values for MMG's mineral assets and adjusting for net debt and other assets and liabilities and its assessment of MMG's mineral assets has been determined having regard strictly to parameters stipulated in Chapter 18 of the Listing Rules. In particular, Grant Samuel has valued MMG, pursuant to the requirements of Chapter 18 of the Listing Rules, by taking into account the estimated value of measured and indicated resources that are considered to be economically extractable, which will generally mean that the Chapter 18 Valuation will be limited to an estimate of the value of reserves (i.e. that portion of measured and indicated resources that has been demonstrated to be economically extractable). Of particular significance, Rule 18.30(3) of the Listing Rules states that valuations for inferred resources are not permitted.

In assessing the Purchase Price, we have reviewed and discussed with Grant Samuel the methodology of, and basis and assumptions adopted for, the Chapter 18 Valuation of MMG as contained in the Valuation Report. In this connection, we understand that Grant Samuel has considered the four principal methodologies commonly used for valuing operating businesses, namely capitalisation of earnings or cash flow; discounting projected cash flows; industry rules of thumb; and estimation of the aggregate proceeds from an orderly realisation of assets. Grant Samuel has adopted the discounted cash flow ("DCF") methodology for the purpose of its valuation in the Valuation Report. The DCF methodology is widely used in the valuation of resources assets. More importantly, in the context of the requirements for a Chapter 18 Valuation it allows for the preparation of an estimate of value that only takes into account specified mineralisation (i.e. reserves plus that portion of measured and indicated resources that are economically extractable).

The DCF methodology involves the calculation of the net present values by discounting expected future cash flows. Projected cash flows are discounted to present values using discount rates that take into account the time value of money and the risks associated with the cash flows. We consider that the DCF methodology is appropriate for assets such as mineral assets where reserves are depleted over time and where significant capital expenditure is required. It is the primary method of valuation in the mining industry.

Grant Samuel constructed cash flow models for each of the key mineral assets of MMG. The financial models were constructed by Grant Samuel on the basis of operating models developed by AMC Consultancy Pty Ltd ("AMC"), the Competent Person, based on life of mine plans provided by MMG. The operating models developed by AMC had regard only to that portion of measured and indicated resources that has been demonstrated to be economically extractable, which generally corresponded to reserves. AMC reviewed each of the technical assumptions in the operating models, including those regarding reserve estimates, production profiles, operating overhead costs and capital costs. Grant Samuel determined the economic and financial assumptions used in the cash flow models. The net present value of each mineral asset has been calculated on an ungeared after tax basis as at 1 July 2010.

Based on our discussions with AMC and Grant Samuel and our review of the work conducted by AMC and Grant Samuel, we consider that, the assumptions, the basis and the methodology for the Chapter 18 Valuation of MMG are fair and reasonable.

### (b) Market Valuation

As explained in the sub-section headed "Chapter 18 Valuation" above, the Chapter 18 Valuation prepared by Grant Samuel in the Valuation Report in Appendix V to the Circular has only taken into account the measured and indicated resources that are considered to be economically extractable, which will generally be limited to an estimate of the aggregate value of reserves (i.e. that portion of measured and indicated resources that has been demonstrated to be economically extractable). In particular, the inferred resources are ignored.

In light of the above, the Company has commissioned Grant Samuel to prepare the Market Valuation by way of market based valuation approach, which is commonly adopted by industry participants for valuation of mineral resources asset (i.e. both Chapter 18 Valuation and Market Valuation attempt to estimate fair market value and market participants' assessment of value as reflected in transaction prices). The approach generally takes into account, where appropriate, measured, indicated and inferred resources, the potential for exploitation of additional mineralisation not yet classified as resources, and broader exploration prospectivity. As emphasised by Grant Samuel, the exclusion of these sources of potential value from the Chapter 18 Valuation means that Chapter 18 Valuation does not reflect a market value, i.e. it does not represent an estimate of the value that might be realised through an arm's length transaction. Rather, the Chapter 18 Valuation is essentially an estimate of the value notionally attributable to reserves only (based on a set of assumptions).

In fact, this is also consistent with AMC's analysis as set out in Appendix IV to the Circular. AMC has prepared production and capital and operating cost projections for use by Grant Samuel. Three scenarios were prepared with scenario one, which took into account existing ore reserves only, was used by Grant Samuel for its valuation in the Valuation Report. The other two scenarios considered the mineral resources and exploration potential for which AMC judges there is a high and reasonable confidence respectively of future conversion to ore reserves. Since these possible ore reserves and specifically excluded in the Valuation Report pursuant to the requirement of the Listing Rules, the valuation of "reserves only" case may understate the fair market value of MMG.

As discussed with Grant Samuel, the quantum of the difference between fair market values and values estimated for the purposes of a Chapter 18 Valuation will necessarily depend on the nature of individual resources assets. For some assets, particularly those that are well explored and tending towards the end of their economic lives, it is likely that there will be limited opportunities to exploit mineralisation beyond current reserves. For such assets, the difference between market value and values estimated for the purposes of a Chapter 18 Valuation may be immaterial. However, for certain other assets (such as resources projects in the early stages of their development or mines where it is impractical or uneconomic to prove up significant reserves in advance of mining, but where the ore body being mined is such as to provide reasonable grounds to expect that mining will continue for years into the future) the difference between estimates of market value and estimates of value for the purpose of a Chapter 18 Valuation may be substantial.

The market valuation approach and computation methodology used by Grant Samuel in the valuation of MMG is similar to that used for the Chapter 18 Valuation, including but not limited to the discount rates used. The key differences are (a) certain key assumptions, namely higher long run gold and silver prices, higher exchange rate of Australian dollars to United States dollars as well as higher long run inflation rates for both Australia and the United States of America was not adopted in the Market Valuation (as compared to the Chapter 18 Valuation) since the Market Valuation had not taken into account the historical commodity prices and exchange rates from July to October 2010; and (b) the asset value of the Market Valuation has been determined on the basis of fair market value after taking into account additional factors, among other things, (i) the potential for reserve extensions i.e. conversion of measured, indicated and inferred resources that are yet to be economically extractable; and (ii) option value inherent in mining operations having regard to cost structure, mine life and other characteristics of each of MMG's mining operations. The conventional discounted cash flow methodology implicitly assumes that the rate of output from a mining operation is pre-determined. This methodology ignores the value inherent in management's ability to vary production and other operating parameters in reaction to changes in commodity prices or other circumstances. Management may change the rate of production of a mine, close or re-open the mine or in certain circumstances even abandon it. Accordingly, the market value of a mining asset often comprises the sum of its Chapter 18 Valuation, the market value of inferred resources and an option (or series of options) over the resources it contains.

In particular, the Market Valuation differs from the Chapter 18 Valuation in a number of aspects:

- (i) the value of Inferred Resources has, in compliance with Rule 18.30(3) of the Listing Rules, been excluded from the Chapter 18 Valuation. However, a portion of the value of the Inferred Resources is included in the Market Valuation if the Competent Person is of the view that such portion of the Inferred Resources have a reasonable likelihood of being converted to reserves and economically mined in the future;
- (ii) the value of a portion of the Measured Resources and Indicated Resources which cannot be assumed to convert to reserves according to the requirements of Chapter 18 of the Listing Rules has been excluded from the Chapter 18 Valuation. However, the value of such portion of Measured Resources and Indicated Resources is included in the Market Valuation as the Competent Person is of the view that such portion of Measured Resources and Indicated Resources have a reasonable likelihood of being mined in the future;
- (iii) the value of a portion of the current Ore Reserves is excluded from the Chapter 18 Valuation, as the exclusion of Inferred Resources caused such Ore Reserves to become theoretically uneconomically viable to extract due to mine scheduling constraints. However, the value of such portion of Ore Reserves is included in the Market Valuation;

- (iv) the Chapter 18 Valuation attributes no value to near-mine exploration, whereas some level of success in near-mine exploration and the associated value have been included in the Market Valuation; and
- (v) the Chapter 18 Valuation attributes no value to the exploration and development projects currently operated by MMG due to an absence of a currently-stated Ore Reserve. However, some value has been ascribed to such exploration and development projects in the Market Valuation.

Furthermore, alternative valuation methodologies have been considered as secondary evidence of value as to the value of MMG's key mineral assets. In particular, the estimates of value have been reviewed to the extent possible and appropriate in terms of reserve and resource multiples, comparable company analysis and comparable transaction analysis. These alternative approaches to valuation reinforce the reasonableness of a DCF valuation since the DCF valuation is typically sensitive to the assumptions adopted. Based on our discussions with the management of the Company and Grant Samuel, as the Market Valuation was prepared in September 2010 for the purpose of the determination of the Purchase Price, the Market Valuation does not reflect the commodity prices and exchange rates from July to October 2010 such as the recent surges in the spot prices of various base and precious metals. On the other hand, the Valuation Report is prepared as at the date of the Circular for the purpose of compliance with Chapter 18 of the Listing Rules and therefore it is appropriate to include the recent commodity prices and exchange rates in its key assumptions.

In the light of the above, we have therefore reviewed the potential for reserve extensions of the mining assets of MMG as at 30 June 2009 as set out below.

# Sepon

	Copper	Gold	Silver
	(000's $t)$	(moz)	(moz)
Measured and indicated mineral resources	952.8	2.4	8.6
Less: Ore reserves	(763.4)	(0.2)	(0.3)
Measured and indicated mineral resources yet to be			
classified as ore reserves	189.4	2.2	8.3
Inferred mineral resources	685.9	0.6	6.1
Potential reserves	875.3	2.8	14.4
Percentage of ore reserves to:			
<ul> <li>total measured and indicated mineral resources</li> <li>total measured, indicated and inferred mineral</li> </ul>	80.1%	8.3%	3.5%
resources	46.6%	6.7%	2.0%

Source: the Valuation Report

As set out in the table above, reported copper ore reserve at Sepon mine represents approximately 80.1% of the measured and indicated mineral resources. The potential reserves, being the sum of measured and indicated mineral resources that are yet to be economically extractable together with inferred mineral resources, are 875,300 tonnes of copper, 2.8 million ounce of gold and 14.4 million ounce of silver, representing 53.4%, 93.3% and 98.0% of the total resources respectively. AMC notes that new ore reserves will come from, among other things, the conversion of existing mineral resources to ore reserves as well as the generation of new mineral resources and ore reserves from known prospects that have been partly explored. In general, AMC considers the potential for additional discoveries of gold and copper resources and conversion to reserves to be high.

# Century

	Zinc	Lead	Silver
	$(000{}^{\circ}\!\!s\ t)$	$(000{}^{\circ}\!\!s\ t)$	(moz)
	5 0 4 0   4	607.6	46.5
Measured and indicated mineral resources	5,048.4	635.6	46.7
Less: Ore reserves	(3,396.5)	(321.4)	(19.3)
Measured and indicated mineral resources yet to be			
classified as reserves	1,651.9	314.2	27.4
Inferred mineral resources	45.6	4.4	0.6
Potential reserves	1,697.5	318.6	28.0
Percentage of ore reserve to			
- total measured and indicated mineral resources	67.3%	50.6%	41.3%
- total measured, indicated and inferred mineral			
resources	66.7%	50.2%	40.8%

Source: the Valuation Report

As set out in the table above, reported ore reserve of zinc and lead at Century mine represent approximately 67.3% and 50.6% respectively of the measured and indicated mineral resources. The potential reserves, being the sum of measured and indicated mineral resources that are yet to be economically extractable together with inferred mineral resources, are 1,697,500 tonnes of zinc, 318,600 tonnes of lead and 28.0 million ounce of silver, representing 33.3%, 49.8% and 59.2% of the total resources respectively. AMC is of the opinion that there is a low likelihood that any discovery that might be made will materially impact the operations of the Century mine.

# Rosebery

	<b>Zinc</b> (000's t)	<b>Copper</b> (000's t)	<b>Lead</b> (000's t)	Silver (moz)	Gold (moz)
Measured and indicated mineral					
resources	992.1	33.5	261.1	30.0	0.5
Less: Ore reserves	(453.1)	(13.1)	(116.2)	(13.2)	(0.2)
Measured and indicated mineral resources yet to be classified as					
reserves	539.0	20.4	144.9	16.8	0.3
Inferred mineral resources	822.6	22.2	289.0	33.5	0.4
Potential reserves	1,361.6	42.6	433.9	50.3	0.7
Percentage of ore reserve to - total measured and indicated mineral					
resources	45.7%	39.1%	44.5%	44.0%	40.0%
- total measured, indicated and					
inferred mineral resources	25.0%	23.5%	21.1%	20.8%	22.2%

Source: the Valuation Report

As set out in the table above, reported ore reserve of zinc, copper and lead at Rosebery mine represents approximately 45.7%, 39.1% and 44.5% respectively of the measured and indicated mineral resources. The potential reserves, being the sum of measured and indicated mineral resources that are yet to be economically extractable together with inferred mineral resources, are 1,361,600 tonnes of zinc, 42,600 tonnes of copper, 433,900 tonnes of lead, 50.3 million ounce of silver and 0.7 million ounce of gold, representing 75.0%, 76.5%, 78.9%, 79.2% and 77.8% of the total resources respectively. Rosebery has a history of successful exploration and increases in resources and reserves. MMG believes there remains considerable potential for further increases through exploration and delineation drilling. AMC expects this to continue for the period of its production scenarios but there is a risk that exploration and conversion to reserves will not be as successful as envisaged.

#### Golden Grove

	Zinc	Copper	Lead	Silver	Gold
	(000's $t)$	(000's $t)$	(000's $t)$	(moz)	(moz)
Measured and indicated mineral					
resources	668.1	430.5	69.0	21.9	0.6
Less: Ore reserves	(265.1)	(131.3)	(34.1)	(7.8)	(0.2)
Measured and indicated mineral resources yet to be classified as					
reserves	403.0	299.2	34.9	14.1	0.4
Inferred mineral resources	489.2	271.4	27.8	16.9	0.3
Potential reserves	892.2	570.6	62.7	31.0	0.7
Percentage of ore reserve to - total measured and indicated mineral					
resources	39.7%	30.5%	49.4%	35.6%	33.3%
- total measured, indicated and					
inferred mineral resources	22.9%	18.7%	35.2%	20.1%	22.2%

Source: the Valuation Report

As set out in the table above, reported ore reserve of zinc, copper and lead at Golden Grove mine represents approximately 39.7%, 30.5% and 49.4% of the respective measured and indicated mineral resources. The potential reserves, being the sum of measured and indicated mineral resources that are yet to be economically extractable together with inferred mineral resources, i.e. 892,200 tonnes of zinc, 570,600 tonnes of copper, 62,700 tonnes of lead, 34.6 million ounce of silver and 0.7 million ounce of gold, represent 77.1%, 81.3%, 64.8%, 79.9% and

77.8% of the total resources respectively. Grant Samuel indicated that there is considerable potential to extend mining operations, both through mining underground resources and other mineralisation not currently in reserves, and through potential open pit mining of gold, copper and zinc mineralisation. In addition, the area around the Golden Grove operations remains prospective for further discoveries.

## Avebury

	Nickel
	(000's t)
Mineral resources	
- Measured and indicated	82.3
- Inferred	131.3
Potential reserves	213.6

Source: the Valuation Report

As set out in the table above, measured and indicated mineral resources at Avebury mine that are yet to be economically extractable together with inferred mineral resources, i.e. 213,500 tonnes of nickel, represent the entire amount of resources. MMG has not reported any ore reserves for Avebury but, in view of the significant portion of inferred resources, it is undertaking further drilling at the site to delineate additional resources. AMC echoes that there is significant potential for exploration success as they consider the area contains numerous significant ore bodies and many small scale historic workings.

# **Dugald River**

	Zinc	Lead	Silver
	(000's $t)$	(000's $t)$	(moz)
Mineral resources			
- Measured and indicated	5,596.6	851.4	57.8
- Inferred	1,005.8	131.6	4.1
Potential reserves	6,602.4	983.0	61.9

Source: the Valuation Report

MMG has not reported any reserves or measured and indicated mineral resources of Dugald River that are economically extractable so far and, therefore, Grant Samuel has not attributed any value thereto in the Valuation Report. Nevertheless, the Dugald River project potentially contains one of the world's largest known undeveloped lead-zinc-silver deposits and as indicated in the table above and by Grant Samuel, there are significant potential in Dugald River's mineral resources and they may provide additional value to MMG.

In addition to the above, we have also discussed with the management of MMG regarding the track record of the discovery of new resources and conversion of resources to reserves. We have been informed that MMG has successful results from recent exploration drilling programs and that are likely to results in increases in both mineral resources and ore reserves of MMG.

Based on the amount of potential reserves owned by the Target Group as discussed above, our discussion with AMC and Grant Samuel and our review of the work conducted by AMC and Grant Samuel, we consider that, the assumptions, the basis and the methodology for the Market Valuation are fair and reasonable.

We note from the letter from the Board in the Circular that the basis of determining the Purchase Price was with reference to the range of the Market Valuation and adjusted by the parties for expectations on working capital changes until 31 December 2010, including, but not limited to, the Repatriation (the "Adjusted Market Valuation").

As discussed in this section earlier, certain key assumptions adopted in the Market Valuation were different from those in the Chapter 18 Valuation, namely lower long run gold and silver prices, lower exchange rate of Australian dollars to United States dollars as well as lower long run inflation rates for both Australia and the United States of America. In the event that the abovementioned key assumptions were adjusted with reference to the recent commodity prices and exchange rates similar to that of the Chapter 18 Valuation, it is expected that the Adjusted Market Valuation would be adjusted upward.

# (c) P/E multiples

Based on the Purchase Price of US\$1,846.0 million (equivalent to approximately HK\$14,398.8 million) and the annualised net profit of the Target Group for the 13-month period ended 30 June 2010, the implied price-to-earnings multiple (the "P/E multiple") of the Target Group is approximately 5.1 times.

For reference purpose only, we have compared the P/E multiple of the Target Group to the P/E multiples of the peer companies which are engaged in trading, manufacturing and/or mining of base metals and listed on the Stock Exchange and with market capitalisation of over HK\$1.0 billion (the "Peer Companies"), comprising Aluminium Corporation of China Ltd. (stock code: 2600), China Molybdenum Co., Ltd. (stock code: 3993), CITIC Resources Holdings Ltd. (stock code: 1205), Hunan Nonferrous Metals Corporation Ltd. (stock code: 2626), Jiangxi Copper Co. Ltd. (stock code: 358), United Company RUSAL Plc (stock code: 486) and Xinjiang Xinxin Mining Industry Co., Ltd. (stock code: 3833). As shown in the table below, the P/E multiple of the Target Group is significantly lower than those of the Peer Companies, which are calculated

based on their respective closing share price as at the Latest Practicable Date and the results for latest 12 months, ranging from 6.2 times to 39.4 times with an average of 23.7 times and therefore the Purchase Price is considered favourable to the Company on this basis.

Page Companies	P/E multiples
Peer Companies	(times)
Aluminium Corporation of China Ltd.	N/A (Note)
China Molybdenum Co., Ltd.	39.4
CITIC Resources Holdings Ltd.	17.0
Hunan Nonferrous Metals Corporation Ltd.	N/A (Note)
Jiangxi Copper Co. Ltd.	26.9
United Company RUSAL Plc	6.2
Xinjiang Xinxin Mining Industry Co., Ltd.	29.2
Average	23.7
Maximum	39.4
Minimum	6.2

Sources: The respective Peer Companies' financial statements

Note: The respective companies were loss making during the latest 12 months reporting period.

Although the Peer Companies may have different location of mines, mine life and metals involved, we consider the Peer Companies, in general, serve as fair and representative samples for the purposes of comparison with the Target Group. The P/E multiple analysis as shown in this paragraph is for reference purpose only and our assessment on the Purchase Price is largely based on the fairness and reasonableness of the assumptions, the bases and the methodology for the Market Valuation as set out in this section above.

## 9. Analysis of the payment structure

The Purchase Price, being US\$1,846.0 million (equivalent to approximately HK\$14,398.8 million), is proposed to be settled by a combination of cash, the Loan, the Consideration Shares and the PSCS as set out in the table below.

	Purchase Price	HK\$ equivalent
	US\$ (million)	HK\$ (million)
Coch	100.0	780.0
Cash	100.0	780.0
Loan	694.2	5,414.5
Consideration Shares	361.8	2,822.3
PSCS	690.0	5,382.0
Total	1,846.0	14,398.8

#### (a) Cash

The Company had net cash, being the sum of cash and cash equivalent, time deposits and pledged bank deposits, less bank borrowings, of approximately HK\$931.8 million as at 30 June 2010. Although the cash component of the Purchase Price of HK\$100.0 million (equivalent to approximately HK\$780.0 million) represents a considerable portion of the net cash of the Group, after reviewing and taking into account, among other things, (i) the composition of the internal resources of the Group; (ii) the projected cash balance of the Target Group after the repatriation of US\$340.0 million (equivalent to approximately HK\$2,652.0 million) to Album Enterprises; (iii) the existing balances and maturity profiles of bank borrowings of the Enlarged Group; (iv) the cash flow forecast of the Enlarged Group for the period ending 31 December 2011 (the "Cash Flow Forecast"); (v) the banking facilities available to and the capital expenditure requirements of the Enlarged Group (after completion of the Acquisition), we consider the Company has sufficient internal resources to satisfy the payment of the cash component of the Purchase Price. Further discussion on the gearing and liquidity of the Enlarged Group is set out in the section headed "Financial effects of the Acquisition on the Group" below.

#### (b) Loan

Pursuant to the Share Sale Deed, approximately US\$694.2 million (equivalent to approximately HK\$5,414.5 million) of the Purchase Price will be satisfied by the proceeds from the Loan. The Loan has a maturity of five years and carries a fixed interest rate of 2.0% per annum for the first two years, 3.0% per annum for the third year, 4.0% per annum for the fourth year and 5.0% per annum for the last year. The Loan will be settled by a bullet payment at maturity unless the Company exercises its option for early repayment of the Loan, either in whole or in part. The early repayment of the Loan will not result in any penalty payment by the Company.

The Loan can be considered as a deferred consideration for the Acquisition. Given its five-year term, the availability of the Loan alleviates an immediate pressure on the Enlarged Group's liquidity as a result of the Acquisition, we consider this to be favourable to the Group. It is the intention of the Group to use part of the Specific Mandate for the primary purpose of repayment of the Loan. We are of the view that the tenor of five years shall provide the Company with sufficient time to conduct appropriate equity raising exercises such as the issue of new Shares under the Specific Mandate and, on top of the Specific Mandate, the issue of new Shares under the existing general mandate of the Company granted by the Shareholders at the annual general meeting of the Company held on 25 May 2010 (the "Existing General Mandate").

The fixed interest rate mechanism allows the Group with more certainty in terms of payment and is beneficial to the Group amid a possible rising trend of the market interest rate environment. In fact, the average interest rate of the Loan Note of 3.2% per annum is below the 5-year average historical effective borrowing rate of the Group in US dollars borrowings of 4.04%. Also, we estimate the future borrowing costs of the Group, which are determined based on the Group's current borrowing cost and the prevailing market forward rates in the coming five years. We consider that the average interest rate of the Loan is lower than the anticipated future borrowing costs of the Group.

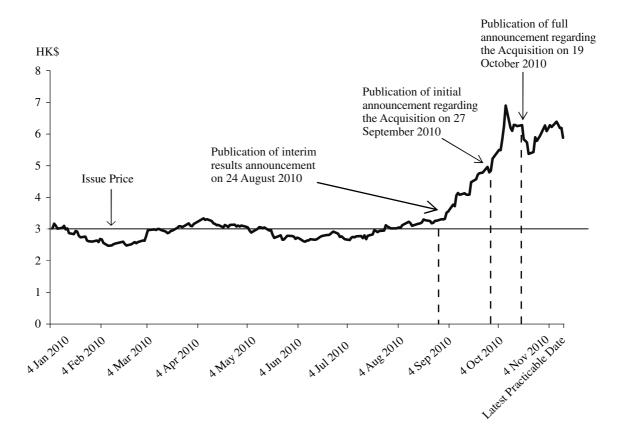
It is noted that the annual interest expense of the Loan payable by the Group will increase as mentioned above and maximum amount payable during the term of the Loan will be approximately US\$34.7 million (equivalent to approximately HK\$270.7 million) in the fifth year. Such interest expense only represents approximately 6.5% of the pro forma net cash flows generated from operating activities of the Enlarged Group for the six months ended 30 June 2010 or 15.4 times interest coverage, both on an annualised basis. On such basis, we consider the terms of the Loan will not represent an onerous burden on the Group.

#### (c) Consideration Shares

Pursuant to the Share Sale Deed, the Company will allot and issue 940,779,090 Consideration Shares at an issue price of HK\$3.00 per Share (the "Issue Price"), totalling approximately US\$361.8 million (equivalent to approximately HK\$2,822.3 million), to Album Enterprises or its nominee on Completion. The 940,779,090 Consideration Shares represent approximately 46.43% of the existing issued share capital of the Company as at the Latest Practicable Date, approximately 31.71% of the enlarged issued share capital of the Company immediately after Completion (assuming no conversion of the PSCS) and approximately 20.78% of the enlarged issued share capital of the Company immediately after Completion (assuming full conversion of the PSCS).

We have discussed with the Company and note that the issue of 940,779,000 Consideration Shares to satisfy part of the Purchase Price has the benefit of preserving the internal resources of the Company while maintaining the 25% minimum public float requirement under the Listing Rules. As such, the management of the Group considers that the issue of the Consideration Shares will strengthen the capital base of the Company and hence will be beneficial to the future development and expansion of the Group.

We set out below a chart of the Issue Price and the closing prices of the Shares from 1 January 2010 up to and including the Latest Practicable Date (the "Review Period").

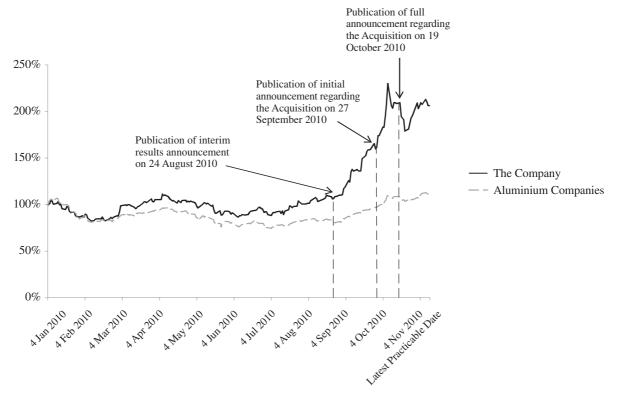


Source: Stock Exchange's website

As shown in the chart above, the Share price was either lower than or close to the Issue Price for most of the time from early 2010 up to the date of the release of the announcement of interim results for the six months ended 30 June 2010 (the "Interim Results") by the Company on 24 August 2010. The Interim Results were considered a good performance for the Company as both the turnover and net profit recorded considerable increases compared to the corresponding period in the prior year. The results should have an impact on the Share price and we would have expected that most of the impact, if any, would have been fully reflected within a few trading days after the release of the results. However, the Share price only increased slightly in the one-week period after the announcement of the Interim Results. In fact, the average closing Share price of the five-day period immediately after the release of the announcement of the Interim Results was approximately HK\$3.27 per Share.

The Share price started to rise from about the middle of September 2010. We consider that the increase in Share price has no direct relationship with the Interim Results but is more likely the result of market speculation on the Acquisition. Upon the release of the announcement on 27 September 2010 in relation to the possibility of the Acquisition, the Share price went up further from HK\$4.96 and reached its peak during the Review Period at HK\$6.9 on 8 October 2010.

We have also reviewed and compared the relative share price performance of the Company, the peer companies of the Company, which are engaged in trading, manufacturing and/or mining of alumina and aluminium and listed on stock exchanges and with market capitalisation of over HK\$10.0 billion (the "Aluminium Companies"), comprising Alcoa Inc., Alumina Limited, Aluminium Corporation of China Ltd., Hindalco Industries Limited, National Aluminium Company Limited, Norsk Hydro ASA and United Company RUSAL Plc, for the Review Period. We consider the Aluminium Companies are fair and representative samples for the purposes of assessing the Issue Price.



Source: Stock Exchange's website and Bloomberg

As shown in the chart above, the performance of Share price was largely consistent with those of the Aluminium Companies during the period up to, and shortly after, the announcement of the Interim Results by the Company (the "Reference Point"). Subsequent to the aforesaid period, the Share price surged significantly in September and October 2010, in particular upon the release of the announcement on 27 September 2010 in relation to the possibility of the Acquisition (the "27 Sep Announcement"), and rose by over 100% in certain time periods. The share prices of the Aluminium Companies have also demonstrated rising trends during the aforesaid period but were not as much as compared to the Share price. We are of the opinion that most of the recent upward movement in the Share price was predominantly due to market speculation on the Acquisition and, to a lesser extent, the improvement in market valuation of the industry in general, as shown by the share price performances of the Aluminium Companies, during the period between the Reference Point to the Latest Practicable Date (the "Reference Period").

Given the significant disparity between the increase in the market price of the Share and that of the Aluminium Companies during the Reference Period, we consider the run up in the Share price, in particular during the period after the release of the 27 Sep Announcement and up to the Latest Practicable Date, as being largely affected by the speculation on the Acquisition. Set out in the table below is a comparison of the share price performance of the Aluminium Companies as compared to the Share price during the Reference Period.

Percentage

	rereentage
	increase/(decrease) in
	share price during the
	Reference Period
	(Note)
Alcoa Inc.	31.0%
Alumina Limited	22.1%
Aluminium Corporation of China Limited	17.7%
Hindalco Industries Limited	33.9%
National Aluminium Company Limited	(3.0)%
Norsk Hydro ASA	26.4%
United Company RUSAL Plc	25.0%
Average	21.9%
Maximum	33.9%
Minimum	3.0%
The Company	77.6%

Source: Stock Exchange's website and Bloomberg

Note: The percentage increase/decrease in share price during the Reference Period is calculated based on (i) 5-day average of the closing share price of the Aluminium Companies and the Company immediately after the announcement of the Interim Results; and (ii) 5-day average of the closing share price of the Aluminium Companies and the Company immediately (a) before (and including) the Latest Practicable Date for Alumina Limited, Aluminium Corporation of China Limited and United Company RUSAL Plc; and (b) before (but excluding) the Latest Practicable Date for Alcoa Inc., Hindalco Industries Limited, National Aluminium Company Limited and Norsk Hydro ASA.

As shown in the table above, the average share prices of the Aluminium Companies has increased by 21.9%. If we apply the average share prices increase of the Aluminium Companies during the Reference Period to the average Share price of the five-day period immediately after the release of the announcement of the Interim Results of approximately HK\$3.27 per Share, the Share price would be approximately HK\$3.99 (the "Adjusted Share Price"). The Issue Price of the Consideration Shares of HK\$3.00 represents a discount of approximately 24.8% as compared to the Adjusted Share Price. Another major part of the Purchase Price is to be satisfied by the issue of the PSCS. We consider that the PSCS, when issued, forms part of the Company's equity and one of the chief purpose of having the PSCS as part of the Consideration is to ensure compliance with the "public float" requirement under the Listing Rules as the PSCS, which have

no voting rights at general meetings of the Company, are excluded from the "public float" computation. We therefore consider that the analysis of the Issue Price shall be made in conjunction with the analysis of the initial conversion price of the PSCS as set out in the next sub-section.

#### (d) PSCS

Pursuant to the Acquisition, US\$690.0 million (equivalent to approximately HK\$5,382.0 million) of the Purchase Price will be satisfied by the issue of the PSCS, which is convertible into 1,560 million Shares at the conversion price of HK\$3.45 (the "Initial Conversion Price").

### (i) Conversion price

The initial conversion price of HK\$3.45 per conversion share represents a 15% premium over the Issue Price. The PSCS will be subject to customary conversion price adjustments for, among other things, subdivision, reclassification or consolidation of Shares, bonus issues, rights issues, capital distributions, distributions and other dilutive events.

As discussed in the sub-section headed "Consideration Shares" immediately above, we consider that the analysis of the Issue Price shall be made in conjunction with the analysis of the initial conversion price of the PSCS. After allowing for the relative size of the Consideration Shares and the PSCS, the "blended issue price" of the Consideration Shares and the PSCS is approximately HK\$3.30 per Share, which represents a discount to the Adjusted Share Price of approximately 17.3%. Notwithstanding such discount, after considering (i) the possible upward adjustments to the Adjusted Market Valuation due to the recent commodity prices and exchange rates as analysed in the sub-section headed "Market Valuation" above; (ii) the significantly lower implied P/E multiple of the Target Group as compared to the Peers Companies as analysed in the sub-section headed "P/E multiples" above; (iii) the effective P/E multiple of the Company of 14.8 times represented by the "blended issue price" of HK\$3.30 and the aggregate net profit of the Group for the 12 months ended 30 June 2010 (based on the interim results of the Group for the 6-month periods ended 30 June 2009 and 2010, the audited net profit of the Group for the year ended 31 December 2009 and adjusted for restatement) is significantly higher than the 5.1 times P/E multiple of the Target Group as discussed in the section headed "Analysis of the Purchase Price" above; and (iv) the considerable anticipated enhancements of earnings per Share of the Enlarged Group by as much as 129.3% as set out in the sub-section headed "Financial effects of the Acquisition on the Group — Earnings" in below; and (v) the positive industry outlook of the base metal industry as mentioned in the section headed "Industry Outlook" above, we are of the view that the discount of the "blended issue price" of the Consideration Shares and the PSCS to the Adjusted Share Price is acceptable.

#### (ii) Distribution rate

The PSCS carries a fixed distribution rate of 1% per annum and any undistributed amount will be accumulated. The payment of the distribution of the PSCS will be at the discretion of the Company but it does impose a restriction on the dividend payment to the Shareholders if the distribution of the PSCS is not made.

As discussed with the Company, the distribution rate of the PSCS was determined based on, among other things, (i) the current borrowing rate of the Group; (ii) the pro forma cash flow of the Enlarged Group; (iii) the repayment capability of the Enlarged Group; and (iv) the quasi capital nature of the PSCS.

Based on our review of the Company's borrowing costs, we noted that the distribution rate of 1% is significantly lower than the best rates it can borrow from the capital markets.

The Company has no fixed dividend policy. Save for the dividend of HK3.0 cents per Share for the financial year ended 31 December 2007, the Company has not declared any dividend since the restructuring of the Company in 2005, mainly due to the lack of distributable reserves of the Company. Based on the Share price immediately after the announcement of annual results, including declaration of proposed dividends, for the financial year ended 31 December 2007, the dividend yield was approximately 1.05%, which is higher than the 1% distribution rate of the PSCS.

The annual distribution of the maximum principal amount of the PSCS is approximately HK\$53.8 million. Such distribution amount only represents approximately 1.9% of annualised net profit of the Enlarged Group for the six months ended 30 June 2010 and approximately 1.3% of the annualised pro forma net cash flows generated from operating activities of the Enlarged Group based on the results for the six months ended 30 June 2010.

Based on (i) the healthy pro forma cash flow and net profit position of the Enlarged Group (details of which will be discussed in the section headed "Effects of the Acquisition" below) and the annual distribution only represents approximately 1.9% and 1.3% of the annualised pro-forma net profit and operating cashflow of the Enlarged Group; (ii) the non-redeemable nature of the PSCS; (iii) the option available to the Company to defer any payment of distributions; and (iv) the Company will have control over MMG operating and financing activities upon completion of the Acquisition and therefore the Company can manage the cash flow of MMG in a way that would allow the Company to have sufficient financial resources to pay for the distribution of PSCS, we consider that the Enlarged Group will not suffer from excessive financial burden in relation to the payment of the fixed distribution of the PSCS. We are therefore of the view that the distribution rate of 1% per annum is fair and reasonable so far as the Independent Shareholders are concerned.

#### (iii) Redemption

PSCS is perpetual in nature and none of the PSCS is redeemable by the issuer or the holder(s) thereof in general. We consider that the non-redeemable nature of the PSCS is favourable to the Company on the basis that (i) the issue of the PSCS will enhance the capital base of the Company but avoiding any contravention of the "public float" requirement under the Listing Rules as the PSCS are excluded from the "public float" computation; and (ii) the non-redeemable nature of the PSCS will not put undue pressure on the Enlarged Group's liquidity.

#### (iv) Restriction on conversion

A holder of the PSCS may only convert such number of PSCS if such conversion would not cause the Company to be not in compliance with the minimum public float requirement under the rules and regulations of the stock exchange on which the Shares are listed following conversion.

## (v) Company's option to force conversion

After the first anniversary of the date of issue of the PSCS, the Company may, at its sole discretion and subject to the terms of the PSCS (which have been set out in detail in the letter from the Board in the Circular), elect to convert the PSCS in whole but not in part into Shares subject to certain requirements (including the restriction on conversion referred in paragraph (iv) above). As the Company will have the right, but not obligation, to force the conversion of the PSCS, we are of the view that the option is favourable to the Company.

### (vi) Pre-emption right

Prior to the PSCS Holder transferring a PSCS, the PSCS Holder must notify the Company of the PSCS Holder's intention to transfer the PSCS in writing. Following the receipt by the Company of such notice, the Company may elect to purchase and cancel all or some of the PSCS at the price specified in the notice. If the Company does not elect to purchase, or fails to complete the purchase after so elected, the PSCS Holder may transfer those PSCS to the purchaser for the purchase price specified in the notice in accordance with the terms of the PSCS. As the Company will have the pre-emption right, but not obligation, to purchase and cancel the PSCS proposed to be transferred, we are of the view that the right is favourable to the Company.

Further details of the PSCS are contained in the letter from the Board in the Circular, the Independent Shareholders are advised to read the relevant sections carefully.

### 10. Specific Mandate

## (a) Background

Under the existing general mandate granted by the Shareholders at the annual general meeting of the Company held on 25 May 2010 (the "Existing General Mandate"), the Directors have been authorised to allot and issue new Shares of not exceeding 20% of the issued share capital of the Company as at 25 May 2010 (i.e. a maximum of 405,243,359 new Shares). As at the Latest Practicable Date, the total number of Shares in issue remain 2,026,216,799 and unchanged since the last annual general meeting of the Company. The Existing General Mandate has not been utilised by the Company and no equity fund raising activities have been conducted by the Company during the past 12 months immediately preceding the Latest Practicable Date.

As stated in the letter from the Board, the Board proposes to seek a Specific Mandate from the Independent Shareholders at the EGM to issue not more than 2,700 million new Shares (representing approximately 133.25% of the existing issued share capital of the Company as at the date of this announcement, approximately 91.00% of the enlarged issued share capital of the Company immediately after Completion (assuming no conversion of the PSCS), approximately 59.64% of the enlarged issued share capital of the Company immediately after Completion (assuming full conversion of the PSCS), and approximately 37.36% of the enlarged issued share capital of the Company immediately after Completion (assuming full conversion of the PSCS) and the issuance of all the new Shares under the Specific Mandate. This Specific Mandate amount is approximately 2.24 times of the normal 20% general mandate available to listed issuers in Hong Kong on an enlarged basis.

The Board currently intends that the Specific Mandate sought will cover new Shares to be issued pursuant to one or more potential Placing(s) in part to be conducted by the Company, subject to the then prevailing market conditions. Depending on market conditions, the Directors intend to raise net proceeds of up to US\$1,600.0 million (equivalent to approximately HK\$12,480.0 million) and apply such net proceeds from the potential Placing(s) for the full repayment of the Loan of approximately US\$694.2 million (equivalent to approximately HK\$5,414.5 million) and deployment of funding towards the exploration and development initiatives of the Target Group's projects, including, but not limited to, the development of the Dugald River zinc project located in Queensland, Australia (which is in the final stages of a feasibility study and has an estimated pre-production capital cost of approximately US\$790.0 million (equivalent to approximately HK\$6,162.0 million)) and any remaining balance to the other exploration initiatives of the Target Group. The proposed issue of new Shares under the potential Placing(s), if executed, will also enlarge each of the shareholder and capital bases of the Company and strengthen the financial position of the Enlarged Group.

## (b) Terms of the Specific Mandate

The major terms of the proposed Specific Mandate are as follows:

- (i) to issue not more than 2,700,000,000 new Shares;
- (ii) the new Shares will be issued at a discount of not more than 20% to the higher of:
  - (a) the closing price on the date of any relevant placing agreement or other agreement involving the proposed issue of securities under the Specific Mandate; and
  - (b) the average closing price in the five trading days immediately prior to the earlier of:
    - (A) the date of announcement of the placing or the proposed transaction or arrangement involving the proposed issue of securities under the Specific Mandate;
    - (B) the date of the placing agreement or other agreement involving the proposed issue of securities under the Specific Mandate; and
    - (C) the date on which the placing or subscription price is fixed;
- (iii) the grant of the Specific Mandate is part of the terms of the Acquisition and conditional upon the passing of an ordinary resolution by the Independent Shareholders at the EGM approving such grant;
- (iv) the issue of the new Shares pursuant to the Specific Mandate will be conditional upon Completion; and
- (v) the proposed Specific Mandate is for the period from the passing of the relevant resolutions at the EGM up to the earlier of: (a) 31 July 2011; or (b) the revocation or variation of the authority given under the relevant resolution(s) at the EGM by ordinary resolution(s) of the Independent Shareholders in a general meeting.

We note that the pricing threshold of the Shares proposed to be issued under the Specific Mandate is similar as the pricing threshold prescribed by the Listing Rules. We therefore consider the pricing mechanism of the Specific Mandate to be fair and reasonable.

We also consider that the new issue amount threshold of 2,700 million Shares, being the maximum number of new Shares to be issued under the Specific Mandate, is acceptable primarily because the position of the controlling Shareholder CMN is essentially the same as the other Independent Shareholders in the context of the Specific Mandate. Following Completion, subject to any conversion of the PSCS, CMN will suffer the same degree of dilution as the other Independent Shareholders as a result of any new Shares issues pursuant to the Specific Mandate. The grant of the Specific Mandate does not necessarily mean dilution as a result of the new Share placement. The Company still retains the option to conduct various type of fund raising exercises through, for example, rights issue, issues of convertibles and/or debt financing. Because of the increase in the Enlarged Group's gearing immediately after the Acquisition as discussed in the section headed "Financial effects of the Acquisition on the Group" below, we consider that the Specific Mandate, which is valid up to 31 July 2011, provides the Company with an additional option to conduct new Share placement(s) on-market swiftly to deal with any unforeseen cashflow requirements as a result of the Acquisition. Although conducting a rights issue may also achieve similar effects but conducting a rights issue of this scale in Hong Kong takes a much longer timetable as compared to new Share placement. In addition, a rights issue may attract higher underwriting costs as compared to new Share placement. The option of having the rights issue underwritten by the controlling Shareholder at lower underwriting fee may not be feasible in this case because of the "public float" restriction. As mentioned in the section headed "Financial effects of the Acquisition on the Group" below, earnings per Share will continue to be accretive on the assumptions that (i) the new Share placement price at approximately HK\$4.67, being 20% discount to the Share price as at the Latest Practicable Date; and (ii) the gross proceeds from the new Share placement fully cover the initial outstanding amount of the Loan.

Based on the above, we consider the availability of the Specific Mandate is desirable and the terms of the Specific Mandate are fair and reasonable and in the interests of the Independent Shareholders as a whole.

## 11. Proposed increase in authorised share capital

The present authorised share capital of the Company is HK\$300 million comprising 6,000 million Shares, of which 2,026,216,799 Shares are in issue as at the Latest Practicable Date. As part of the terms of the Acquisition, the Board proposes to increase the authorised share capital of the Company from HK\$300 million to HK\$900 million by the creation of an additional 12,000 million unissued Shares to rank *pari passu* in all respects with the existing Shares, when issued, in the capital of the Company. The increase in authorised share capital of the Company is conditional upon the passing of an ordinary resolution by the Shareholders at the EGM.

As the increase in the authorised share capital of the Company is necessary for the issues of the Consideration and the PSCS, we consider that the proposed increase is fair and reasonable.

### 12. Potential dilution to shareholding of the Independent Shareholders

Assuming no changes in the shareholding in the Company from the Latest Practicable Date other than those contemplated under the Share Sale Deed, the shareholding structures of the Company (i) as at the Latest Practicable Date; (ii) immediately after Completion (assuming no conversion of the PSCS); (iii) immediately after Completion (assuming full conversion of the PSCS); (iv) immediately after Completion (assuming full conversion of the PSCS and the issuance of all the new Shares under the Specific Mandate) are, and will be, as follows:

**Immediately** 

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			after Comp	•	conversion of 1	•
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	As at the l	Latest	no convei	O	the new Shar	
Shareholder	Practicable	Date	of the PS	SCS)	the Specific I	Mandate
	No. of Shares	%	No. of Shares	%	No. of Shares	%
CMC (Notes 1 and 2)	1,284,467,826	63.39	1,284,467,826	43.29	1,284,467,826	17.77
Consideration Shares	_	_	940,779,090	31.71	940,779,090	13.02
Conversion Shares					1,560,000,000	21.59
Total CMC shareholding						
(Notes 1 and 2)	1,284,467,826	63.39	2,225,246,916	75.00	3,785,246,916	52.38
Public Shareholders	741,748,973	36.61	741,748,973	25.00	741,748,973	10.26
Independent placees			<u> </u>		2,700,000,000	37.36
Total	2,026,216,799	100.00%	2,966,995,889	100.00%	7,226,995,889	100.00%

## Notes:

- 1. CMC holds approximately 91.57% of the issued share capital of CMN, which in turn holds the entire issued share capital of Top Create Resource Limited. Top Create Resource Limited holds approximately 63.39% of the issued share capital of the Company as at the Latest Practicable Date. The Consideration Shares and Conversion Shares are to be issued to Album Enterprises or its nominee. Album Enterprises is wholly-owned by CMN.
- 2. The table assumes that CMN will be Album Enterprises' nominee for the issuance of the Consideration Shares and to hold the PSCS. CMN may only convert such number of securities, where such conversion would not cause the Company to contravene the minimum public float requirement under the rules and regulations of the stock exchange on which the Shares are listed following the conversion.

As shown above, 2,700 million Shares, representing 133.25% of the issued share capital of the Company as at the Latest Practicable Date (assuming there is no change in the issued share capital of the Company between the Latest Practicable Date and the date of the EGM), would be issued upon being full utilisation of the Specific Mandate. Upon the Specific Mandate is fully utilised, the shareholding of the existing public Shareholders will decrease to 10.26% immediately after Completion (assuming full conversion of the PSCS) and the issuance of all the new Shares under the Specific Mandate.

### 13. Financial effects of the Acquisition on the Group

#### (a) Earnings

Upon Completion, the Target Company will become a wholly-owned subsidiary of the Company and, accordingly, the financial results of the Target Group will be consolidated into the financial statements of the Group. We set out below the earnings and pro forma earnings, including on a per Share basis, of the Group and of the Enlarged Group for the six months ended 30 June 2010 respectively based on the unaudited pro forma consolidated income statement of the Enlarged Group as set out in Appendix III to the Circular.

	The Group	Pro forma Enlarged Group		
		Immediately	Immediately	
		after Completion	after Completion	
		(assuming no	(assuming	
		conversion	full conversion	
		of the PSCS)	of the PSCS)	
			(Note)	
Profit for the period attributable				
to the Shareholders				
(HK\$ million)	424.0	1,423.7	1,423.7	
Total number of Shares in issue	2,026,216,799	2,966,995,889	4,526,995,889	
Earnings per Share (HK cents)	20.92	47.98	31.45	
Earnings per Share accretion	_	129.3%	50.3%	

Note: This scenario may or may not exist as CMN may only convert such number of securities, where such conversion would not cause the Company to contravene the minimum public float requirement under the rules and regulations of the stock exchange on which the Shares are listed following the conversion.

As shown in the table above, earnings would increase from HK\$424.0 million to HK\$1,423.7 million (which would further increase if the one-off estimated transaction costs, substantially comprising stamp duties, of approximately HK\$651.3 million in relation to the Acquisition have been excluded) while earnings per Share immediately after Completion (assuming no conversion of the PSCS and issue of Shares under the Specific Mandate) will be enhanced by 129.3% to HK47.98 cents. In the event that the PSCS are fully converted, earnings per Share will still improve to HK31.45 cents, representing an increase in earnings per Share of 50.3%.

As referred to in the section headed "Analysis of the payment structure — Loan", the Loan can be considered as a deferred consideration for the Acquisition and it is the intention of the Group to use the Specific Mandate firstly for the purpose of repayment of the Loan. As the Specific Mandate forms an integral part of the Acquisition, we also consider the potential financial effects of the Acquisition upon the issue of new Shares under the Specific Mandate if the Loan is fully settled by issuing new Shares pursuant to the Specific Mandate. Assuming (i)

new Shares are issued at the prices of approximately HK\$4.67, being 20% discount to the Share price as at the Latest Practicable Date; and (ii) the gross proceeds from the new Share placement pursuant to the Specific Mandate fully cover the initial outstanding amount of the Loan, effect on earnings per Share will continue to be accretive.

## (b) Equity attributable to the Shareholders

As at 30 June 2010, the Group's equity attributable to the Shareholders amounted to HK\$5,375.5 million, or approximately HK\$2.65 per Share. As both the Group and the Target Group are controlled by CMC, the assets and liabilities of the Target Group will be accounted for in the consolidated financial statements of the Enlarged Group upon Completion using the merger accounting method.

We set out below the equity and pro forma equity attributable to the Shareholders, including on a per Share basis, of the Group and of the Enlarged Group as at 30 June 2010 respectively based on the unaudited pro forma consolidated balance sheet of the Enlarged Group as set out in Appendix III to the Circular.

	The Group	Pro forma Enlarged Group	
		Immediately after	Immediately after
		Completion	Completion
		(assuming no	(assuming full
		conversion of	conversion of
		the PSCS)	the PSCS)
			(Note 1)
Equity attributable to the			
Shareholders (HK\$ million)	5,375.5	1,589.7	1,589.7
Total number of Shares in issue	2,026,216,799	2,966,995,889	4,526,995,889
Based on merger accounting			
Equity attributable to the			
Shareholders per Share (HK\$)	2.65	0.54	0.35
Changes to equity attributable			
to the Shareholders per Share	_	(79.6)%	(86.8)%
If merger accounting is not adopted			
Equity attributable to the			
Shareholders per Share (HK\$)	2.65	4.36	2.86
		(Note 2)	( <i>Note</i> 2)
Changes to equity attributable			
to the Shareholders per Share	_	64.5%	7.9%

#### Notes:

<sup>1</sup> This scenario may or may not exist as CMN may only convert such number of securities, where such conversion would not cause the Company to contravene the minimum public float requirement under the rules and regulations of the stock exchange on which the Shares are listed following the conversion.

Assuming the fair value of the Target Group of HK\$14,398.8 million is fully reflected in the books of the Enlarged Group, the equity attributable to the Shareholders of pro forma the Enlarged Group is expected to be enhanced by HK\$11,338.9 million.

As shown in the various scenarios above, the pro forma equity attributable to the Shareholders of the Enlarged Group would represent dilutions ranging from 79.6% to 86.8% to the equity attributable to the Shareholders of the Group as at 30 June 2010.

As set out in note 6 to the unaudited pro forma financial information on the Enlarged Group in the Appendix III to the Circular, the assets and liabilities of the Target Group will be accounted for using merger accounting. Therefore, adjustments will be made for the elimination of investment cost of the Company in the Target Company against its share capital and for the recognition of that amount in merger reserve (the "Merger Reserve"). Given that the investment cost of the Company in the Target Group, i.e. the Purchase Price, of US\$1,846.0 million (equivalent to approximately HK\$14,398.8 million) considerably exceeds the share capital of the Target Company of HK\$2,628.6 million, the elimination of the investment cost of the Company in the Target Company against its share capital would result in a significant deficit of approximately HK\$11,770.2 million charged to the merger reserve account, which significantly reduce the equity attributable to the Shareholders of the Enlarged Group, as well as on a per Share basis as shown in the table above.

We are of the view that the dilution of net asset value per Share as a result of the consolidation of the Target Group by adopting the aforesaid merger accounting treatment is purely notional as the underlying fair value of the Target Group of HK\$14,398.8 million would not be fully reflected in the books of the Enlarged Group. Should the fair value of the Target Group of HK\$14,398.8 million be fully reflected in the books of the Enlarged Group, the pro forma net asset value per share of the Enlarged Group shall be enhanced by 64.5% (assuming no conversion of PSCS) or enhanced by 7.9% (assuming full conversion of PSCS). If the fair value of the Target Group is fully reflected in the books of the Enlarged Group, the effect of the pro forma net asset value per share of the Enlarged Group is accretive if (i) new Shares are issued at the prices of approximately HK\$4.67, being 20% discount to the Share price as at the Latest Practicable Date; and (ii) the gross proceeds from the new Share placement pursuant to the Specific Mandate fully cover the initial outstanding amount of the Loan, (assuming no conversion of the PSCS and merger accounting is not adopted).

# (c) Gearing and liquidity

As at 30 June 2010, the Group had net cash position of HK\$931.8 million, representing cash and bank deposits of HK\$1,950.9 million, less bank borrowings of HK\$1,019.1 million. Accordingly, the Group's gearing ratio (defined as total borrowings less cash and bank deposits divided by shareholders' equity) is nil.

We set out below the gearing of the Group and of the Enlarged Group as at 30 June 2010 based on the unaudited pro forma consolidated balance sheet of the Enlarged Group as set out in Appendix III to the Circular.

	The Group	Pro forma Enlarged Group Immediately after Completion (either no or full conversion of the PSCS)
Total borrowings less cash and bank deposits (HK\$ million)	Net cash	13,846.6
If merger accounting is adopted Total equity (HK\$ million) Gearing ratio (times)	5,375.5 —	2,097.1 6.6
If merger accounting is not adopted  Total equity (HK\$ million)  Gearing ratio (times)	5,375.5 —	13,436.0 1.03

Based on the unaudited pro forma consolidated balance sheet as set out in the Appendix III to the Circular, the total cash and bank deposits of the Enlarged Group would reduce to HK\$1,128.0 million after the payment the cash portion of the Purchase Price of US\$100.0 million (equivalent to approximately HK\$780.0 million) and the Repatriation of US\$340.0 million (equivalent to approximately HK\$2,652.0 million), while total borrowings, including the Loan of approximately US\$694.2 million (equivalent to approximately HK\$5,414.5 million) and bank borrowings, would increase to HK\$14,974.6 million. Based on the Shareholders' equity as discussed in the sub-section (b) headed "Equity attributable to the Shareholders" in this section above, the gearing of the Group will increase substantially to approximately 6.6 times. This substantial increase in gearing level of the Group is however mainly attributable to the adoption of merger accounting as discussed above. Should the value of the Target Group be fully reflected in the books of the Enlarged Group, the Enlarged Group's gearing will only increase to approximately 1.03 times.

We consider that the Loan due to Album Enterprises can be viewed as part of the Company's equity provided by its major shareholder CMN as Album Enterprises is wholly-owned by CMN which will be interested in approximately 83.61% of the Company's equity (taken into account the PSCS) on a fully-diluted basis after the Acquisition. If the Loan of approximately US\$694.2 million (equivalent to approximately HK\$5,414.5 million) were to be adjusted, the Enlarged Group's gearing will further reduce to approximately 0.45 times.

Further, if the Specific Mandate is utilised in full, the Enlarged Group's gearing is expected to be significantly reduced.

We also set out below the gearing ratio, calculated as total borrowings less cash and bank deposits divided by shareholders' equity, of each of the Peer Companies.

Peer Companies	Gearing
Aluminium Corporation of China Ltd.	1.03 times
China Molybdenum Co., Ltd.	Net cash
CITIC Resources Holdings Ltd.	1.09 times
Hunan Nonferrous Metals Corporation Ltd.	1.55 times
Jiangxi Copper Co. Ltd.	0.18 times
United Company RUSAL Plc	1.29 times
Xinjiang Xinxin Mining Industry Co., Ltd.	Net cash

Sources: The respective Peer Companies' financial statements

Among the Peer Companies, save for China Molybdenum and Xinjiang Xinxin which had net cash positions, the gearing ratios of the Peer Companies were between 0.18 times and 1.55 times with an average of 1.03 times. We therefore consider, that the increase in the Enlarged Group's gearing immediately after the Acquisition as discussed above is acceptable.

We set out the maturity profile of the borrowings of the Enlarged Group as below:

	The Target			
	The Group	Group	The Loan	Total
	(HK\$	(HK\$	(HK\$	(HK\$
	million)	million)	million)	million)
On demand or within one year	455.1	_	_	455.2
More than one year but not				
exceeding two years	144.9	5,857.8	_	6,002.7
More than two years but not				
exceeding five years	294.3	_	5,414.5	5,708.8
Over five years	124.8	2,683.2		2,808.0
	1,019.1	8,541.0	5,414.5	14,974.6

After Completion, as shown in the table above, approximately 40.1% and 56.8% of the borrowings will fall due within more than one year but not exceeding two years; and more than two years respectively, and therefore the pressure for repayment of borrowings is not imminent.

As at 30 June 2010, the Group had a net working capital, being current assets less current liabilities, of HK\$2,551.6 million. Based on the pro forma consolidated balance sheet of the Enlarged Group, the working capital position would decrease by 10.0% to HK\$2,297.3 million mainly as a result of the payment of the cash portion of the Purchase Price of US\$100.0 million (equivalent to approximately HK\$780.0 million). Given the relatively strong cash flow from operating activities as shown in (i) the Cash Flow Forecast; (ii) the cash flow projection in the DCF model prepared by Grant Samuel; and (iii) the Enlarged Group's pro forma cash flow statement as shown in Appendix III to the Circular, and also after considering the working capital level of the Enlarged Group as discussed above and the availability of the banking facilities, we consider that the liquidity of the Enlarged Group is healthy and we concur with the Directors' opinion that the Enlarged Group has sufficient working capital for its present requirement for at least the next twelve months.

After taking into account (i) our analysis on the Enlarged Group's gearing immediately after the Acquisition above; (ii) the strong net cash flow generated from the Enlarged Group's operating activities of approximately HK\$2,085.8 million (after deducting a one-off estimated transaction cost in relation to the Acquisition of approximately HK\$651.3 million) for the six-month period ended 30 June 2010; and (iii) the grant of the Specific Mandate and the Existing General Mandate, we are of the view that the Enlarged Group would have the ability to generate adequate working capital to gradually reduce its gearing from a relatively highly leveraged position immediately after the Acquisition.

# 14. Management of MMG

Upon completion, MMG will continue to be managed by an experienced board and management team. The board of MMG consists of eight members, including six representatives from the CMC Group, of which three of them are also Directors, namely Mr. Li Fuli, Mr. Wang Lixin and Mr. Xu Jiqing. The Target Group has an executive committee comprising six members, whose brief profiles are set out in below. Two executive directors of MMG, namely Mr. Andrew Gordon Michelmore and Mr. David Mark Lamont, are proposed to be appointed as executive Directors following the Acquisition. Mr. Andrew Gordon Michelmore and Mr. David Mark Lamont will also become the CEO and CFO of the Enlarged Group respectively following the Acquisition. In addition, each of Dr. Peter William Cassidy, presently an independent non-executive director of MMG, and Mr. Jiao Jian, presently a non-executive director of MMG, are proposed to be appointed as an independent non-executive Director and a non-executive Director, respectively, following the Acquisition. Set out below is a brief profile of the existing senior management of MMG. Further details have been set out in the section headed "Proposed directors and senior management of the Target Group" in the Circular.

## Mr. Andrew Gordon Michelmore

Mr. Andrew Gordon Michelmore, aged 58, joined MMG as managing director and CEO on 17 June 2009 after his tenure as CEO of Zinifex and then OZL. Prior to his tenure as CEO of Zinifex, he spent two years working in London and Russia as CEO of EN+ Group. Mr. Michelmore has more than 28 years experience in the metals and mining industry including 12 years at WMC Resources Limited where he was CEO and prior to that, held senior roles in company's nickel, gold, alumina, copper, uranium, and fertilizer businesses.

Mr. Michelmore holds a First Class Honours degree in Engineering (Chemical) from The University of Melbourne and a Master of Arts in Politics, Philosophy and Economics from Oxford University. Mr. Michelmore is a Fellow of the Institute of Chemical Engineers, the Institute of Engineers Australia and the Australian Academy of Technological Sciences and Engineering. He is also chairman of The Jean Hailes Foundation for Women's Health, chairman of the Council of Ormond College at The University of Melbourne and a member of each of the Minerals Council of Australia and the Business Council of Australia. Mr. Michelmore is also a director of Century Aluminum Company (listed on the NASDAQ and the Iceland Stock Exchange).

#### Mr. David Mark Lamont

Mr. David Mark Lamont, aged 45, joined MMG as CFO on its formation in June 2009. He was previously CFO of OZL from October 2008. Mr. Lamont is a member of the Institute of Chartered Accountants and was an Audit Supervisor at Deloitte Haskins and Sells before commencing a corporate career. After progressing through a number of senior positions in the chemical and agricultural industries, Mr. Lamont was appointed CFO at Incitec Limited in 1999. Mr. Lamont joined BHP Billiton in 2001 where he held a number of senior positions including CFO of BHP Billiton's Energy Coal and Carbon Steel Materials Groups. Mr. Lamont joined OZL from PaperlinX Limited, where he had served as CFO since 2006 and was appointed an executive director between February 2008 and September 2008. Mr. Lamont holds a Bachelor of Commerce degree and is a qualified Chartered Accountant.

#### Mr. Brett Fletcher

Mr. Brett Fletcher, aged 46, was appointed as the Chief Operating Officer of Zinifex in April 2007. Mr. Fletcher has more than 21 years of experience in the metals and mining industry. Mr. Fletcher commenced his career in the mining industry in 1989 at Pasminco Limited in Broken Hill, New South Wales as a qualified mining engineer and he held various technical and management positions. For the last seven years, Mr. Fletcher has held general manager positions at Rosebery Mine, Century Mine and Hobart Smelter.

## Mr. Michael Nossal

Mr. Michael Nossal, aged 52, joined MMG as the Executive General Manager of the Business Development Department in January 2010. Mr. Nossal has 23 years of experience in the metals and mining industry. Mr. Nossal has held senior business development and strategy roles at WMC, Normandy Mining Limited and Macquarie Corporate Finance. Before joining MMG, Mr. Nossal was the Deputy CEO of En+ where he was responsible for corporate finance, strategy and business development and the execution of key mergers and acquisition projects.

Mr. Steve Ryan

Mr. Steve Ryan, aged 47, joined MMG as an Executive General Manager of the Exploration Department. Mr. Ryan has over 20 years of international experience in the mineral exploration industry. Mr. Ryan worked for the CRA / Rio Tinto Group and held positions including Country Exploration Manager positions in India, Papua New Guinea and Fiji and geologist positions in Russia, Australia and other countries. Mr. Ryan worked for Oxiana and held positions as Asia Exploration General Manager and China Country Exploration Manager. Mr. Ryan also has three years experience in the venture capital industry as an Investment & Business Development Manager for an international venture capital group. Mr. Ryan has degrees in Geology and an MBA in international business.

Mr. Tim Scully

Mr. Tim Scully, aged 62, joined MMG as an Executive General Manager of the Business Support Department. Mr. Scully joined OZL in November 2008. Mr. Scully has 21 years of experience in the metals and mining industry. Mr. Scully has experience in leadership development, talent management, succession planning and the Human Resources systems and processes. Before joining OZL, Mr. Scully was the General Manager of the Organisation Development at Intrepid Mines Limited. Prior to that, Mr. Scully was the General Manager of the Organisation Development and Human Resources at Atlas Group Holdings. Prior to his position at Atlas Group Holdings, he was the General Manager of Human Resources at WMC where he worked from 1989 to 2005.

### 15. Risk factors

The Independent Shareholders may wish to bear in mind the following summarised risk factors when considering the Acquisition:

- Risks relating to the Acquisition
  - 1. Risks relating to investments in a new business and country risks
  - 2. Risks relating to completion of the Acquisition
- Risks relating to the business of the Target Group
  - 3. Risks associated with the MEPA
  - 4. Risks relating to title
  - 5. Risks associated with litigation
  - 6. Risks relating to operation and development of mines
  - 7. Risks relating to government policies and regulations
  - 8. Risks relating to the environment

- 9. Risks relating to commodity prices
- 10. Risks relating to foreign currency exchange rate fluctuations
- 11. Risks relating to the ability to attract, retain and train key personnel
- 12. Risks relating to changes in the estimates of the resources and reserves of the Operating Mines and the Development Projects
- 13. Risks relating to changes in future plans
- 14. Risks relating to the requirement for significant and continuous capital investment
- 15. Risks relating to the borrowings and interest rate
- 16. Risks relating to limited insurance coverage that may not be adequate to satisfy all potential claims
- 17. Risks relating to inclement weather
- 18. Risks relating to competition
- 19. Risks relating to economic and market conditions
- 20. Risks relating to funding requirements
- 21. Risks relating to mining contractors
- 22. Risks relating to customers and suppliers

Details of the risk factors in relation to the Acquisition are set out in the section headed "Risk factors" in the Circular.

#### DISCUSSION AND ANALYSIS

The businesses and the recent financial results of the Group since its transformation in 2005 are summarised above. Alumina and aluminium ingot trading has been the core business of the Group and its financial performance has been therefore largely consistent with the general demand for alumina and aluminium, which is a function of the ups and downs of the global economic growth. The acquisition of a 33% equity interest in Guangxi Huayin in 2008 allowed the Group to move further up-stream to participate in bauxite exploration and production. The acquisition began to pay off by way of significant earnings contribution in the first half of 2010, upon commencement of full production of Guangxi Huayin in late 2009 and the rebound of alumina and aluminium prices from the global financial crisis. The earnings momentum of the Group is growing with more volatility as a result of surging commodity prices in recent months and uncertain economic outlook in most of the developed countries.

MMG owns and operates a portfolio of world-class base metal mining operations, development projects and exploration fields. It is one of the world's largest producers of zinc as well as a substantial producer of copper, lead, gold and silver. The Acquisition is in line with the stated strategy of the Group to capitalise on its status as CMC's overseas platform for non-ferrous metals businesses and to gradually develop into an international metals and mining company. The Company is of the view that there are strong commercial and strategic reasons for the Acquisition and there will be benefits of the Acquisition for the Group. Nevertheless, the Independent Shareholders are reminded of the additional risks that will be inherent in the businesses of the Enlarged Group resulting from the Acquisition.

The Purchase Price of US\$1,846.0 million (equivalent to approximately HK\$14,398.8 million) was arrived at after arm's length negotiations between the Company, All Glorious and Album Enterprises and determined with reference to the range of the Market Valuation and adjusted by the parties for projections of working capital changes until 31 December 2010. The Market Valuation seeks to evaluate the full market value of MMG and accordingly reflects the value associated with Inferred Resources and the exploration potential of the Target Group's assets, which are specifically excluded from the Chapter 18 Valuation as required by the Listing Rules. As emphasised by Grant Samuel, the exclusion of these sources of potential value from the Chapter 18 Valuation means that Chapter 18 Valuation may not fully reflect a market value, i.e. it may not represent an estimate of the value that might be realised through an arm's length market based transaction. Based on the amount of potential resources owned by the Target Group and the analysis and opinion of AMC and Grant Samuel, we consider that the assumptions, the basis and the methodology for the valuation of MMG under the fair market value approach are fair and reasonable. In fact, this is also consistent with the analysis of AMC, which is of the opinion that there is a high to reasonable confidence of future conversion to ore reserves for cases adopted by Grant Samuel for the use in the Market Valuation. On the basis that the Market Valuation reflects the market value of the Target Group, we consider that it is fair and reasonable and in the interests of the Company and the Shareholders as a whole to determine the Purchase Price based on the Market Valuation. If certain key assumptions were also adopted by the Market Valuation similar to that of the Chapter 18 Valuation, for example the adjustment for the recent changes in commodity prices and exchange rates, it is expected that the Adjusted Market Valuation would be revised upward.

The payment mechanism is divided into equity and cash/debt in a proportion of around 57% against 43%. The equity portion is first settled by the issue of Consideration Shares up to the "public float" limit as prescribed by the Listing Rules while the remaining equity portion is to be satisfied by the issue of the PSCS. The cash component of the Purchase Price of US\$100.0 million (equivalent to approximately HK\$780.0 million) is to be satisfied by the available net cash holding of the Group whereas the Loan can be viewed as a deferred consideration.

The five-year tenor and relative low interest rates of the Loan does not put immediate pressure on the Enlarged Group's liquidity with the effect that the Enlarged Group will have sufficient time to reduce the gearing by replacing all or part of the Loan with equity. Availability of the Specific Mandate provides the Enlarged Group with an additional option to conduct new Share placements based on prevailing market condition for repayment of the Loan. The Enlarged Group retains the option to conduct other means of fund raising, for example by rights issue, issue of convertibles and/or debt financing if immediate dilution is a concern.

The PSCS is treated as the Company's equity. Based on the relative size of the Consideration Shares and the PSCS, the "blended issue price" of the Consideration Shares and the PSCS is approximately HK\$3.30 per Share. Such issue price represents a significant discount to the Share price as at the Latest Practicable Date. We however consider that the significant increase in the Share price during September to November 2010 is mainly attributable to market speculation on the Acquisition. This can be evidenced by the significant disparity in trading price of the Shares against the share prices of those closely correlated peers during the Reference Period. We consider that the Share price shall be adjusted to around HK\$3.99 on an "undisturbed" basis. The "blended issue price" of the Consideration Shares and the PSCS of HK\$3.30 therefore represents a discount of approximately 17.3% as compared to this Adjusted Share Price. Nevertheless, we consider the issue price of the Consideration Shares and the initial conversion price of the PSCS is acceptable chiefly because of the significant earnings accretion as a result of the Acquisition.

The shareholding dilution to the Independent Shareholders is significant and the existing Independent Shareholders will only hold less than one-third of its original shareholding following the Acquisition and the full utilisation of the Specific Mandate. The Enlarged Group however will become over three times larger in terms of earnings on a pro forma basis (based on the half year earnings up to 30 June 2010). Earnings per Share accretion amounts to approximately 50.3% on a pro forma basis if the PSCS is fully converted into the Shares. Book dilution on net asset value per Share is mainly due to the elimination of a significant amount of the Merger Reserve. We consider this notional as the value of the Target Group would not be fully reflected in the books of the Enlarged Group under the merger accounting treatment. The Enlarged Group's gearing will increase immediately after the Acquisition but is expected to gradually decline as a result of the strong cash flow generated by the Target Group's operations and the possible issue of new equity by utilising the Specific Mandate. After reviewing the Cash Flow Forecast and the maturity profile of the Enlarged Group's debt position, we concur with the Directors that the Enlarged Group has sufficient working capital and should be able to gradually deleverage from a relatively highly leveraged position immediately after the Acquisition.

Upon Completion, two senior executive officers of MMG will also be appointed as the executive Directors following the Acquisition. We concur with the Directors' view that such arrangement will result in a unique mix of PRC and international management qualifications and expertise in the senior management of the Company and can provide the Enlarged Group with operational experience in MMG's international portfolio and insights into the base metals market of the PRC.

### **OPINION**

Based on the above principal factors and reasons, we consider that the Transactions are on normal commercial terms which are fair and reasonable to the Independent Shareholders and that the Transactions are in the interests of the Company and the Independent Shareholders as a whole. Accordingly, we advise the Independent Board Committee to recommend, and we ourselves recommend, the Independent Shareholders to vote in favour of the ordinary resolution to be proposed at the EGM to approve the Transactions.

Yours faithfully, for and on behalf of SOMERLEY LIMITED

Kenneth Chow

Charles Ng

Managing Director — Corporate Finance

Director

Shareholders should carefully consider all of the information set out in this circular, including the risks and uncertainties described below before making a decision on how to vote on the resolution relating to the Share Sale Deed at the EGM. The business, financial condition and results of operations of the Group and the Target Group could be materially and adversely affected by any of these risks.

To the best of the Directors' knowledge, the Directors consider the following risks to be the most significant in respect of the Target Group for the Shareholders and potential investors of the Company. However, the risks listed do not purport to comprise all those risks associated with the Target Group and are not set out in any particular order of priority. Additional risks and uncertainties not currently known to the Directors may also have an adverse effect on the Target Group's business. If any of the following risks actually occurs, the Enlarged Group's business, financial condition, capital resources, results and/or future operations could be materially and adversely affected.

## RISKS RELATING TO THE ACQUISITION

## 1. Risks relating to investments in a new business and country risks

The Acquisition constitutes an investment in a new business sector involving the development and production of multiple commodities, including zinc, copper, lead, gold, silver and nickel, in Australia, Laos, Canada and exploration on a worldwide basis, which the Company has not previously had exposure to or experience in. There are risks beyond the Target Group's control associated with investing in mineral exploration, mine development and mining in developing and foreign jurisdictions. These risks include, but not limited to, health and safety issues; unexploded ordinance; civil instability; terrorism; religious ethnic or tribal issues; standard of living and wealth distribution; crime; business and regulatory environment and changes to that environment; political stability; government policy changes; expropriation of assets; ability to repatriate funds; corruption; quality and comprehensiveness of the legal regimes in relation to mining or generally the effectiveness of the judiciary; and actions of non-government organisations and adverse changes in attitude by host governments or host communities. The more significant risks associated with the developing country jurisdictions in which the Target Group operates including Laos are: transportation and infrastructure failure (eg: road, transmission lines and air services) and associated safety and production impacts; energy supply and availability; increased negative social issues in the local area including drug use, violence and criminal activity; safety issues from unexploded ordinance; social unrest and civil instability; regulatory changes with the evolution of the legal system and tension regarding the government's revenue share.

Transportation and infrastructure failure is a risk as the Sepon mine is located in a remote region of the world. The mine relies on air charter services to transfer people to and from site. The mine also relies upon roads being open and unimpacted, for example, by flooding and landslips, for inputs and products to be transported. Currently, however, air and road services are unavailable from time to time. Power transmission and the maintenance of power transmission lines is also not at the standard of first world countries. As the country develops, this infrastructure is likely to be improved but currently, however, the region where the Sepon mine is located is exposed to interruption of power supply.

The Target Group also does not place political risk insurance for any country in which it currently operates.

If the Target Group is unable to address the above-mentioned risks and uncertainties, its financial condition and operating results may be materially and adversely affected.

Any change in the political and economic conditions in the jurisdictions in which the Target Group operates may also adversely affect the financial and operational results of the Target Group. Consequently, the Target Group is not in a position to assure the timing and amount of any return or benefits that may be received. If the business in the new mining sectors does not develop or progress as planned, the Target Group may not recover the funds and resources it has spent, and this may adversely affect the Target Group.

### 2. Risks relating to completion of the Acquisition

Completion of the Acquisition is subject to satisfaction of the conditions precedent of the Share Sale Deed, not all of which are within the control of the Group. For example, there is no assurance that the Share Sale Deed and the transactions contemplated under the Share Sale Deed will be approved by the requisite majority of the relevant Shareholders at the EGM as required under the Listing Rules, and even if such approval were obtained, there is no assurance that such approval will not be or be proposed to be revoked. As such, there is a risk that the Acquisition may not be completed.

## RISKS RELATING TO THE BUSINESS OF THE TARGET GROUP

## 3. Risks associated with the MEPA

The Target Group's right to operate the Sepon mine is under the MEPA with the Government of Laos dated 15 June 1993 (as amended from time to time). Whereas the Target Group (and the relevant predecessor company) has been successfully operating under the MEPA for almost 20 years, if the Target Group were to fail to comply with its obligations under the MEPA, it could be terminated.

It is also possible that government policy to foreign investment in Laos could change or that the Government of Laos may seek to impose new or existing laws, decrees, taxes or regulations that are either inconsistent with the MEPA, or would have the effect of over-riding the MEPA or rendering the MEPA of no legal value. If any of these events materialises, the Target Group may have to seek recourse to arbitration under the MEPA and to seek to enforce an arbitration award against the Government of Laos.

# 4. Risks relating to title

The Target Group's mining and exploration claims in Australia, Canada, Indonesia and other jurisdictions in which the Target Group operates (whether held currently by the Target Group or by joint venture partners) may be subject to prior unregistered agreements or transfers and title may be affected by undetected defects or underlying landholdings. Accordingly other parties could potentially dispute the Target Group's title to its mining and exploration rights.

Indigenous title rights may also exist over exploration and mining tenements held by the Target Group. For example, the Target Group operates the Century mine under the Gulf Communities Agreement ("GCA"). If the local indigenous community perceives that the Target Group is not meeting its obligations under the GCA then that group may take action impacting the Target Group's ability to operate the Century mine. The Target Group believes it is a welcome and valued member of the communities in which it operates.

In addition, concessions held by the Group may not be renewed upon their expiry.

If these title risks materialise, the business, financial condition and operating results of the Target Group may be materially and adversely affected.

## 5. Risks associated with litigation

As with any company, the Target Group is or will be exposed to risks of litigation. To the extent such risks are not covered by insurance, an adverse outcome in litigation or the cost of responding to potential or actual litigation may have a material adverse impact on financial performance.

# 6. Risks relating to operation and development of mines

Exploration drilling to establish productive reserves is inherently speculative. The techniques presently available to technical specialists to identify the existence and location of resources are indirect and subject to a wide variety of variables which are subjective in nature. Mineral exploration is highly speculative in nature. The Target Group's exploration projects involve many risks, and success in exploration is dependent upon a number of factors, including, but not limited to, quality of management, quality and availability of geological expertise and availability of exploration capital. The Target Group cannot give any assurance that its future exploration efforts will result in the discovery of a mineral resource or ore reserve, or that its current and future exploration programs will result in the expansion or replacement of current production with new resources and reserves. The Target Group cannot give assurance that its exploration programmes will be able to extend the life of its existing mines or result in the discovery of new producing mines.

The production phase by its nature also involves significant risks and hazards, including environmental pollution, accidents or spills, industrial and transportation accidents, unexpected labour shortages and compensatory claims, disputes or strikes, cost increases for contracted and/or purchased goods and services, shortages of required materials and supplies, electrical power interruptions, mechanical and electrical equipment failure, changes in the regulatory environment, natural phenomena such as inclement weather conditions, floods and earthquakes, encountering unusual or unexpected climatic conditions which may or may not result from global warming, and encountering unusual or unexpected geological conditions. The occurrence of any of these hazards can delay or interrupt production, increase production costs and result in liability to the Target Group. The Target Group could become subject to liability for pollution or other hazards against which it has not insured or cannot insure, including those in respect of past activities for which it was not responsible.

The current mining operations of the Target Group are focusing on four operating mines and the relevant mineral tenements thereof and the operations at the four operating mines are expected to continue in the future. Any significant operational or other difficulties in the mining, processing, exploration and development of the four operating mines could reduce, disrupt, or halt the Target Group's production, which could materially and adversely affect the Target Group's business, prospects, financial condition and results of operation. Loss or damage to critical equipment may or may not be covered by insurance depending on the cause of the loss.

The Avebury nickel mine located in Tasmania, Australia is currently on care and maintenance. The principal tasks required to achieve the re-start of the project comprise further resource drilling, resource interpretation and modeling, development of a new mine plan and mining schedule, investigation of the use of backfill in the mining process, metallurgical test work to improve nickel recovery and deal with arsenic in the ore, development of a long term tailings storage solution and development of a viable re-start plan. Should the operation be re-started, risks include, but are not limited to, the execution of the re-start plan, ramp up of the mine and plant to nameplate capacity and achieving a stable and sustainable operation. At all stages, the project is exposed to the risks of nickel price and exchange rate fluctuations.

### 7. Risks relating to government policies and regulations

The new business in mining sectors to be conducted by the Target Group as mentioned in paragraph 1 above is subject to various applicable laws and regulations and extensive governmental approvals, licences, regulations, policies and controls. There can be no assurance that the relevant government will not change such laws and regulations or impose additional or more stringent laws or regulations. Any failure to comply with the relevant laws and regulations and any failure or delay in obtaining the required approvals or licences for the Target Group's business may make it difficult or even impossible for the Target Group to complete its exploration and development work programs and to begin commercial production of the commodities, which may adversely affect the Target Group. In addition, there can be no certainty that any approvals or licences once granted will not be withdrawn or will be renewed. Also, any changes to government policies may increase the operating costs of the Target Group which may adversely affect the operating results of the Target Group.

# 8. Risks relating to the environment

The Target Group's mining and development operations are subject to the environmental risks inherent in the exploration and production industry and the environmental laws and regulations in connection with all of its operations.

In particular, the Target Group's mining and development operations located in Australia are subject to extensive health and safety and environmental laws, regulations and standards in each state of Australia in which the Target Group operates which impose significant ongoing costs and obligations on the Target Group and which include obligations to rehabilitate current and former facilities and locations where operations are or were conducted. Wide ranging penalties apply in the event of non-compliance with these Australian laws, regulations and standards. Changes to Australian health and safety and environmental laws, regulations and standards beyond the control of the Target Group may result in materially increased costs and obligations being imposed on the Target Group.

Mining operations have inherent risks and liabilities associated with safety and damage to the environment and the disposal of waste products occurring as a result of mineral exploration and production. The occurrence of any such safety or environmental incident could delay production or increase production costs. Events such as unpredictable rainfall or bushfires may impact on the Target Group's ongoing compliance with environmental legislation, regulations and licences. Significant liabilities could be imposed on the Target Group for damages, clean up costs or penalties in the event of certain discharges into the environment, environmental damage caused by previous operations or non-compliance with environmental laws or regulations.

Environmental regulations and health guideline standards for certain products and by-products produced by the Target Group are generally becoming more onerous and will likely to require stricter standard and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibilities for mining companies and officers. Any future changes in the environmental regulations, if any, could significantly increase the operating costs of the Target Group and materially and adversely affect its financial conditions, business and results of operations.

Further, the Target Group may require approval from the relevant authorities before it can undertake activities which are likely to impact the environment. Failure to obtain such approvals will prevent the Target Group from undertaking its desired activities. The Group is unable to predict the effect of additional environmental laws and regulations which may be adopted in the future, including whether any such laws or regulations would materially increase the cost of carrying on business by the Target Group or affect the Target Group's operations in any aspect.

#### 9. Risks relating to commodity prices

The prices of zinc, copper, lead, gold, silver and nickel are affected by numerous factors and events that are beyond the control of the Target Group. These factors and events include general economic activity, global production level, global demand, forward selling activity, costs of production by other metal producers and other matters such as inflationary expectations, interest rates, currency exchange rates, speculative activity as well as general global economic conditions and political trends.

The Target Group has no commodity price hedging in place at present.

## 10. Risks relating to foreign currency exchange rate fluctuations

The Target Group generates the majority of its revenue in United States dollars. However, a significant portion of the Target Group's operating costs are denominated in Australian dollars. Hence, its cost competitiveness, profitability and financial position is affected by appreciation of the Australian dollar against the US dollar without the offsetting improvements in US dollar-denominated commodity prices. Further, mineral resource prices have historically fluctuated widely and have been affected by numerous factors over which the Target Group does not have any control, including, but not limited to, currency exchange fluctuations. The effect of currency exchange fluctuations is impossible to predict with any degree of certainty and this may materially and adversely affect the Target Group's operations and financial performance.

The Target Group has no currency hedging in place at present.

## 11. Risks relating to the ability to attract, retain and train key personnel

The future performance of the Target Group depends, to a significant extent, upon its ability to continue to attract, retain and motivate key qualified personnel, key senior management and other employees in the mining business. There is no assurance that these key qualified personnel will continue to provide services to the Target Group or will honour the agreed terms and conditions of their employment or service contracts. Moreover, the Target Group does not maintain insurance for the loss of any key qualified personnel. Any loss of key qualified personnel or failure to recruit and retain personnel may have a material adverse effect on the Target Group's mining business, financial condition, results of operations and future prospects.

In addition, the Target Group's ability to train operating and maintenance personnel will be a key factor for the success of its mining business activities. If the Target Group is not successful in recruiting, training and retaining such personnel, its business and results of operations could be materially and adversely affected.

# 12. Risks relating to changes in the estimates of the resources and reserves of the Operating Mines and the Development Projects

The resource and reserve estimates of the Operating Mines and the Development Projects set out in this circular and the Competent Person's Report comply with the JORC Code, but no assurance can be given that any particular level of recovery from ore reserves will in fact be realised or that an identified mineral resource will qualify as a commercially mineable ore body that can be economically exploited.

The estimation of mineral resources and ore reserves involves some interpretation and is a partially subjective process. The accuracy of resource and reserve estimates is a function of the quantity and quality of available data and the assumptions used and judgments made in interpreting engineering and geological information. There is significant uncertainty in any resource or reserve estimate and the actual deposits encountered and the economic viability of mining a deposit may differ materially from the estimates set out in this circular and the Competent Person's Report. The discovery of mineral resources through exploration of mineral tenements is speculative in nature and is frequently unsuccessful. The Target Group may be unable to successfully discover and exploit new reserves to replace those it is mining to ensure the ongoing viability of the Target Group's projects.

Estimated mineral resources or ore reserves may have to be re-calculated based on changes in metals prices, further exploration or development activity or actual production experience. This could have a material adverse effect on estimates of the volume or grade of mineralisation, estimated recovery rates or other important factors that influence resource or reserve estimates. Market price fluctuations for metals, increased production costs, reduced recovery rates or other factors may render the present proven and probable ore reserves of the Operating Mines and the Development Projects uneconomical or unprofitable to develop at a particular site or sites.

# 13. Risks relating to changes in future plans

Whether the Target Group ultimately implements the production plans of the Target Group described in this circular, and whether it achieves the objectives described in this circular, will depend on a number of factors including, but not limited to, (i) the availability and cost of capital; (ii) current and projected prices of metals; (iii) metal markets; (iv) costs and availability of drilling services, costs and availability of heavy equipment, supplies and personnel; (v) success or failure of activities in similar areas to those in which its projects are situated; and (vi) changes in estimates of project completion costs. The Target Group will continue to gather information about its projects, and it is possible that additional information will cause the Target Group to alter its schedule or determine that a project should not be pursued at all. Accordingly, the Target Group's plans and objectives may change from those described in this circular.

# 14. Risks relating to the requirement for significant and continuous capital investment

The mining business requires significant and continuous capital investment. Natural resources production projects may not be completed as planned or scheduled, may exceed the original budgets and may not achieve the intended economic results or commercial viability. Thus, the actual capital investment for operation and development of the Target Group may significantly exceed its budget because of factors beyond the Target Group's control.

# 15. Risks relating to the borrowings and interest rate

The Target Group is exposed to interest rate risk primarily through its cash and deposit balances and its interest-bearing borrowings. The Target Group has not used any derivative financial instruments to manage the interest rate risk.

# 16. Risks relating to limited insurance coverage that may not be adequate to satisfy all potential claims

Exploration, development and production operations on mineral properties involve numerous risks and hazards, including rock bursts, slides, earthquakes or other adverse environmental occurrence, industrial accidents, labour disputes, political and social stability, technical difficulties due to unusual or unexpected geological formation, failure of pit walls, and flooding and periodic interruptions due to inclement or hazardous weather condition. These risks can result in, among others, damage to, and destruction of, mineral properties or production facilities, personal injuries, environmental damages, delays in mining, monetary losses and legal liability.

The Target Group has business interruption insurance in place. The level of cover provides for loss against budgeted insurable profit under certain circumstances, subject to a substantial deductible following property damage. The Target Group is therefore not fully insured against all risks to which it is subject in planned operations or development projects.

Should any liabilities arise for which the Target Group are not insured or insurance coverage is inadequate to cover the entire liability, the Target Group may have to pay out of its funds for such liabilities which could result in a reduction or elimination of its actual or prospectus profitability, increasing costs and a decline in the value of the Shares, and could materially and adversely affect the Target Group's business and results of operations.

# 17. Risks relating to inclement weather

Inclement weather may cause evacuation of personnel, curtailment of operations, damage to mineral properties, transportation routes and loading facilities. This could in turn result in temporary suspension of operations and a general reduction in productivity. From time to time, Century and Sepon can experience tropical weather events that can result in their inbound and outbound logistics routes being cut off. Historically, these interruptions have typically not exceeded two weeks. Through stockpiling of run-of-mine ore and appropriate management of site consumable inventories, plant operations at Century and Sepon have generally continued through such periods, resulting in minimal impact on production. There is no assurance that inclement weather will not cause significant losses to the Target Group in the future. Any damage to the Target Group's projects or delays to its operations by prolonged periods of inclement weather could materially affect its business and results of its operations.

# 18. Risks relating to competition

The markets for the commodities mined or contemplated to be mined by the Target Group, including zinc, copper, lead, gold, silver and nickel, are intensely competitive and the Target Group faces competition from Chinese, Mongolian, Australian and other foreign miners. Competition in these markets is based on many factors, including, among others, price, production, capacity, quality, transportation capabilities and costs, blending capability and brand name. Some of the Target Group's competitors may have greater production capacity as well as greater financial, marketing, distribution and other resources, and may benefit from more established brand names in the international market.

The mineral commodities industry is also characterised by technological advancements and the introduction of new production process using new technologies. Some of the Target Group's competitions may develop new technologies and processing methods that are more effective or less costly than those currently used by the Target Group.

Competitive activities in the markets served by the Target Group could have a significant impact on the prices realised for its products and can therefore have a material adverse effect on its results of operations and financial condition. The Target Group's future success will depend on its ability to respond in an effective and timely manner to competitive pressure.

# 19. Risks relating to economic and market conditions

The operating and financial performance of the Target Group is influenced by a variety of general business cycles and economic conditions. Changes in business and economic factors, such as interest rates, exchange rates, inflation, national demographics, government fiscal, monetary policies in Australia, Laos or other countries, and accounting and financial reporting standards, can be expected to impact on the Target Group's business. Any future economic downturn that reduces the demand for the commodities mined by the Target Group could materially and adversely affect the Target Group's business and results of operations.

# 20. Risks relating to funding requirements

It is currently intended that the Specific Mandate sought will cover new Shares to be issued pursuant to one or more potential Placing(s) to be conducted by the Company, subject to the then prevailing market conditions.

Depending on market conditions, the Directors intend to raise net proceeds of up to US\$1,600 million (equivalent to approximately HK\$12,480 million) and apply such net proceeds from the potential Placing(s) for (i) the full repayment of the loan of US\$694,161,888 (equivalent to approximately HK\$5,414,462,726) under the Loan Agreement; and (ii) the remaining balance of US\$905,838,112 (equivalent to approximately HK\$7,065,537,274) for (a) the deployment of funding towards the exploration and development initiatives of the Target Group's projects, including, but not limited to, the development of the Dugald River zinc project located in Queensland, Australia (which is in the final stages of a feasibility study and has an estimated pre-production capital cost of approximately US\$790 million (equivalent to approximately HK\$6,162 million)), and (b) the other exploration initiatives of the Target Group.

In the event that the Company is not able to exercise the Specific Mandate or to raise sufficient funds pursuant to the exercise of the Specific Mandate and the Company is not able to obtain alternative sources of funding, the Target Group may be unable to pursue the above-mentioned exploration and development initiatives of the Target Group's projects and other exploration initiatives of the Target Group which may result in our long term business prospects being adversely affected.

# 21. Risks relating to mining contractors

The Target Group contracts with third parties to provide mining operation services in respect of certain sites (eg: Rosebery). If such contractors are unable to provide the service to the required standard for a sustained period, to the extent that the Target Group does not have stockpiles of products, the ability to perform the services itself or access to alternative providers, this may adversely affect the production and financial performance of the Target Group.

# 22. Risks relating to customers and suppliers

The Target Group will have exposure to movements in prices charged by external suppliers, including those that provide inputs to production, such as electricity and other energy providers, explosives suppliers, sea freight and transport service providers. A significant increase in one or more of these cost items for a sustained period could have an adverse impact on the financial performance of the Target Group, especially in circumstances where alternative suppliers are not available. In addition, unforeseen adverse changes in quality or reductions in the quantity of supplies provided may also have an adverse impact on operations.

The Target Group sells a significant proportion of its zinc and lead concentrate to Nyrstar and its subsidiaries under long-term contracts. The Target Group has credit exposure to Nyrstar and any material adverse change in Nyrstar's financial position may impact the Target Group.

This section contains certain information which has been derived from official, market and other third party sources including the Wood Mackenzie/Brook Hunt Report. The Directors believe that the sources of such information are appropriate sources for the information. The Directors have exercised reasonable care in selecting and identifying the named information sources and, in compiling, extracting and reproducing such information, and have no reason to believe that such information is false or misleading or that any fact has been omitted that would render such information false or misleading. This information has not been independently verified by the Directors or any of the Directors' affiliates or advisers or any of their affiliates or advisers and no representation is given as to its accuracy. This information may not be consistent with information from other sources.

The Company has commissioned Wood Mackenzie, a provider of market intelligence, to prepare and compile certain information and data relating to copper, nickel, zinc and lead to form the Wood Mackenzie/Brook Hunt Report. Any party who wishes to extract or reproduce any information or statistics from the Wood Mackenzie/Brook Hunt Report or extracts from it as presented in this circular shall obtain the prior written consent from Wood Mackenzie.

MMG is a significant producer of zinc, copper, lead, gold and silver. MMG currently operates four mines: (i) the Sepon copper and gold operations located in Laos; (ii) Century, one of the world's largest zinc mines, located in Queensland, Australia, also producing lead and silver; (iii) Golden Grove, a zinc, copper, lead and precious metals mine located in Western Australia; and (iv) Rosebery, a zinc, lead, copper and precious metals mine located in Tasmania, Australia. In addition, MMG owns the Avebury nickel mine in Tasmania, Australia (which is currently on care and maintenance) and has several other Development Projects and an active minerals exploration programme in Australia, Indonesia and Canada. This section sets out an industry overview of copper, nickel, zinc, lead, gold and silver, which are the minerals of MMG's key assets.

The Company has commissioned Wood Mackenzie, a provider of market intelligence, to prepare and compile certain information and data relating to copper, lead, nickel and zinc to form the Wood Mackenzie/Brook Hunt Report. Information relating to gold and silver have been derived from other official, market and third party sources.

# **COPPER**

# Introduction

Copper is a metal that is corrosion resistant, extremely malleable and ductile, and is one of the best thermal and electrical conductors among the metals. Copper is also a highly recyclable metal which allows for the recycling of all forms of copper. Due to its high conductivity properties, copper is commonly used in copper wires, electromagnets, printed circuit boards as an electrical conductor and heat exchangers as a thermal conductor. Copper is also used as a constituent of various metal alloys, commonly in association zinc, tin and nickel.

Copper is often found in ore bodies in associated with other metals, most notably gold and silver but also zinc, lead, nickel and molybdenum. Copper exists in two broad categories of ore types: sulphide and oxide. The world's major copper deposits are located in the Americas, particularly in

Chile and Peru. Chile is the world's largest producer of mined copper with an estimated market share of 34% in 2010 followed by the PRC (8%), Peru (7%) and the USA (7%). Copper is also recovered through recycling end of life products. In 2010 scrap copper accounted for around 8% of refined metal consumption.

There are primarily two broad processes of producing pure copper from copper concentrates and scrap copper: pyrometallurgical smelting and refining, and hydrometallurgical refining (i.e. leaching and solvent extraction - electrowinning, commonly termed Sx-Ew). The pyrometallurgical processes are typically more suited for sulphide ores and the hydrometallurgical processes and typically more suited for oxide ores.

Copper miners sell copper concentrate under annual or multi-year tonnage contracts (frame contracts) or on the spot market to copper smelters, either directly or via traders. Approximately 55% of all copper produced in concentrates are sold to third party smelters with the balance consumed in integrated facilities. The refining process produces high purity (99.99%) copper cathodes that are despatched to customers in bundles.

#### **Demand**

Globally, the major end markets for copper being construction, industrial equipment and electronics have accounted for more than 79% of the global copper demand.

# General products, 8% Transportation equipment and consumer, 13% Industrial machinery and equipment, 13% Electric and electronic products, 33%

Copper consumption by sector (2010)

Source: Wood Mackenzie/Brook Hunt Report

The PRC is the world's largest consumer of copper, accounting for approximately 38% and 39% of global consumption in 2009 and 2010, respectively. A combination of heavy re-stocking of end use copper products by most leading consumer regions of the world and strong underlying demand, especially from the PRC, for the first half of 2010, has created expectations for an increase in global demand to 18.8Mt in 2010, representing an 8.6% increase from 2009.

Notwithstanding anticipated dissipation of the impact from the Chinese government's stimulus packages, it is expected that continuing increase in investments, industrialisation and modernisation will see the PRC continue to be the world's largest consumer of copper in the foreseeable future. The PRC's demand for copper is expected to grow at approximate CAGR of 6% over the period 2009 and 2025. Demand for copper in Asia and Latin America is also expected to grow between 2010 and 2025 due to similar reasons for the PRC — rapid development in construction, automotive and other developing industries in those regions.

Despite all the debate and concern regarding efforts to slow down the Chinese economy, Brook Hunt remains confident that Chinese copper consumption will increase by 13% year-on-year to 7.4Mt for 2010. In 2011, we forecast that lower demand from the reduction in the government's stimulus packages and reduced lending will be more than offset by strong growth in Chinese exports, which will in turn lift Chinese copper consumption by a further 10% to approximately 8.1Mt.

Regional refined first-use copper consumption (kt)

								2025 vs	2009
	2009	2010	2011	2012	2013	2014	2025	Change	CAGR
									(%)
The PRC	6,520	7,368	8,105	8,834	9,452	9,972	16,536	10,016	6.0
Europe	3,425	3,605	3,653	3,645	3,588	3,511	2,865	(560)	(1.1)
North America	1,774	1,851	1,888	1,873	1,790	1,738	1,226	(548)	(2.3)
Japan	876	990	1,002	1,005	1,018	929	473	(403)	(3.8)
Asia (excluding the									
PRC & Japan)	3,466	3,661	3,846	4,051	4,270	4,454	6,650	3,184	4.2
Latin America	777	825	872	920	984	1,041	1,623	846	4.7
Others	473	492	515	539	572	608	955	482	4.5
Global total	17,311	18,792	19,881	20,867	21,674	22,253	30,328	13,017	3.6
Change year-on-year	(3.6%)	8.6%	5.8%	5.0%	3.9%	2.7%	2.9		

Source: Wood Mackenzie/Brook Hunt Report

The Wood Mackenzie/Brook Hunt Report forecasts that Chinese refined copper consumption will grow at a CAGR of 6%, rising from approximately 6.5Mt at the end of 2009 to 16.5Mt by 2025. The estimated 10Mt increase in refined copper consumption will result in the PRC's share of global refined copper consumption increasing from 38% in 2009 to a significant 55% by 2025.

# Supply

The biggest producers of copper globally are Chile, Peru, the United States and the PRC. Canada, Australia, Poland, Eastern Europe and Russia also contribute significantly between them.

Western Europe USA 2.% 7% Canada Rest of the world 24% Australia 5% CIS 8% Chile Peru 34% 7% The PRC Poland 3%

Global mined copper production by country (2010)

Source: Wood Mackenzie/Brook Hunt Report

Chile is the world's dominant copper producing country, accounting for approximately 34% of the global copper mine supply during the period. We expect the PRC to be an increasingly important producer of mined copper, with mine production capability forecast to increase from circa 1.1Mt in 2009 to approximately 1.4Mt in 2025 (equivalent to 10.7% of global mine supply) with the commissioning of three new mines: Tonghua (Ji Lin, 5ktpa), Yangla Sx-Ew (Yunnan, 20ktpa) and Duobaoshan (Hei Long Jiang, 58ktpa).

Global mine production capability is forecast to decline from 16.0Mt in 2009 to 13.3Mt in 2025 (equivalent to a CAGR of -1.2%), due to disruptions to mining operations, delays in planned mine expansions and greenfield projects coming on-stream. Such disruptions and delays are often a combination of technical issues, strikes and the slow ramp up of projects.

Base case regional copper mine production capability (kt)

								2025 vs	2009
	2009	2010	2011	2012	2013	2014	2025	Change	CAGR
									(%)
Africa	1,240	1,417	1,711	1,871	1,942	1,859	1,288	48	0.2
Asia	2,319	2,185	2,022	2,105	2,163	2,266	2,114	(205)	(0.6)
The PRC	1,055	1,216	1,299	1,383	1,422	1,425	1,429	374	1.9
Europe	1,439	1,517	1,597	1,632	1,635	1,633	1,438	(1)	0.0
Latin America	7,287	7,299	7,816	8,496	8,606	8,457	5,567	(1,720)	(1.7)
North America	1,692	1,600	1,797	1,987	1,991	1,995	948	(744)	(3.6)
Oceania	1,011	1,040	1,065	1,078	1,032	917	509	(502)	(4.2)
Global total	16,043	16,274	17,307	18,552	18,791	18,552	13,293	(2,750)	(1.2)
Change year-on-year	1.9%	1.4%	6.4%	7.2%	1.3%	(1.3%)	(2.6%)		

Source: Wood Mackenzie/Brook Hunt Report

# **Pricing**

The LME is a transparent, terminal market for the buying and selling of refined metal. The metal stocks are stored in LME warehouses and are branded by the LME to ensure that it meets the prescribed criteria for shape, weight and quality. Prices are set amongst producers, consumers, funds and speculators on the exchange and are traded in the spot market or with futures contracts.

Unlike cathodes, there is no terminal market (e.g. the LME) for copper concentrates. This is because, unlike cathodes, concentrate qualities vary enormously from mine to mine and as such are not (and cannot be) produced to a consistent and precise market standard. Concentrate pricing is thus established through a process of negotiation between buyer and seller.

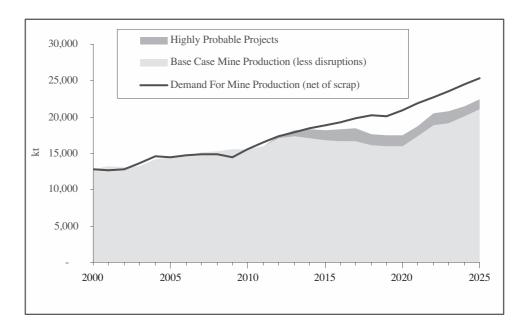
A copper concentrate smelting contract is drawn up between the buyer and seller to provide a framework covering a whole range of terms and conditions. These terms include a treatment charge ("TC"), refining charge ("RC" and collectively with treatment charge referred to as "TC/RC"), price participation ("PP"), if any, payables for copper, silver and gold, penalties for impurities (e.g. arsenic, bismuth, fluorine, etc), quotational periods for payable metals and payment terms that the miner (or trader) will pay to the smelter (or trader) for smelting and refining services. The main aspects of the contract that are subject to negotiation are the TC/RC and PP that are expressed in US dollars per dry metric tonne of concentrate for TC and in US cents per pound of payable copper for RC and PP (under long-term contracts).

# Market outlook

According to the Wood Mackenzie/Brook Hunt Report, 2009 marked the bottom of the industry cycle, in terms of demand for copper and prices. Since then, there has been a significant recovery in global demand from outside the PRC. At the same time, primary supply growth during the first half of 2010 has been restricted due to mine disruptions and low availability of concentrate feed which had in turn caused smelters and refiners to turn to secondary feed to address the shortfall.

The Wood Mackenzie/Brook Hunt Report anticipates that the market will move from a surplus of refined copper in 2009 to a deficit in 2010 fuelled by strong recovery in demand. The shortfall in supply will need to be satisfied by the reactivation of closed mines, exploitation of new ore discoveries at currently producing mines, incremental expansions, or the development of greenfield projects. The Wood Mackenzie/Brook Hunt Report anticipates that higher prices and refined production will help the market return to balance in 2012.

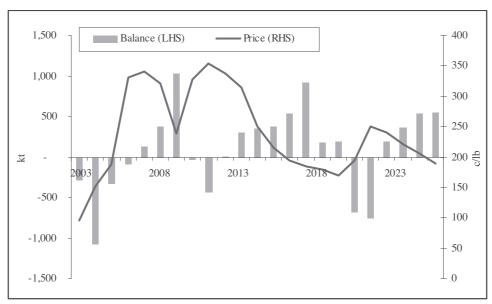
# Copper supply/demand balance (2000-2025)



Source: Wood Mackenzie/Brook Hunt Report

Due to the projected supply deficit, the Wood Mackenzie/Brook Hunt Report forecasts prices to average US\$3.28/lb this year, up almost 40% from last year's average of US\$2.34/lb. By 2013, it is expected that a considerable supply response will outweigh demand growth and generate a steady rise in metal stocks. This will push prices to the cyclical low of US\$1.70/lb by 2019.

# Global metal balances and copper price (in 2010 US\$ terms)



Source: Wood Mackenzie/Brook Hunt Report

Similar to previous cycles, an extended period of low copper prices will discourage companies to develop new mines or expand existing operations. This will result in a market recovery between 2018 and 2021 which will coincide with a projected global economic recovery. During these years prices are expected to rise sharply, reaching a cycle high point of US\$3.42/lb (in 2010\$) in 2021. Similar to prior cycles, high prices will encourage new mine development which will result in metal stocks rising above normal levels by 2024.

#### **NICKEL**

# Introduction

Nickel is a metal that is hard with a high melting point and resistant to oxidation. These properties make it suitable use as an alloying element in the production of stainless steel and superalloys. Superalloys are nickel-based alloys containing less than 50% iron and have been developed for use in high temperature applications such as aero-engines. Reflecting its properties, nickel is widely used in a variety of everyday use products, including electronics, construction materials and medical equipment.

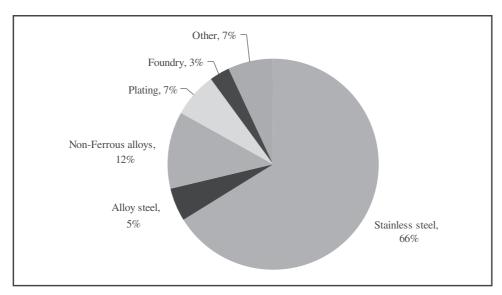
Nickel occurs in two broad categories of ore types: sulphide and laterite. Historically and currently, sulphide ores have provided the majority of primary nickel production, approximately 46% in 2010. The major sulphide deposits and mines are located in Russia, Canada, Australia, the PRC, Finland, South Africa, Brazil, Botswana, Zambia and Zimbabwe. In the future, production from laterite ores is expected to become the dominant source of primary nickel production. Major laterite deposits are located in Cuba, the Dominican Republic, Colombia, Guatemala, Brazil, Australia, the Philippines, Indonesia, New Caledonia, Russia, the PRC, Serbia and Macedonia.

Historically, the production side of the nickel industry has been a highly integrated business. In sulphides mining, a company's mine feed passes through the same company's processing plants all the way through to a saleable product. Often, all of these operations would be carried out on a single site. Equally, in the laterites mining, where there are well-established ore trading patterns, it is often the case that mine feed emerges as refined product from a facility at least partially owned by the same company.

#### **Demand**

Refined nickel demand is highly dependent on the stainless steel market as a first use of the metal. Broadly, stainless steel typically accounts for 60-70% of total primary nickel demand. In recent years, the growth in demand for nickel from non-stainless applications has been strongly supported by growth in demand for non-ferrous alloys (i.e. superalloys) mainly from consumers in the aerospace industries.

# Nickel consumption by product (2010)



Source: Wood Mackenzie/Brook Hunt Report

As a result of the recent global recession, global stainless steel production contracted for two years in succession to 25.1Mt in 2009. Slow economic recovery and re-stocking through the supply chain, especially in the PRC, has resulted in a return to stainless steel production growth in 2010. World stainless steel production in 2010 is now forecast at 30.3Mt, representing an increase of 21% in comparison with 2009. After a strong first half 2010, stainless steel mills globally cut production in the third quarter of 2010, in response to declining orders and falling nickel prices. Consequently, the Wood Mackenzie/Brook Hunt Report forecasts global nickel consumption of 1.5Mt in 2010, an 11% increase from 2009.

The PRC is the world's largest consumer and producer of stainless steel. The Chinese government's target of increasing domestic energy efficiency by 20% by the end of 2010 may have helped to constrain stainless production rates, particularly at the smaller independent production facilities. The Wood Mackenzie/Brook Hunt Report forecasts that Chinese stainless steel production will reach 10.6Mt in 2010, which will translate to 350kt of primary nickel consumption.

Through 2015, the world market is expected to improve gradually and will be strongly supported by further growth in the Chinese stainless steel industry, thereby allowing global stainless steel output to increase to 41Mt in 2015. However, periodic de-stocking within the stainless steel supply chain will counter this at times, especially in the mature economies of Europe and the USA. As a result, world nickel consumption is projected to rise to 1.8Mt in 2014.

# Regional nickel consumption (kt)

								CA	GR
	2009	2010	2011	2012	2013	2014	2025	2009-2014	2014-2025
Europe	355	407	413	435	437	450	482	4.8%	0.6%
USA	130	147	146	151	153	158	183	3.9%	1.3%
Japan	154	167	175	176	176	182	175	3.4%	(0.3%)
The PRC	411	450	492	531	564	625	1,242	8.7%	6.4%
Korea	71	85	87	93	91	99	94	7.0%	(0.5%)
Others	190	207	220	242	251	264	331	6.8%	2.1%
Global total	1,311	1,463	1,533	1,628	1,672	1,778	2,507	6.3%	3.2%
Charge year-on-year	2.9%	11.4%	4.9%	6.1%	2.8%	6.3%	5.1%		

Source: Wood Mackenzie/Brook Hunt Report

Between 2014 and 2025, the Wood Mackenzie/Brook Hunt Report forecasts of nickel demand are affected by the next economic downturn, which we project will to occur around 2019, as well as further de-stocking cycles. Strong nickel demand growth is expected to be derived from the PRC, India and other emerging economies whereas the mature economies of Western Europe, Japan and the USA will experience much lower rates of growth with periodic contractions.

# Supply

The biggest producers of refined nickel in 2010 were the PRC, Russia, Japan, Australia, Norway and Canada.

# Norway Others 26% Canada The PRC 22% CIS 20% Australia Japan

Global refined nickel production by country

Source: Wood Mackenzie/Brook Hunt Report

8%

After the year-on-year contractions in 2008 and 2009 largely due to worldwide recession, global refined nickel output has returned to growth and is currently expected to increase by 5% to 1.4Mt in 2010.

12%

Between 2010 and 2014, the Wood Mackenzie/Brook Hunt Report forecasts growth in world refined nickel production of approximately 380kt, representing a 6% CAGR to reach a nickel output of 1.9Mt by the end of that period. The forecast increase in production assumes that the high rate of nickel-pig iron ("NPI") production in 2010 will be sustained and that the major mine development projects including Goro (New Caledonia, 60ktpa), Ambatovy (Madagascar, 60ktpa), Onça-Puma (Brazil, 50ktpa), Barro Alto (Brazil, 36ktpa), Ramu (Papua New Guinea, 35ktpa) and Ravensthorpe (Australia, 40ktpa) are commissioned by the end of 2011 as expected. Additional refined nickel supply is also expected from other development projects within the 2012 and 2014 time frame, including Koniambo (New Caledonia, 60ktpa), Voisey's Bay (Canada, 50ktpa) and Taganito (Philippines, 30ktpa), which will supply intermediate nickel products to support the refinery expansion at Niihama, Sumitomo Metal Mining's refining complex in Japan. There remains the risk that eventual production is below the forecast level due to mine closures, disruptions and delays in commissioning planned projects.

The Wood Mackenzie/Brook Hunt Report's forecast balance is premised on the base case refined nickel output and first use consumption. The base case mine production table below is shown for background information and to be consistent with the copper and zinc sections.

Base case regional nickel mine production capability (kt)

								Production change				
	2009	2010	2011	2012	2013	2014	2025	2009-2014	2014-2025			
Indonesia	228	248	263	288	277	285	290	57	5			
Canada	133	120	189	215	221	202	28	69	(174)			
Australia	164	167	179	183	180	167	66	3	(101)			
New Caledonia	93	120	147	171	188	196	192	103	(4)			
CIS	256	267	267	268	267	263	256	7	(7)			
Others	562	591	650	734	800	825	766	263	(59)			
Global total	1,436	1,513	1,695	1,859	1,933	1,938	1,598	502	(340)			
Change year-on-												
year	(9.6%)	5.3%	12.0%	9.7%	3.9%	0.2%	(1.2%)					

Source: Wood Mackenzie/Brook Hunt Report

The medium-term growth of nickel production in the PRC is largely focused on NPI, which is only consumed by stainless steel mills. The combination of strong NPI demand from Chinese stainless steel mills and nickel prices that rallied to levels exceeding NPI production costs enabled the NPI producers to raise output from an estimated 77kt (contained nickel) in 2008 to 97kt (contained nickel) in 2009 and an anticipated 137kt (contained nickel) in 2010, with a further increase likely in 2011.

Base case regional nickel refinery production capability (kt)

								Production change			
	2009	2010	2011	2012	2013	2014	2025	2009-2014	2014-2025		
CIS	274	283	295	295	293	294	289	20	(5)		
Japan	142	166	173	178	186	190	192	48	2		
The PRC (incl NPI)	251	304	308	328	341	352	359	101	7		
Australia	129	115	119	125	126	124	124	(5)	0		
Canada	117	85	139	154	160	155	164	38	9		
Norway	89	91	90	90	90	90	90	1	0		
Others	332	365	427	516	560	585	583	253	(2)		
Global total	1,334	1,409	1,551	1,686	1,756	1,790	1,801	456	11		

 $Excludes\ highly\ probable\ projects,\ disruption\ allowance\ and\ market\ adjustment$ 

Source: Wood Mackenzie/Brook Hunt Report

In the longer-term, the Wood Mackenzie/Brook Hunt Report projects that global production of refined metal will need to increase by an average of a little under 3% per year, to around 2.5Mt in 2025, in order to keep pace with demand. As the Wood Mackenzie/Brook Hunt Report's base case refined nickel production forecast for 2025 stands at 1.8Mt the achievement of this long-term target is dependent on new projects currently in our Probable and Possible Projects categories supplying around 700kt of refined nickel to the market.

# **Pricing**

The LME is the main benchmark market for global nickel trading. Nickel stocks are stored in LME warehouses and are branded by the LME to ensure that it meets the prescribed criteria for shape, weight and quality. Prices are set amongst producers, consumers, funds and speculators on the exchange and are traded in the spot market or with futures contracts.

Unlike, for example, the copper market, there are no global benchmark TC/RC set for nickel concentrates and each contract is negotiated on an individual basis. Concentrate contracts take a number of forms, such as a fixed TC with a variable RC related to the LME nickel price, a variable percentage of nickel price payable and a payable nickel percentage with a variable RC. This latter form may or may not also include a fixed TC. The straight percentage of nickel price charge related to the LME price is favoured by the Chinese buyers in their offtake deals.

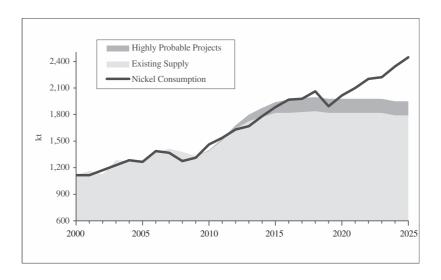
TC/RC are in the range of 25-35% of the nickel price and is a consequence of smelters needing additional feed rather than taking any available concentrate. The deductions or percentages payable for each of the payable metals reflect the anticipated recovery rate of each metal in the smelting and refining process. The TC reflects the cost of smelting the concentrate to matte plus an element of profit for the smelter. Similarly the RC reflects the cost of refining matte into nickel plus an element of profit for the refinery.

#### Market outlook

Nickel prices experienced significant volatility in 2010 with price increases of the first quarter reversed by concerns surrounding the European debt crisis in the second quarter. Nickel prices have, since mid third quarter 2010, improved on expectations of an improvement in stainless steel demand after the seasonal lull and concerns about production constraints in the PRC, particularly in the NPI sector.

The Wood Mackenzie/Brook Hunt Report projects a balanced nickel market for 2011 assuming the four large development projects, including Goro (New Caledonia), Onça-Puma (Brazil), Barro Alto (Brazil) and Ambatovy (Madagascar) are commissioned as expected within 2011. Delays in any of these development projects could result in eventual nickel shortfall and prices increasing above the forecast levels. Expected increases in refineries and Chinese NPI production are likely to push the nickel market into oversupply from 2012 through to 2015. The Wood Mackenzie/Brook Hunt Report forecasts that the nickel market will return to a deficit in 2016 supported by a strong global demand. The balance between world supply and demand for nickel starts to become dependent on development projects from 2018.

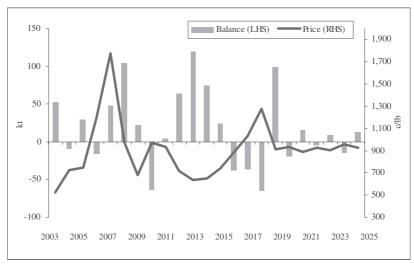
Nickel supply-demand balance (2000-2025)



Source: Wood Mackenzie/Brook Hunt Report

Notwithstanding that Brook Hunt is projecting a balanced market in 2011, we remain cautious that nickel prices could potentially continue to be volatile. We forecast prices to remain in the 2010 range for the first half of 2011, before trading lower during the second half of 2011 to reach our forecast average price of US\$9.60/lb in 2011 as expectations of an oversupply in 2012 sets in. Brook Hunt expects that nickel prices could fall to US\$6.30-6.50/lb in 2013 and 2014, which will force around metal refiners out of economic production.

Global metal balances and nickel price (in 2010 US\$ terms)



Source: Wood Mackenzie/Brook Hunt Report

The balance between world supply and demand for nickel starts to become dependent on pipeline projects from 2018. In order to maintain a reasonable balance in the long term, Brook Hunt believes that a long term incentive price of around US\$9.00-10.00/lb is required. Our long-term average price for the 2015-2025 period stands at around US\$9.40/lb (in 2010 dollar terms).

#### **ZINC**

#### Introduction

Zinc is a metal that has diverse properties such as corrosion resistance, low melting point, fluidity, corrosion resistance, and ductility, as well as electrochemical and chemical properties, enabling its use in a variety of industrial applications. Zinc is chemically active and alloys readily with other metals such as copper, aluminium and magnesium. Its ability to react with iron is of particular significance as this imparts good corrosion resistance to steel substrate when used as a galvanised or applied coating. While rigid, zinc is still soft enough to be formed, rolled or extruded, which together with its low melting point, makes it suitable for die-casting.

Zinc is usually found in ore bodies in association with other minerals, commonly lead, copper, silver or gold. Over the last decade, zinc mines averaged 60% of their revenue from zinc, 25% in roughly equal portions from lead and copper, and 15% from silver and gold.

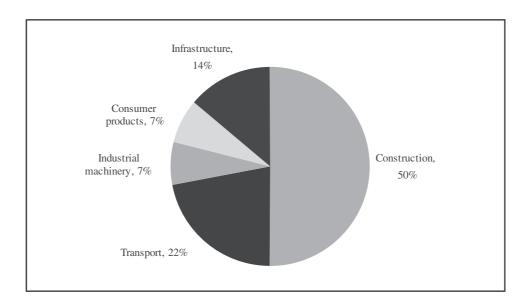
Extraction of zinc is largely done in two steps: mining of ore to produce concentrates at the mine site, processing concentrates and recycling zinc-bearing secondary material to produce refined zinc (often referred to as slab zinc) at smelters. Smelters generally use either the hydrometallurgical method or pyro-metallurgical methods to produce refined zinc metal. Together, smelters using the pyro-metallurgical Imperial Smelting Process, Vertical Retort and those plants processing only secondary zinc material produce approximately 9% of the world's refined zinc production in 2009.

Zinc miners sell zinc concentrate under annual or multi-year tonnage contracts (frame contracts) or on the spot market to zinc smelters. The zinc metal is then produced in a variety of shapes and weights according to customer requirements.

#### **Demand**

Galvanizing (application of a zinc coating) is the predominant first use for zinc and accounts for 54% of global zinc usage in all forms in 2009. Other common uses of zinc are in brass and die-casting, each accounting for approximately 12% of 2009 total demand. Galvanizing is forecast to be the fastest growing end use with the principal applications being found in the construction and automotive industries.

# Zinc consumption by sector (in 2010 US\$ terms)



Source: Wood Mackenzie/Brook Hunt Report

In terms of sector usage of end-use zinc, construction (including publicly funded infrastructure activity) accounted for 64% of 2009 global consumption, with is the transport sector accounting for 22% of 2009 global consumption. Consumer products accounted for 7% of 2009 global end-use zinc consumption and the remainder is used in the manufacture of industrial goods and equipment.

In the past decade, the PRC has become the dominant feature of the refined zinc market. The PRC's demand for zinc has grown from 15% of global demand in 2000 to 40% in 2009. In comparison, the US share of global demand has fallen from 15% to about 9% over the same period.

The pattern of zinc consumption in the end-use markets is such that demand for zinc moves closely with changes in industrial production and the business cycle. The global recession reduced refined zinc consumption in the world's mature economies (most notably in Western Europe, North America and Japan) from 4.1Mt in 2008 to 3.3Mt in 2009, the lowest level since 1967. Notwithstanding the strong rebound in the manufacturing sectors in many of the world's mature economies during 2010, Brook Hunt expects that zinc consumption by mature economies will not rise to the levels prior to the recent recession. Persisting weakness in the construction sector, government austerity programmes and the continuing trend of outsourcing manufacturing capacity to lower cost countries, is expected to moderate growth in consumption of zinc by mature economies to reach 4.2Mt in 2025, which is equivalent to a CAGR of 1.5% between 2009 and 2025.

# Regional refined first-use zinc consumption (kt)

								2025 versi	ıs 2009
	2009	2010	2011	2012	2013	2014	2025	Change	CAGR
The PRC	4,061	4,581	5,039	5,467	5,877	6,289	11,459	7,398	6.7%
Western Europe	1,630	1,843	1,894	1,938	1,980	2,010	2,051	421	1.4%
North America	1,021	1,075	1,111	1,141	1,179	1,196	1,353	332	1.8%
Other Asia	1,767	1,988	2,139	2,277	2,387	2,504	3,558	1,791	4.5%
Japan	421	496	503	508	514	523	510	89	1.2%
East and Central Europe	293	323	343	363	382	398	533	240	3.8%
Latin America	535	579	617	646	690	714	916	381	3.4%
Oceania	217	223	226	236	240	242	265	48	1.2%
Africa	153	165	173	177	188	194	231	78	2.6%
Global	10,098	11,273	12,045	12,753	13,437	14,070	20,876	10,778	4.6%
Change year-on-year	(9.8%)	11.6%	6.8%	5.9%	5.4%	4.7%	4.1%		

Source: Wood Mackenzie/Brook Hunt Report

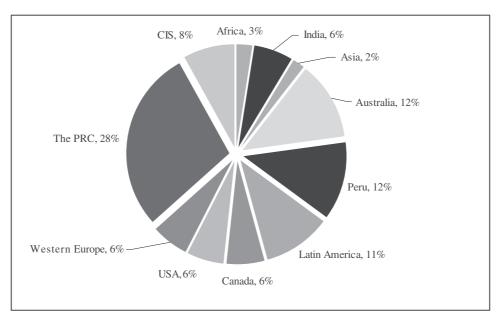
The industrialisation and urbanisation of the developing economies have resulted in a much greater zinc demand per unit of industrial production. Together with the ongoing trend of moving manufacturing capacity from high cost to low cost economies, Brook Hunt forecasts that demand for refined zinc in the PRC will reach 11.5Mt in 2025, representing a CAGR of 6.7% over the period 2009 to 2025.

The rapid expansion of zinc demand in the developing economies will be the primary driver behind the forecast global CAGR of 4.6% over the period 2009 to 2025, presenting an average growth of 0.7Mt of zinc per annum to reach a total demand of 20.9Mt in 2025.

# **Supply**

Major zinc deposits are located in the PRC and South America, which account for 28% and 23% of 2010 production respectively. In South America, Peru is the largest producer of zinc, producing as much as all other countries combined. Other significant producers in 2010 were Australia (12%), India, Canada and the US (each accounting for approximately 6%).

Global mined zinc production by country (2010)



Source: Wood Mackenzie/Brook Hunt Report

Global mine production is projected to contract from 11.3Mt in 2009 to 7.6Mt in 2025, as ore reserves are depleted. The Wood Mackenzie/Brook Hunt Report projects that by 2014 the increase in demand for refined zinc and concentrate will outstrip supply by 0.5Mt per annum as mines close or are abandoned due to marginal production. The market deficit will have to be satisfied by new production coming from re-activated operations, exploitation of new ore discoveries at existing mines and the development of greenfield projects. The PRC's share of forecast global zinc mine production in 2025 is projected to increase to 46% (3.5Mt).

Base case regional zinc mine production capability (kt)

			2009 vs						s 2025
	2009	2010	2011	2012	2013	2014	2025	Change	CAGR
Africa	306	308	302	378	384	389	12	(294)	(18.3%)
Asia	920	980	1,113	1,256	1,244	1,266	1,162	242	1.5%
Australia	1,316	1,494	1,618	1,603	1,627	1,277	200	(1,116)	(11.1%)
The PRC	3,173	3,475	3,416	3,568	3,609	3,635	3,501	328	0.6%
Eastern Europe	897	992	1,125	1,250	1,235	1,235	557	(340)	(2.9%)
Latin America	2,597	2,811	3,005	3,050	2,970	3,059	1,542	(1,055)	(3.2%)
North America	1,402	1,440	1,493	1,358	1,139	1,132	543	(859)	(5.8%)
Western Europe	667	709	806	864	869	671	136	(531)	(9.5%)
Global total	11,278	12,209	12,878	13,327	13,077	12,664	7,653	(3,625)	(2.4%)
Change year-on-year	(1.7%)	8.2%	5.5%	3.5%	(1.9%)	(3.2%)	(4.5%)		

Source: Wood Mackenzie/Brook Hunt Report

# **Pricing**

The LME is the main global trading platform for zinc. The LME sets the prescribed criteria for shape, weight and quality and stocks are stored in LME warehouses. Prices are set amongst producers, consumers, funds and speculators on the exchange and are traded in the spot market or with futures contracts.

Zinc concentrate agreements are typically set out in contracts during annual negotiations. A contract for the sale of concentrate from seller to buyer will typically contain details around payment by the smelter to the mine for 85% of the zinc contained in the concentrate or, if lower an agreed reduction in payment based on the zinc grade. The paid zinc is valued at the LME zinc price averaged over an agreed quotational period.

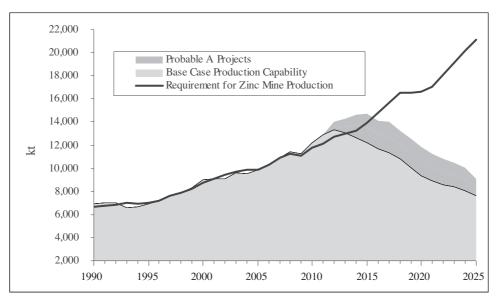
There is also a payment by the mine to the smelter for TC. Typically this will comprise a base TC and a PP clause. The TC contract may be agreed over 12 months in advance of the actual sale, at a time when the future zinc price on which the concentrate value will be based is not known. The PP clause will sometimes be expressed in terms relative to each US cent per lb movement in the zinc price.

#### Market outlook

The global recession between October 2008 and February 2009 saw zinc prices decline to around US\$0.50/lb, causing a large number of mine production cuts and closures, and an unprecedented high level of voluntary smelter production cuts to avoid building uneconomic inventory.

The Wood Mackenzie/Brook Hunt Report forecasts that increases in mine production of 8.2% (0.9Mt contained zinc) and smelter production of 16.4% (1.8Mt contained zinc) against growth in consumption of 11.6% (1.2Mt contained zinc) in 2010. The mismatch in growth rates between forecast mine and smelter production and consumption is expected to widen between 2011 and 2013, thereby creating an underlying structural surplus that must be removed before market fundamentals are restored to be supportive of high zinc prices. The Wood Mackenzie/Brook Hunt Report forecasts that this trend of surplus zinc production will be reversed by 2014 as the increase in demand for refined zinc and concentrate will outstrip production by 1.6Mt per annum as mines close or are abandoned due to marginal production.

# Zinc supply/demand balance (2000-2025)

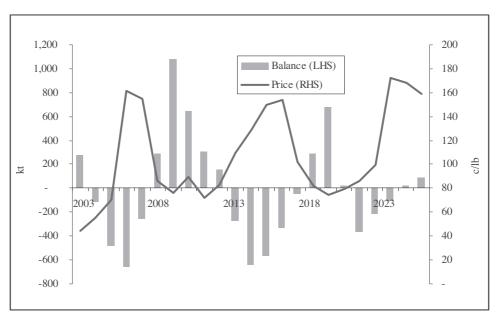


Source: Wood Mackenzie/Brook Hunt Report

The Wood Mackenzie/Brook Hunt Report forecasts an average balanced market price of US\$0.89/lb in 2012, rising to US\$1.92/lb in 2016 as the supply deficit reached a peak. At prices of around US\$1.00/lb, the Wood Mackenzie/Brook Hunt Report expects that virtually all of the world's zinc miners and smelters will be profitable, at least on a cash basis. Strong supply side response can be expected with elevated prices, and there is a risk that the eventual surplus will be even greater than forecast.

Higher prices will encourage the commissioning of new production capacity such that when the low of the next global business cycle occurs, the concentrate and refined markets will have moved to surplus. We estimate that 2019 marks the low point of the next price cycle and 2023 the subsequent high point. Over the forecast period the zinc price is forecast to average US\$1.10/lb (in 2010 US\$ terms).

Global metal balances and zinc price (in 2010 US\$ terms)



Source: Wood Mackenzie/Brook Hunt Report

#### **LEAD**

# Introduction

Lead is a soft, malleable, ductile, bluish-white element principally extracted from galena and found in association with zinc, silver and copper. Its physical properties, such as its malleability and resistance to corrosion, encouraged early usage in the form of pipes and tank linings, as well as sheet designed to keep water out from churches and dwellings. Meanwhile, its chemical properties have allowed lead to find uses that have spanned the range over time from cosmetics to glazes in paints for the ceramics sector.

The metal - both pure and alloyed, and typically cast into ingots or rolled into sheet - has found modern-day uses in the power and protection sectors, from batteries for vehicles and energy back-up storage, to radiation protection and undersea power and communications cables protection. Importantly, lead recycling rates generally exceed in 90% in mature economies, making lead one of the most recycled materials on earth.

Lead is predominately mined as a by-product of zinc and there are very few lead-only mines in existence today. Over the last decade, zinc mines averaged 25% of their revenue from lead. Extraction of lead is largely done via two methods: mining of ore to produce concentrates at the mine site which are then smelted (sometimes with recycling lead-bearing secondary material) and refined to produce refined lead, and the processing of lead scrap, predominately lead from used batteries at smelters which process only secondary materials.

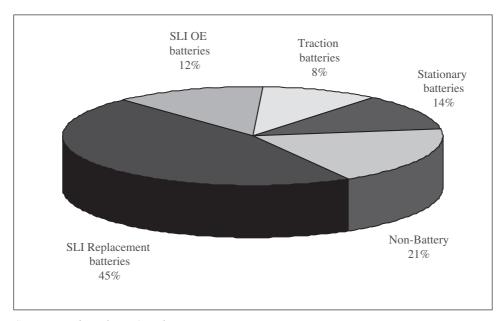
Lead miners sell lead concentrate under annual or multi-year tonnage contracts (frame contracts) or on the spot market to lead smelters. Lead metal is then produced in a variety of grades and alloys according to customer requirements.

#### **Demand**

The PRC overtook the US in 2005 to become the world's largest consumer of lead. In 2009 it accounted for 43% of global lead consumption, up from 10% in 2000. In contrast US lead demand has fallen from 27% of the global market to 18% over the same period.

Lead demand contracted by 2.4% in 2009 as a result of the global recession, but it still fared significantly better than most other base metals owing to the large nature (+50% of total lead demand) of the replacement battery sector. Looking forward, the cheap and efficient nature of lead-acid batteries ("LABs") in starting, lighting and ignition ("SLI") applications means that there is no effective substitute at this stage, thus securing lead's future as the leading battery technology for many years to come. Although an increasing number of new battery technologies are being developed, mainly for the automotive market, these are designed to replace some or all of the role of the internal combustion engine, rather than the role of current LABs. Furthermore new LAB technologies are being developed which may well prove to be a more than adequate competitor to non-lead technologies. Either way, with the global vehicle fleet estimated to be 941 million at the end of 2008, and with hybrid technologies estimated to represent less than 0.5% of this population, it will be decades before there is any real threat to LABs as the leading automotive battery technology.

Lead demand by first use sector (in 2010 US\$ terms)



Source: Wood Mackenzie/Brook Hunt Report

In other applications, infrastructure development in developing economies is driving demand for uninterruptible power supply ("UPS") batteries. Spending on transportation, schools, hospitals, warehousing and power generation in countries such as the PRC and India is steering growth in both the stationary and motive battery sectors. In the developed economies growth is being driven by the larger replacement sector, although a return to investment spending in the next couple of years should see a healthy increase in spending on key areas such as UPS and telecoms systems. The massive increase in wireless networks stemming from growing 3G and 4G networks should benefit lead demand in particular.

Global lead demand is forecast to increase from 8.2Mt in 2009 to 16.1Mt by 2025. Growth will be most evident in the developing economies of Asia and Latin America, with the PRC retaining its spot as the world's number one consumer. Its share of global lead demand is forecast to rise to 67% by 2025. Long-term growth in the developing economies is forecast at 6.4% p.a., and at 2.7% p.a. excluding the PRC. Growth in the mature economies is forecast to contract by 0.7% p.a. over the forecast period. This highlights the ongoing shift in the global demographics of lead demand, including the migration of manufacturing to cheaper locations such as Eastern Europe and Asia.

Regional first-use refined lead consumption (kt)

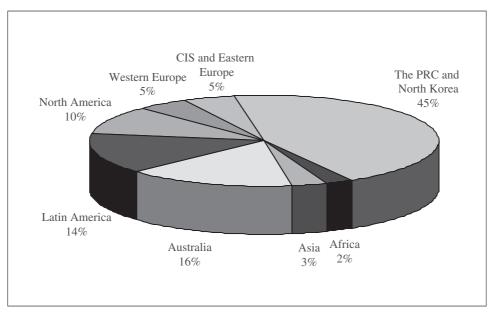
								2025 versus 2009		
	2009	2010	2011	2012	2013	2014	2025	Change	CAGR	
The PRC	3,501	3,869	4,236	4.617	5,010	5,396	10.892	7,391	7.4%	
North America	1,459	1,466	1,463	1,496	1,514	1,521	1,316	(143)	(0.6%)	
Western Europe	1,206	1,162	1,145	1,158	1,181	1,202	1,034	(173)	(1.0%)	
Other Asia	1,125	1,211	1,279	1,341	1,404	1,480	1,890	765	3.3%	
Latin America	391	392	408	427	457	472	497	106	1.5%	
East/Central Europe	285	316	338	365	374	377	349	64	1.3%	
Japan	159	160	160	162	163	163	91	(68)	(3.4%)	
Africa	86	95	99	103	108	108	69	(17)	(1.4%)	
Oceania	22	23	21	20	22	22	10	(12)	(4.8%)	
Global total	8,235	8,694	9,149	9,689	10,233	10,741	16,149	7,914	4.3%	
Change year-on-year	(2.4%)	5.6%	5.2%	5.9%	5.6%	5.0%				

Source: Wood Mackenzie/Brook Hunt Report

# Supply

Major lead deposits are located in the PRC, Australia and South America, which account for 44%, 16% and 15% of 2010 production respectively. North America accounts for a further 10% of mine production. In the PRC, the ore reserve base of many existing producers is declining and this is likely to lead to mine closures from reserve depletion. However, most of the lost output is almost certain to be replaced by new production and over the next decade, the Wood Mackenzie/Brook Hunt Report foresees the development of more capital-intensive, large mines.

Regional lead mine production (in 2010 US\$ terms)



Source: Wood Mackenzie/Brook Hunt Report

Global lead mine production is forecast to contract from 3.6Mt in 2009 to 2.7Mt by 2025 on the depletion of ore reserves. The ongoing requirement for new lead mine production will need to be satisfied from re-activated operations, new ore discoveries at currently-producing mines and the development of greenfield projects.

Base case regional lead mine production capability (kt)

									2025 versus 2009			
	2009	2010	2011	2012	2013	2014	2015	2025	Change	CAGR		
Africa	108	99	87	81	80	82	78	4	(104)	(18.6)		
Asia	116	134	162	208	228	231	231	231	115	4.4		
Australia	544	646	719	716	729	691	638	43	(501)	(14.7)		
The PRC	1,426	1,799	1,664	1,703	1,707	1,706	1,687	1,641	215	0.9		
Eastern Europe	210	217	241	250	246	247	247	155	(55)	(1.9)		
Latin America	536	591	688	684	687	719	620	314	(222)	(3.3)		
North America	436	416	421	389	338	323	341	281	(155)	(2.7)		
Western Europe	174	194	206	204	204	163	160	63	(111)	(6.2)		
Global total	3,550	4,096	4,188	4,235	4,219	4,162	4,002	2,732	(818)	(1.6)		
Change year-on-year	2.5%	15.4%	2.2%	1.1%	(0.4%)	(1.4%)	(3.8%)	(6.2%)				

Source: Wood Mackenzie/Brook Hunt Report

Global refined lead produced from primary smelters which process concentrates and small amounts of scrap lead is forecast to increase from 4.5Mt in 2010 to 8.0Mt by 2025, including new production not yet allocated to individual operations. Refined lead output from secondary smelters which process scrap only is forecast to increase from 4.1Mt in 2009 to 8.1Mt by 2025. This is to meet the ongoing requirement for refined lead in light of the forecast contraction of lead mine, and therefore primary refined, output in the short term, and increasing demand in the longer term.

In 2009, 39% of global refined output came from concentrate with the remainder from scrap. The Wood Mackenzie/Brook Hunt Report forecasts that refined output from already-identified concentrate sources will account for less than 20% of total refined output by 2025.

# **Pricing**

The LME is the main global trading platform for lead. The LME sets the prescribed criteria for shape, weight and quality and stocks are stored in LME warehouses. Prices are set amongst producers, consumers, funds and speculators on the exchange and are traded in the spot market or with futures contracts.

Lead concentrate agreements are typically set out in contracts during annual negotiations. A contract for the sale of concentrate from seller to buyer will typically contain details around payment by the smelter to the mine for 95% of the lead contained in the concentrate or, if lower, an agreed reduction in payment based on the lead grade. The paid lead is valued at the LME lead price averaged over an agreed quotational period.

There is also a payment by the mine to the smelter for a treatment charge ("TC"). Typically this will comprise a base TC and a price participation ("PP") clause. The TC contract may be agreed over 12 months in advance of the actual sale, at a time when the future lead price on which the concentrate value will be based is not known. The PP clause will sometimes be expressed in terms relative to each US cent per lb movement in the lead price.

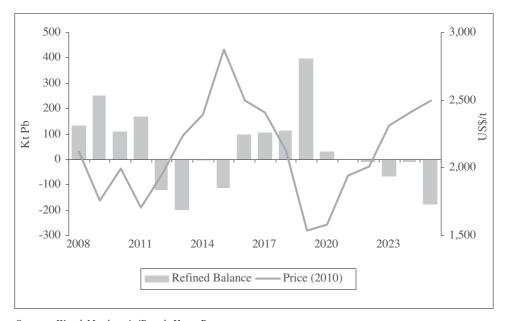
# Market outlook

Following a substantial 253kt refined surplus in 2009 a further 110kt refined surplus is forecast for 2010. Lead demand is expected to recover following a contraction of 2.4% last year, but a year-on-year increase in global refined output will be more than adequate to meet requirements. Global stocks will remain high, at over 1.1Mt, equivalent to 49 days of consumption at year end. The Wood Mackenzie/Brook Hunt Report forecasts an average price for the year of US\$1,995/t.

The Wood Mackenzie/Brook Hunt Report forecasts a further refined market surplus in 2011 before eroding to a large deficit in 2012. Refined stocks in days of consumption are forecast to increase further in 2011 as demand growth slows on weaker economic conditions and is outpaced by growth in refined output, mainly in the PRC. Brook Hunt forecasts an average cash lead price for the year of US\$1,756/t. In 2012 ongoing mine production cutbacks will continue to restrict refined output

growth and, when combined with strong lead demand growth, will quickly erode the refined market surplus of the previous year, returning the market to a large deficit. Refined stocks will fall to 46 days of requirement at year end and prices will start to rise accordingly.

Global refined lead balance and price (2008-2025)



Source: Wood Mackenzie/Brook Hunt Report

Forecast cutbacks in lead mine and therefore smelter production, coupled with a recovery in lead demand, will result in a tight refined market from 2013 to 2015, with prices rising gradually over the period to peak at US\$3,500/t (159¢/lb) in 2015. As these cutbacks ease, and as more secondary output comes on stream in the medium to long term, the refined market will return to surplus between 2016 and 2020. Prices will fall correspondingly over the period to a cyclical low of US\$2,028/t (92¢/lb) in 2019, with refined stocks in days of requirement peaking at 50 days the same year as lead demand contracts on a forecast economic downturn. From 2021-2025 the refined market will revert to deficit as lead demand improves following the forecast low in 2019, again resulting in lower refined stock days and higher prices. The Wood Mackenzie/Brook Hunt Report forecast long-term price over the period 2010-2025 is US\$2,156/t (98¢/lb).

# **GOLD**

# Introduction

Gold is a ductile and malleable yellow precious metal that is resistant to air and water corrosion. It is principally used for the manufacture of jewellery, production of electronics and the storage of wealth.

# **Pricing**

Other than at Sepon Gold, MMG produces gold as a by-product metal. MMG is exposed to the price of gold through the production of:

# Sepon

• a gold and silver doré product

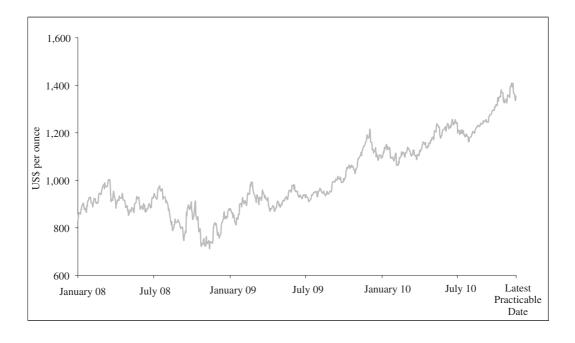
# Rosebery

- a gold and silver doré product
- a gold by-product credit in the copper concentrate
- a gold by-product credit in the lead concentrate

# Golden Grove

- a gold by-product credit in the HPM concentrate
- a gold by-product credit in the copper concentrate

# Spot gold price (1 January 2008 to the Latest Practicable Date) (US\$ per ounce)



Source: Bloomberg

Like most commodities, the price of gold is driven by supply and demand as well as speculation. However, unlike most commodities hoarding and disposal plays an important role in affecting the price of gold. Therefore, the gold price is driven by a broad range of macro economic and policy factors, particularly those of central banks.

Given the relative contribution of gold revenue to MMG's overall revenue, which is dominated by copper and zinc, and the complexity of the drivers of gold price, a detailed consideration of the factors that drive the price of gold and outlook for gold have not be contemplated in this circular.

# **SILVER**

#### Introduction

Silver is a soft, white and lustrous metal. Silver has the highest electrical and thermal conductivity amongst all metals and is one kind of precious metals. It has been used for a variety of purposes, such as manufacturing (for example the manufacture of jewellery and silverware), industrial (for example its use in electronic and electrical applications) and investment purposes.

# **Pricing**

Silver is a by-product metal that MMG produces. MMG is exposed to the price of silver through the production of:

# Sepon

• a gold and silver doré product

# Century

• a silver by-product credit in the lead concentrate

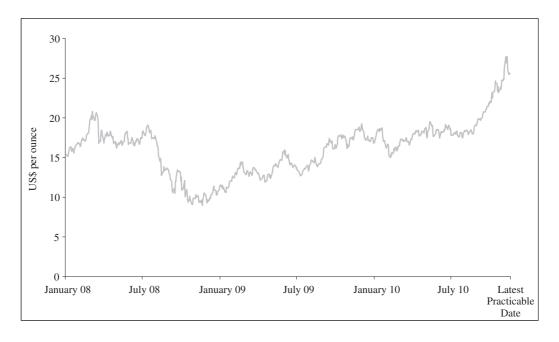
# Rosebery

- a gold and silver doré product
- a silver by-product credit in the lead concentrate
- a silver by-product credit in the copper concentrate
- a silver by-product credit in the zinc concentrate

#### Golden Grove

- a silver by-product credit in the HPM concentrate
- a silver by-product credit in the zinc concentrate

Spot silver price (1 January 2008 to the Latest Practicable Date) (US\$ per ounce)



Source: Bloomberg

Like most commodities, the price of silver is driven by supply and demand as well as speculation. However, unlike most commodities there is a correlation between the price of silver and the price of gold, linking the price of silver to broader macro economic and policy factors that drive the gold price.

Given the relative contribution of silver revenue to MMG's overall revenue, which is dominated by copper and zinc, and the complexity of the drivers of silver price, a detailed consideration of the factors that drive the price of silver and outlook for silver have not be contemplated in this circular.

# FOREIGN CURRENCY EXCHANGE RATE

# Introduction

Foreign currency exchange rate is the rate at which one currency is converted into another currency, giving the relative prices of different currencies.

# **Exchange rates**

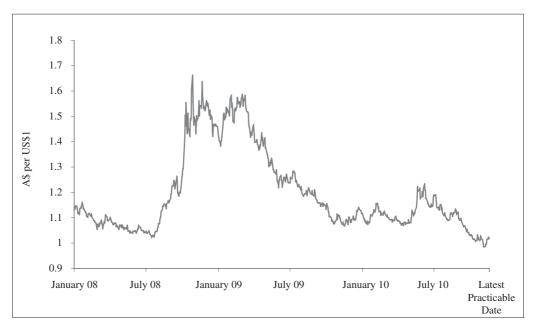
The fluctuation in foreign currency exchange rates may affect the Target Group in the following ways:

Mineral resource prices have historically fluctuated widely and have been affected by numerous factors over which the Target Group does not have any control, including, but not limited to, currency exchange fluctuations. The effect of currency exchange fluctuations is impossible to predict with any degree of certainty and this may materially and adversely affect the Enlarged Group's operations and financial performance.

The Target Group generates the majority of its revenue in United States dollars, while a significant portion of the Target Group's operating costs are denominated in Australian dollars. Hence, the exchange rates of the Australian dollar against the United States dollar will impact on the cost competitiveness, profitability and financial position of the Target Group, without the offsetting improvement or deterioration in US dollar-denominated commodity prices. The appreciation of the Australian dollar against the United States dollar may have an adverse impact while the depreciation of the Australian dollar against the US dollar may have a favourable impact, in each case the Target Group's revenue and operating costs.

The Target Group has no currency hedging in place at present.

# Exchange rates of the Australian dollar against the United States dollar (1 January 2008 to the Latest Practicable Date) (US\$/A\$ exchange rate)



Source: Bloomberg

# INFORMATION AND DATA FROM THE WOOD MACKENZIE/BROOK HUNT REPORT

The Company commissioned Wood Mackenzie, a provider of market intelligence, to prepare and compile certain information and data relating to copper, lead, nickel and zinc to form the Wood Mackenzie/Brook Hunt Report, being a report issued by Wood Mackenzie under the brand name, Wood Mackenzie/Brook Hunt.

Brook Hunt has been a subsidiary of Wood Mackenzie since 2008. Wood Mackenzie is well known for a broadly analogous range of research and consulting services to the global energy industry.

#### **About Brook Hunt**

Brook Hunt was formed in 1975 and is wholly focused on the analysis of the global base and precious metals markets: aluminium, copper, lead, gold, nickel, silver and zinc. It has over 200 customers in 50 countries with four overlapping business activities:

- Competitive analysis of mines, refineries and smelters.
- Raw materials markets and flows.
- Market analysis and forecasts of metal and raw materials prices.
- Bespoke consultancy services: advisory, expert witness, IPOs, market studies, project evaluation, strategy, and valuations

Brook Hunt has an excellent reputation for independent in-depth analysis of the metal and mineral industries and markets. Its highly qualified and experienced team is drawn from the mining and metals industry, with geologists, engineers, economists and statisticians. Since its formation in 1975 the company has invested continually in the development of its global industry data base.

# About the Wood Mackenzie/Brook Hunt Report

The Company paid Wood Mackenzie a fee of GBP40,000, which the Directors consider as reflecting market rates, to compile and prepare the information and data relating to copper, lead, nickel and zinc which is included in this section. The information and data commissioned by the Company has been compiled and prepared by Wood Mackenzie based on publicly available governmental and industry information and its proprietary databases.

# Parameters and assumptions used in preparing the Wood Mackenzie/Brook Hunt Report

The assumptions used in the Wood Mackenzie/Brook Hunt Report are based upon Wood Mackenzie's "business as usual" scenario and do not take into account unusual or infrequent market events. The underlying assumptions rely on Wood Mackenzie's in-house macroeconomics team's forecasts for Industrial Production, Gross Domestic Product and other variables relevant to the metal industry.

The Wood Mackenzie/Brook Hunt Report and its data have been prepared by Wood Mackenzie's metal market experts, with experience of between 10 and 30 years in their respective metals. Forecast data is based upon available historic industry data, in conjunction with Wood Mackenzie's proprietary research and are derived using Wood Mackenzie's in-house model and expertise.

The information upon which the Wood Mackenzie/Brook Hunt Report is based comes from Wood Mackenzie's own experience, knowledge and databases. The opinions expressed in the Wood Mackenzie/Brook Hunt Report are those of Wood Mackenzie. They have been arrived at following careful consideration and enquiry. Wood Mackenzie does not guarantee their fairness, completeness or accuracy. The opinions, as of the Latest Practicable Date, are subject to change. Wood Mackenzie does not accept any liability for the Shareholders' reliance upon such information. Notwithstanding the above, given that the opinions expressed in the Wood Mackenzie/Brook Hunt Report have been arrived at following careful consideration and enquiry, the Directors believe that the Wood Mackenzie/Brook Hunt Report is an appropriate source of the information contained therein and set out in this circular, and have no reason to believe that such information is false or misleading or that any fact has been omitted that would render such information false or misleading.

# LEGAL AND REGULATORY REGIME IN WHICH THE TARGET GROUP OPERATES

A summary of the legal and regulatory regime in which the Operating Mines and Development Projects are situated is set out below.

#### LAOS

#### LAWS AND REGULATIONS APPLICABLE TO THE MINING INDUSTRY & MMG

#### **Current licence of MMG**

Mining activities in Laos are primarily governed by the Mineral Law No.04/NA, dated 8 December 2008, (the "Mineral Law"), which replaced Law No.04/97/NA on Mining, dated 12 April 1997. Although the Mineral Law was promulgated on 8 December 2008 it was only made publicly available in late 2009, but has been in effect since 18 March 2009.

Article 102 of the Mineral Law provides that "Individuals and organizations that have received mining licences pursuant to the 1997 Mining Law or in accordance with contracts effective prior to this Law coming into force may continue their mining business operations in accordance with the terms and conditions of such contracts. Any person having been authorised to operate mining activities in accordance with previously established contracts and wishing to apply this amended law shall inform the concerned authority within one hundred and twenty days from the entry into force of this Law". Therefore the Mineral Law will not affect mining licences or concession agreements obtained or entered into prior to the Mineral Law, unless the holder of such licence or agreement advised the concerned authority of its desire to have the Mineral Law apply to its operations.

MMG Laos Holdings Limited entered into the MEPA prior to the effective date of the Mineral Law. The MEPA sets out the terms and conditions for MMG's operations in Laos and contains provisions relating to the exploration and production of copper and gold. The MEPA, in essence, is MMG's mining licence and provides the terms in which MMG shall conduct such operations in Laos. The Target Group (and the relevant predecessor company) has been successfully operating under the MEPA for almost 20 years and has maintained a good relationship with the Government of Laos.

# Future licence(s) of MMG

As regards any future mining licence(s) of MMG in Laos which are not covered under the MEPA, the provisions of the Mineral Law shall apply.

Additional details regarding the implementation of the Mineral Law will be provided in a supplementary decree. This decree is currently being drafted by the Government of Laos and a timeline for its completion has not been provided.

Like other natural resources in Laos, all minerals are the property of the national community, to be managed in a centralised and uniform manner by the Government of Laos. The Mineral Law is administered by the Ministry of Energy and Mines (the "MEM").

The Mineral Law requires permission to be obtained from the MEM for various mining activities, including (i) the gathering of basic geological data; (ii) the analysis of mineral samples in Laos or overseas; (iii) the granting of licences for prospecting, exploration and mining activities; and (iv) the establishment of a mineral processing plant.

Mineral exploration and exploitation activities are open to investment from both domestic and foreign entities. Mining activities, including exploration and exploitation, are subject to the negotiation of a concession agreement with the Government of Laos, per the requirements of the new Law on the Promotion of Investment No. 02/NA, dated 8 July 2009 (the "New Investment Law").

#### INVESTMENT APPLICATION

Laos law does not allow foreign companies or investors to engage directly in mineral exploration and mining activities in Laos. Thus, in conjunction with the above mining activity approval, the Mineral Law requires the establishment of a foreign invested entity incorporated in Laos under the Enterprise Law No.11/NA, dated 9 November 2005 (the "Enterprise Law"), such as a limited company, joint venture or partnership to conduct mining activities.

The following are the general application and licensing procedures which would be involved in setting up a foreign-invested entity in Laos:

- (i) Reservation of the company name with the Ministry of Industry and Commerce ("MoIC");
- (ii) Application for the foreign investment licence to the Ministry of Planning and Investment ("MPI") for the foreign investment licence;
- (iii) Approval of the Articles of Association from MPI (including registration of such Articles);
- (iv) Application to MoIC for the enterprise registration certificate;
- (v) Application to the Ministry of Finance for the tax registration certificate;
- (vi) Application to the MEM for business operating licences such as those required under the Mineral Law and New Investment Law;
- (vii) Application to the Ministry of Security for the company seal;
- (viii) Application to the Ministry of Information & Culture for the company signage licence; and
- (ix) Application to the Bank of Laos for the capital importation certificate (this can only be obtained when the capital is paid into the Laos).

The above procedures are currently required by the Government of Laos to register and certify a foreign invested entity under the Law on the Promotion and Management of Foreign Investment No.11/NA, dated 22 October 2004 ("2004 Foreign Investment Law"). The New Investment Law, when effective, will modify the above procedure. The Government of Laos has, however, instructed companies to continue to follow the 2004 Foreign Investment Law for the indefinite future.

Under either the 2004 Foreign Investment Law or New Investment Law, a concession agreement with the Government of Laos is required in the mining sector.

#### CONCESSION AGREEMENT

Mining activities, including exploration and exploitation, currently require a concession right to be granted from the Government of Laos. The MEPA is a form of concession agreement in the mining sector covering both exploration and exploitation activities.

The Government of Laos may recommend a standardised concession form. However, the content of the agreement is open to discussion and can encompass a range of business operating licences and approvals and investment conditions.

Concession agreements can also include exemptions to or modifications from requirements of Laos laws. Generally, all exemptions to Laos laws contained in the concession agreement should be approved by the National Assembly or the National Assembly Standing Committee

#### ADDITIONAL COMPLIANCE

Mining activities will generally involve activities such as the use of explosives, import of equipment and construction. Even though the MEPA approves these related activities in principle, the project company (Lane Xang Minerals Limited) may still be required to obtain relevant certificates/permits from the authorities who have the supervisory authority of such activity. For a company who is licensed to undertake mining activities, the most common certificates/permits to be obtained in addition to the ones mentioned in the paragraphs headed "Legal and regulatory regime in which the Target Group operates — Laos — Investment application" and "Legal and regulatory regime in which the Target Group operates — Laos — Concession agreement" above are: environmental certificate from the Water Resource and Environment Authority, social security registration certificate from the Social Security Organization, approval of health impact assessment from the Ministry of Public Health, permit for construction from the Ministry of Public Works and Transportation, permit for use of explosives from the Ministry of Defence and licence for import of equipment from the MoIC.

# **AUSTRALIA**

## **WESTERN AUSTRALIA**

## MINING LAW

In Australia, legislation regulating the exploration for and production of minerals is the responsibility of the individual States. The *Mining Act 1978* (WA) ("**Mining Act**") and *Mining Regulations 1981* (WA) ("**Mining Regulations**") are the principal means of regulating the exploration for and mining of minerals within Western Australia.

A mining title must be obtained before any exploration or mining operations may be undertaken in respect of minerals which are the property of the Crown. Under the Mining Act, exploration and mining tenements are granted by the Minister. There are a number of procedural steps which must be followed before a tenement is granted.

The main types of tenements granted under the Mining Act are:

- prospecting licences;
- exploration licences;
- mining leases;
- general purpose leases; and
- miscellaneous licences.

Where a resource has been identified but is considered not to be capable of commercial exploitation, a retention licence can be applied for, or an application can be made to convert the relevant tenement to 'retention status'.

Some of the basic features of these tenements are outlined below.

On 10 February 2006, the Mining Act was amended and the regime which applies to tenements applied for on or after this date is slightly different to the regime which applies to certain tenements granted or tenement applications in existence before 10 February 2006. Both regimes are outlined below.

## **MINING TENEMENTS**

## **Prospecting licence**

## General

A prospecting licence authorises the holder to enter the land to prospect for all minerals (except iron ore unless expressly authorised by the Minister).

#### Term

Prospecting licences granted prior to 10 February 2006 have a term of four years with no renewals. Those issued after that date have a term of four years with the provision to extend for one further four year period. If a prospecting licence is granted 'retention status', there is an ability to further extend the term.

#### Rights

The holder of a prospecting licence has a priority right during its term to apply for one or more mining leases over the whole or part of the area of the prospecting licence. Pending determination of the application for a mining lease, the prospecting licence remains in force notwithstanding the expiry, in the interim, of its four year term.

The holder of a prospecting licence may, in accordance with the licence conditions, extract or disturb up to 500 tonnes of material from the ground, including overburden, and the Minister may approve extraction of larger tonnages.

#### **Exploration licence**

#### General

In Western Australia, all large-scale exploration is carried out under an exploration licence. The rights conferred by an exploration licence are substantially the same as those conferred by a prospecting licence.

## Term

An exploration licence granted or applied for before 10 February 2006 will remain in force for five years from the date of grant and may be renewed by the Minister, in certain circumstances, for up to a total further period of four years, after which one or more extensions of one year are available in exceptional circumstances.

An exploration licence applied for on or after 10 February 2006 will remain in force for five years from the date of grant and may be renewed by the Minister for five years (plus further renewals of two years each if prescribed grounds exist).

# Rights

The holder of an exploration licence has a priority right, during its term, to apply for one or more mining leases over the whole or part of the area of the exploration licence. Pending determination of the application, the exploration licence remains in force notwithstanding the expiry, in the interim, of its term.

The holder of an exploration licence may, in accordance with the licence conditions, extract or disturb up to 1,000 tonnes of material from the ground, including overburden, and the Minister may approve extraction of larger tonnages.

If the exploration licence was applied for on or after 10 February 2006, the licensee will need to provide a mining proposal detailing the planned mining operations or statement setting out the likely mining operations, together with a mineralisation report containing details of the exploration results in relation to the area the subject of the mining lease application.

#### Retention licence and retention status

A retention licence may be granted in respect of the whole or any part of the land formerly within a prospecting licence, exploration licence or mining lease. The purpose of a retention licence is to permit the holder to retain title to an identified but marginal mineral resource and the size is determined accordingly. The term of a retention licence is five years and is renewable for further periods not exceeding five years.

From 10 February 2006, the holder of a prospecting licence or exploration licence may apply for retention status for that licence, and not a separate retention licence. The licence will retain its identity as a prospecting or exploration licence, but the annual expenditure commitment is replaced with a work program based condition.

## Mining lease

## General

In Western Australia, all commercial mineral extraction activities must be carried out under a mining lease.

#### Term

Based on the current provisions of the Mining Act, a mining lease will remain in force for an initial term of 21 years and may be renewed, as of right, for a further term of 21 years. The Minister may renew the term of a mining lease for further successive periods of 21 years.

## Rights

The holder of a mining lease is entitled, subject to the Mining Act, to work and mine the land, take and remove any minerals (except iron ore, unless expressly authorised by the Minister) and dispose of them, take and divert water subject to the *Rights in Water and Irrigation Act 1914* (WA), and do all things necessary to effectually carry out mining operations in, on or under the land. The rights conferred are exclusive rights for mining purposes in relation to the land in respect of which the mining lease was granted.

However, the grant of a mining lease does not in itself confer authority to produce minerals. Further approvals are generally required before production may commence, including approvals in respect of environmental impact (please refer to the paragraph headed "Legal and regulatory regime in which the Target Group operates — Australia — Western Australia — Environment" below).

The holder of a mining lease owns all minerals lawfully mined from the land in accordance with the mining lease. However, a royalty is payable to the State in respect of all minerals recovered from a mining lease at the rate prescribed for the relevant commodity in the Mining Act and the Mining Regulations.

No other mining tenement (except a miscellaneous licence) may be granted over the land.

#### General purpose lease

#### General

A general purpose lease is a surface lease which entitles the lessee to erect, place and operate machinery used in connection with mining operations, to deposit or treat minerals or tailings obtained from land on which mining operations are carried out and to use the land for any other specified purpose directly connected with mining operations.

#### Term

A general purpose lease will remain in force for a term of 21 years and may be renewed, as of right, for a further 21 years. The Minister may renew the term of a general purpose lease for further successive periods of 21 years.

## Rights

A general purpose lease may be granted pursuant to the Mining Act over any land where the use of that land is directly connected with mining operations or is for a prescribed purpose under the Mining Act (for example, depositing or treatment of minerals or tailings).

#### Miscellaneous licence

## General

A miscellaneous licence is ancillary to a mining lease, exploration licence or prospecting licence. A miscellaneous licence may be granted over any land, including any land the subject of an existing mining title, whether held by the applicant or by another person.

# Term

A miscellaneous licence that was applied for and granted after 6 June 1998 will remain in force for a term of 21 years, and may be renewed, as of right, for a further 21 years. The Minister may renew the term of a miscellaneous licence applied for and granted after 6 June 1998 for further successive periods of 21 years.

## Rights

A miscellaneous licence may be granted pursuant to the Mining Act over any land where the use of that land is directly connected with mining operations and is for a prescribed purpose under the Mining Regulations (for example, a road or pipeline).

A miscellaneous licence may be applied for over land that is the subject of an existing tenement, irrespective of whether that existing tenement is held by the applicant for the miscellaneous licence. The holder of a miscellaneous licence does not therefore have exclusive title to the land over which the miscellaneous licence is granted.

## GENERAL PROVISIONS RELATING TO MINING TENEMENTS IN WESTERN AUSTRALIA

## Conversion of prospecting licence and exploration licence to mining lease

The holder of a prospecting licence or an exploration licence may apply to convert such licence or part thereof to a mining lease. If the underlying prospecting licence or exploration licence would otherwise expire while the application for a mining lease is pending, it is automatically extended until the application is determined or the mining lease is granted.

## Requirement to meet annual expenditure

Prospecting licences, exploration licences and mining leases are subject to prescribed minimum annual expenditure commitments. There is no prescribed annual expenditure for a retention licence, however, the Minister may determine the level of expenditure by condition on grant.

If the minimum expenditure requirement has not been met and a full or partial exemption from the expenditure requirements has not been applied for or granted, the tenement is liable to forfeiture. An application for forfeiture may be made by any person (Plaintiff) to the Warden within 8 months of the end of that tenement year. If the tenement is forfeited, the Plaintiff has an exclusive period in which to apply for the tenement.

## **Bonds and securities**

Before the Department of Mines and Petroleum ("**Department**") grants final approval for mining to be commenced on any land, the rehabilitation division will assess the level of financial security required from the proponent to secure its future environmental obligations. Security is almost invariably required, under the Department's current practices, in the form of unconditional performance bonds.

# **Royalties**

When any minerals are produced or obtained from a mining tenement, a monthly production report must be lodged and a royalty is payable on minerals, including iron ore.

# Fees payable and rent

Charges are payable in respect of the various types of tenements on application and by way of annual rent. Rent is payable annually in advance due on the anniversary date of the commencement of the term of the tenement and must be paid not later than one month after that date.

## Rates

Rates are payable to the Local Government on all tenements.

#### Liability to pay compensation

Under the Mining Act, native title holders may recover compensation from the holder of a tenement, rather than the State.

#### NATIVE TITLE LAW

## **Background**

Until the decision in the Mabo case (please refer to the paragraph headed "Legal and regulatory regime in which the Target Group operates — Australia — Westen Australia — Native title law — The major decisions" below) in 1992, the Australian legal system did not recognise that Australia's indigenous inhabitants had any rights or interests in relation to land or waters. The Mabo decision recognised the 'native title' rights of Aboriginal people in relation to land where those rights survived the acquisition of sovereignty by non-indigenous people.

The content of the native title rights enjoyed by a particular group in relation to particular land or waters will be a question of fact to be proved by evidence. The nature of the rights can vary considerably from group to group.

The existence, content and ownership of native title rights to particular land or waters are ascertained under procedures contained in the *Native Title Act 1993* (Cth) ("NTA").

# Native title claims and determinations

Aboriginal people can lodge native title claims under the NTA by way of an application for a determination of native title, filed in the Federal Court. If a claim passes the registration test under the NTA and is entered on the Register of Native Title Claims, then the registered applicants will receive the benefit of various procedural rights under the NTA (including the right to negotiate).

After the registration test has been applied, the Federal Court may refer the claim to the National Native Title Tribunal ("NNTT") to mediate an outcome satisfactory to both native title claimants and other interested parties. If these processes are not successful, the Federal Court will list the claim for a trial to determinate whether or not native title exists. Claims may be heard and determined by the Federal Court regardless of whether or not the claim passed the registration test under the NTA.

The NTA recognises and protects native title rights and interests. It provides that both native title holders and registered native title claimants have certain rights under the 'future act' provisions of the NTA in respect of acts (such as the grant of mining and infrastructure titles) that will affect their native title rights and interests.

A person who holds an interest in land or waters which is affected by a native title claim has a right to be a respondent party in the Federal Court claim proceedings.

#### The major decisions

In June 1992, the High Court of Australia delivered its judgment in what has come to be known as the Mabo case. The Mabo case established that the common law of Australia recognises a form of native title where certain preconditions can be made out. These preconditions include an ongoing connection by the native title claimants with the land in question.

In December 1996, the High Court of Australia delivered its judgment in what has come to be known as the Wik case. The Wik case recognised that some native title rights could co-exist with rights held under a pastoral lease. In the event of conflicting rights, the rights of the pastoralist will prevail over those of a native title holder.

In the Fejo case of September 1998, the High Court of Australia determined that the grant of a freehold title normally extinguishes native title.

On 8 August 2002, the High Court of Australia handed down its decision in the Ben Ward case. The findings of the High Court of Australia included the following:

- Native title is a bundle of rights deriving from traditional laws and customs acknowledged and observed by Aboriginal people.
- Native title rights relate to land and waters, although connection does not need to be established by showing continuous physical use or occupation.
- To determine whether native title has been extinguished requires the identification of and comparison between the native title rights and interests and the legal nature and incidents of rights granted under statute or asserted by legislation.
- There may be partial extinguishment of native title rights.
- The grant of a pastoral lease under WA legislation does not give a right of exclusive
  possession and does not necessarily wholly extinguish all native title rights and interests.
  Any native title right to control access to land or to be asked permission to use or have
  access to land will have been extinguished.
- The High Court of Australia held that the evidence in the case did not establish any native title right or interest in minerals or petroleum. The High Court of Australia also stated that even if a right in minerals or petroleum had been established those rights would have been extinguished by the operation of section 117 of the *Mining Act 1904* (WA) and section 9 of the *Petroleum Act 1936* (WA). Under those Acts, the Crown in Right of the Commonwealth of Australia (the "Crown") took full dominium over minerals and petroleum. We note that mining leases granted after 1994 do not extinguish native title.
- The High Court of Australia overturned the Full Court of the Federal Court's finding that the grant of a mining lease confers exclusive possession and wholly extinguishes native title. The grant of a mining lease will partially extinguish native title (e.g. the native title right to control access to the land). The precise extent of extinguishment by the grant of mining leases will need to be reconsidered by the Full Court of the Federal Court.

• The High Court of Australia held that the *Racial Discrimination Act 1975* (Cth) did not operate to invalidate the grant of mining leases, rather the holders of native title rights affected may have an entitlement to compensation.

On 12 December 2002, the High Court of Australia handed down its decision in *Yorta Yorta Aboriginal Community v Victoria*, clarifying the law with respect to the evidence required to prove native title. The High Court of Australia held that in order to prove native title, claimants must establish there has been an acknowledgment and observance of traditional laws and customs on a substantially uninterrupted basis since sovereignty.

Most native title cases since these decisions are applying the principles set out above to various factual situations.

# Commonwealth legislation

In response to the Mabo case, the Commonwealth Government enacted the NTA, the substantive provisions of which commenced on 1 January 1994. Its relevance to titles throughout Australia was that the NTA:

- recognised native title rights and set down some basic principles in relation to native title in Australia;
- provided for the validation of so called 'past acts', including the grant of certain titles and the construction of valid public works before 1 January 1994, that might otherwise be invalid because of the existence of native title;
- provided for the protection of native title in the doing of so called 'future acts', including the grant of titles after 31 December 1993; and
- provided for procedures by which native title can be claimed and, if determined to exist, registered and for compensation to be claimed for the extinguishment or impairment of native title. The process of determination of the existence of native title does not directly impact upon the grant or exercise of rights under existing, valid titles.

The NTA was amended with effect from 30 September 1998. From this date the NTA includes provisions which:

- confirm the validity of certain titles granted by the Commonwealth between 1 January 1994 and 23 December 1996 (the date of the Wik decision), called 'intermediate period acts';
- confirm the extinguishment of native title by certain 'exclusive possession tenures' granted by the Commonwealth;
- provide procedures for indigenous land use agreements ("ILUAs") to be entered into with indigenous groups which, once registered with the NNTT, will ensure the validity of the grant of the titles sought; and

• allows States to set up their own alternative processes (consistent with the NTA provisions) to deal with the grant of mining titles.

#### Western Australian legislation

Western Australia has passed the Title (Validation) and Native Title (Effect of Past Acts) Act 1995 (WA) ("WA Native Title Act") which is complementary to the NTA.

The WA Native Title Act validates all past acts attributable to the State of Western Australia, provides for the extinguishment or suspension of native title in respect of such past acts in line with the provisions of the NTA, and provides that any compensation claimed by native title claimants in respect of past acts of the State is to be paid by the State in accordance with the principles of compensation under the NTA.

The WA Native Title Act was updated in line with the 1998 amendments to the NTA to confirm the extinguishment of native title by certain 'exclusive possession tenures' granted by the State on or before 23 December 1996.

The WA Native Title Act also confirms the validity of certain titles granted by the State between 1 January 1994 and 23 December 1996.

#### Existence of native title

The existence of native title claims covering an area does not mean that native title will ultimately be found to exist in that area. Conversely, the absence of native title claims in an area does not mean that native title does not exist in that area.

Whether native title is found to exist in the area will not be determined until there is an approved determination of native title by the Federal Court.

## Extinguishment of native title

The NTA, in conjunction with the relevant State native title legislation, provides that native title has been wholly extinguished over land that was the subject of 'previous exclusive possession acts' attributable to the Commonwealth or the State.

An act is a 'previous exclusive possession act' if it took place on or before 23 December 1996 and consists of the valid or validated grant or vesting of any of the following:

- a 'Scheduled Interest' (explained below);
- a freehold estate;
- a commercial lease;
- an exclusive agricultural or exclusive pastoral lease;

- a residential lease;
- a community purpose lease;
- any lease (other than a mining lease) that confers a right of exclusive possession; and
- an act that consists of the construction of establishment and any public work that commenced before 23 December 1996.

Of particular importance to each State are the 'Scheduled Interests'. The NTA contains a schedule which lists certain interests in the States and Territories in respect of which extinguishment of native title may be confirmed by State/Territory legislation.

In addition, native title may otherwise have been extinguished at common law if the rights conferred by or granted under statutes are wholly inconsistent with native title rights and interests.

## The validity of titles

## Pre 1994 titles - validation of past acts

All titles which were granted prior to 1 January 1994 and which would otherwise have been invalid because of the existence of native title have been validated. Accordingly, those titles can be regarded as valid and all rights granted thereunder are fully exercisable.

Even if a native title claim is subsequently made or native title is determined to exist over an area of land the subject of such title, the title will remain valid for the duration of its term.

If native title is determined to exist on land the subject of a title that is a mining or other title (other than freehold, certain leases and certain public works):

- the native title will be taken to have been suspended, not extinguished;
- native title holders will be entitled to receive compensation from the State Government; and
- upon expiry of the mining or other title, the native title rights will revive.

## Titles granted after 1 January 1994

The grant of all titles affecting native title after 1 January 1994 are subject to the provisions of the NTA.

The grant of a mining title is an act that is capable of affecting native title and must therefore comply with the future act processes under the NTA. These processes may include the 'right to negotiate' procedures which involve negotiation between the State, the applicant for the title and native title claimants. If the issue cannot be resolved by negotiation it is referred to the NNTT for determination.

## Certain titles granted between 1 January 1994 and 23 December 1996

The various States granted certain mining titles between 1 January 1994 and 23 December 1996 (the date of the decision of the Wik case) other than in compliance with the NTA. Titles were granted over pastoral lease land on the assumption that the grant of pastoral leases had extinguished native title. Those grants did not therefore comply with the provisions of the NTA.

The decision in the Wik case determined that the grant of a pastoral lease did not necessarily extinguish native title. As such, there was a risk that titles granted over pastoral leases without complying with the NTA were potentially invalid.

Amendments to the NTA in 1998 provided that grants that were made between 1 January 1994 and 23 December 1996 over land which had at any time:

- been the subject of a grant of a freehold estate or a lease (other than a mining lease); or
- on which there had been constructed or established a public work,

were 'intermediate period acts' and were validated.

Accordingly, mining titles granted other than in accordance with the NTA over pastoral lease land between 1 January 1994 and 23 December 1996 have been validated.

# Valid titles and the exercise of rights

The holder of a valid mining title may exercise all of the rights under that title without interference from native title holders or claimants (confirmed in section 44H of the NTA).

## The grant of future titles

The NTA provides that future acts can be invalid to the extent that they affect native title. A future act that affects native title will not be invalid to any extent under the NTA if it is covered by any of the provisions of Division 3 of the NTA. If the future act is not covered by any of those provisions, the act will be invalid to the extent of any inconsistency with native title. Of course, if it is not inconsistent with native title, it will not be invalid to any extent under the NTA.

#### Invalid titles and native title risk

If land titles are invalid or invalid to the extent of any inconsistency with native title, the native title holders may be able to obtain injunctions to stop a potential trespass or other acts that may infringe their native title rights. Native title claimants may apply for injunctions to preserve the subject matter of their native title claim.

Native title holders may also be entitled to damages for the effect on their native title rights of past operations and works.

#### Aboriginal land

There are various statutory interests in land which give rise to additional procedural requirements in relation to access and grant of overlapping tenure, for example the requirements of the *Aboriginal Affairs Planning Authority Act 1972* (WA) or *Aboriginal Land Act 1991* (Qld).

#### Compensation

Under the NTA, if a determination is made that native title exists in relation to the land or waters over which valid tenements have been granted, then the native title holders will be entitled to receive compensation for the effect of the grant of those tenements on their native title rights and interests.

# CULTURAL HERITAGE LAW

#### General overview

The States and the Commonwealth have implemented legislation directed at the protection of Aboriginal and Torres Strait Islander heritage sites to protect areas and objects of archaeological and/or cultural significance.

A place or object may be of cultural significance because it is of religious significance to indigenous people, is a burial place, forms part of Aboriginal dreamtime stories, etc. Places that are not necessarily of cultural significance to indigenous people, but are of archaeological significance, are also protected.

# Risk generally

Indigenous objectors who wish to stop or delay a project on indigenous heritage grounds have recourse to a number of legal remedies not available to non-indigenous objectors as well as generally available legal remedies, under environmental, planning and other laws.

The legal remedies specifically available to indigenous objectors in respect of indigenous heritage issues are:

- emergency and permanent declarations under the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth);
- Supreme Court injunctions (interim and permanent) to prevent anticipated breaches or to stop breaches of State legislation protecting Aboriginal or Torres Strait Islander heritage; and
- Supreme Court injunctions (interim and permanent) to prevent anticipated breaches or to stop breaches of any contractual obligations in relation to heritage.

These remedies will involve a claim that proposed operations are to be conducted on a site or area of indigenous cultural significance, and will involve damage to or desecration of that site or area.

Indigenous objectors may also be able to take action seeking damages for breach of contract and/or loss or damage to sites or objects of significance, or ask for a place to be inscribed on the National Heritage List under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

Certain breaches of indigenous heritage legislation constitute an offence the commission of which may not only result in fines, but also give rise to significant reputational effects.

## Commonwealth legislation

The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth) ("Commonwealth Heritage Act") provides for the preservation and protection of areas and objects throughout Australia which are of particular significance to Aboriginals (including Torres Strait Islanders). This Act is currently under review by the Commonwealth.

The areas to which the Commonwealth Heritage Act applies are 'significant Aboriginal areas'. A significant Aboriginal area is an area of land or water within Australia which is of 'particular significance to Aboriginals in accordance with Aboriginal custom'.

The Commonwealth Heritage Act does not automatically apply to sites within each State, even if they are 'significant Aboriginal areas'. The application of the Commonwealth Heritage Act is only triggered when the Minister or an 'authorised officer' receives an application from an Aboriginal group for a declaration in respect of a particular area or object. A declaration made in response to such an application has the effect of prohibiting injury to, or the desecration of, the particular area, object or class of objects specified in the declaration, wherever it is situated.

Section 9 of the Commonwealth Heritage Act permits the Minister to make an emergency declaration following an application from an Aboriginal group or its representative requesting that a particular area be protected or preserved. The Minister must be satisfied that:

- the area falls within the definition of 'significant Aboriginal area'; and
- the area is under 'serious and immediate threat of injury or desecration'.

The Minister can also make declarations which are effective for a longer period. However, the Minister must first be satisfied that the area is a significant Aboriginal area under threat of injury or desecration. The Minister must also commission and consider a report dealing with certain issues.

## Western Australian legislation

The Aboriginal Heritage Act 1972 (WA) ("WA Heritage Act") provides for the protection and preservation of places and objects in Western Australia which are significant by reason of their association with the cultural heritage of Aboriginal people. The places to which the WA Heritage Act applies are described as 'Aboriginal sites' and include:

- places where Aboriginals have (or appear to have) left objects associated with their cultural life;
- sacred, ceremonial or ritual sites; and
- places which are (or were) associated with Aboriginals and should be preserved because of their significance to the cultural heritage of the State.

The WA Heritage Act provides for the protection of, and regulates conduct which may impact upon, Aboriginal sites and objects.

## Environment Protection and Biodiversity Conservation Act 1999 (Cth) ("EPBC Act")

There are also three areas of heritage protection in the EPBC Act:

- the World Heritage values of a declared World Heritage property;
- the National Heritage values of a National Heritage place; and
- places listed on the Commonwealth heritage register.

# Declared world heritage properties

A property included in the World Heritage List is a 'declared World Heritage property'.

A property specified in a declaration made under section 14 of the EPBC Act is a declared World Heritage property for the period for which the declaration is enforceable.

## National heritage list

A place may be included in the National Heritage List only if:

- the place is within the Australian jurisdiction; and
- the Minister is satisfied that the place has one or more National Heritage values.

A place has a National Heritage value if it meets one of the National Heritage criteria, which includes 'the place has outstanding heritage value to the nation because of the place's importance as part of indigenous tradition'.

#### **ENVIRONMENT**

The environment in Western Australia is regulated by a wide variety of laws. This overview highlights the most significant of those that are relevant to mining operations in Western Australia.

The *Environmental Protection Act 1986* (WA) ("**EP Act**") is the primary source of environmental regulation in Western Australia. This overview is divided into two main parts, namely approvals and compliance.

## Approval of proposals

# Background

The EP Act requires that a proposal that appears likely, if implemented, to have a significant effect on the environment, is to be the subject of assessment by the Environmental Protection Authority ("EPA") and then subject to a decision by the Environment Minister by way of a Ministerial Statement.

## EPA review of proposal

An environmental review document, to be prepared by the proponent of a project, is generally required to be submitted to the EPA for assessment.

Once a proposal is referred to the EPA and a decision is made that formal assessment is required, all other decision-making authorities are prohibited from making a decision that could have the effect of causing or allowing the proposal to be implemented until the Ministerial Statement is issued. The proponent is also prohibited from proceeding with the proposal.

# Public review

The proponent then releases for public comment a document which outlines the proposal, its likely environmental impacts and how they are to be managed or mitigated.

During the public review period, any person may make submissions to the EPA regarding the proposal.

## EPA report

Following the public review process, the EPA prepares an assessment report to the Environment Minister.

The EPA report provides a recommendation as to whether the proposal may proceed and, if so, the conditions and procedures to which the proposal should be subject.

## Ministerial statement

After appeals have been determined, the Environment Minister will make a decision, the ministerial statement stating whether the proposal can proceed and if so imposing conditions.

## Secondary approvals

An EP Act works approval is required if work is to be carried out in relation to premises which causes the premises to become a prescribed premises.

A works approval authorises construction work to be carried out on a prescribed premises.

Environmental licences under the EP Act manage the operation of prescribed premises with respect to emissions. Generally, works approvals are for construction and licences are for operations.

## Compliance and offences

# Offences

The following is an overview of the main environmental offences under the EP Act. It is an offence to:

- implement a proposal otherwise than in accordance with the conditions in the Ministerial Statement.
- fail to comply with any condition in the works approval.
- cause or allow pollution to be caused.
- either:
  - emit an unreasonable emission from any premises;
  - cause an unreasonable emission to be emitted from any premises;
  - either cause or allow to be caused material environmental harm or serious environmental harm; or
  - either cause or allow clearing of native vegetation unless properly authorised.

Penalties for offences are up to A\$1 million for companies and A\$500,000 and five years imprisonment for individuals.

# Enforcement

In addition to prosecution or amending approvals, the environmental regulator also has a range of powers which enable it to intervene in the conduct of operations to protect the environment.

## EPBC Act

In addition to obtaining WA approval for a project, assessment and approval under the Commonwealth EPBC Act is required to take an 'action' which will have a 'significant impact' upon a matter of national environmental significance. It is an offence to take an 'action' that has, will have or is likely to have a 'significant impact' on a matter of National Environmental Significance ("NES"). The maximum penalty for a company for commission of this offence is A\$5.5 million.

Matters of NES under the EPBC Act are:

- 1 World Heritage properties;
- 2 National Heritage places;
- 3 wetlands of international importance (Ramsar Wetlands);
- 4 listed threatened species and ecological communities;
- 5 listed migratory species;
- 6 the Commonwealth marine area; and
- 7 nuclear actions, including uranium mining.

A 'controlled action' is an action which will have or is likely to have a significant impact on a matter of NES. A person proposing an action who thinks it may be a controlled action must refer the proposal to the Commonwealth Environment Minister for a decision as to whether or not the action requires assessment and approval from the Minister.

Like Western Australia, the Commonwealth requires a formal assessment. This can be done in most cases in conjunction with the State system. At the end of the process, the Commonwealth Minister grants an approval.

# Other environmental laws

There are a range of other environmental statutes that must be considered for planning any new mining operation in Western Australia. These are briefly summarised below.

The Wildlife Conservation Act 1950 (WA) ("WC Act") provides for the conservation and protection of wildlife in Western Australia.

The WC Act provides that all fauna is wholly protected throughout the State unless the Minister declares otherwise. The WC Act creates offences for taking protected fauna.

The Minister may grant licences to take fauna. These are granted, if needed, following the issue of a Ministerial Statement.

#### Water

In Western Australia, the regulation, management, use and protection of water resources is governed by the *Rights in Water and Irrigation Act 1914* (WA) ("**RIWI Act**"). The right to the use and control of most surface and ground water is vested in the Crown.

Under the RIWI Act, a licence is required to take water from any water sources to which the RIWI Act applies. Licences grant limits of water that can be taken by a licensee.

## Management of contaminated sites

The Contaminated Sites Act 2003 (WA) provides for the identification, recording, management and remediation of contaminated sites in Western Australia. Invariably, a mine site will find its way onto the Contaminated Sites Register and be subject to the obligations under the Act.

## Dangerous goods

The Explosives and Dangerous Goods Act 1961 (WA) sets out various requirements in relation to the storage of explosives and dangerous goods.

#### Controlled wastes

The Environmental Protection (Controlled Waste) Regulations 2004 (WA) ("CW Regs") regulate and impose obligations on the storage and transport of controlled wastes in Western Australia.

## OCCUPATIONAL HEALTH AND SAFETY

# Key Western Australian legislation

Prescriptive legislation regulates health and safety at mining workplaces in Western Australia.

The principal legislation is the:

- Mines Safety and Inspection Act 1994 (WA) ("MSI Act"); and
- Mines Safety and Inspection Regulations 1995 (WA) ("MSI Regulations").

There also is a range of ancillary legislation with potential relevance, for example the *Dangerous Goods Safety Act 2004* (WA) and supporting regulations, and the *Workers Compensation and Injury Management Act 1981* (WA).

# **Duty holders**

The MSI Act and MSI Regulations impose health and safety obligations on a range of duty holders connected with mining workplaces, including employers, employees, persons in control of mining workplaces, and designers, importers, suppliers and manufacturers of plant (which includes, for example, machinery, equipment, tools) provided to mining workplaces. The MSI Act also provides for specific duty holders to be appointed under the MSI Act for each operative mine.

Duties include, for example, an employer's duty to, so far as practicable, provide and maintain at a mine a working environment in which their employees are not exposed to hazards.

#### **Penalties**

Penalties for breach of this legislation range up to \$500,000 (and \$625,000 for a subsequent offence) for a corporation, and \$250,000 (and imprisonment for 2 years) (and \$312,500 for a subsequent offence (and imprisonment for 2 years)) for an individual.

# **QUEENSLAND**

#### MINING LAW

The *Mineral Resources Act 1989* (Qld) ("**Mineral Resources Act**") and *Mineral Resources Regulation 2003* (Qld) are the principal means of regulating the exploration for and mining of minerals within Queensland.

With limited exceptions, minerals in Queensland are the property of the Crown in right of the State.

Under the Mineral Resources Act, exploration and mining tenements are granted by the Mining Registrar or the Minister. The grant of a tenement is a prerequisite to the conduct of exploration or mining operations aimed at discovering and extracting minerals owned by the Crown.

There are a number of procedural steps which must be followed before a tenement is granted.

The main types of tenements granted under the Mineral Resources Act are:

- prospecting permits;
- exploration permits;
- mineral development licences;
- mining claims; and
- mining leases.

Some of the basic features of these tenements are outlined below.

#### **MINING TENEMENTS**

## **Prospecting permit**

#### General

A prospecting permit allows small scale prospecting for minerals (excluding coal). There are two types of prospecting permit:

- a parcel prospecting permit, which is granted for a lot or lots owned by the same person; and
- a district prospecting permit, which is granted for a mining district.

Security may be imposed by the Mining Registrar before the permit is granted.

#### Term

A parcel prospecting permit can be granted for a particular parcel of land for a term of three months. A district prospecting permit can be granted for all available land within a mining district for a term of 1 to 12 months.

# Rights

A prospecting permit authorises entry onto land for the purposes of:

- marking out a mining claim;
- prospecting using metal detectors or other hand held instruments, or sampling using only hand held implements; and
- mining for a mineral other than coal using non-mechanical manual equipment.

More than one prospecting permit may be issued over the same land. Land the subject of a mineral development licence, mining claim or mining lease (or subject to an application for such a tenement) not held by the prospecting permit holder is excluded from a prospecting permit except if the licensee or lessee has consented.

# **Exploration permit**

## General

In Queensland, large-scale exploration is carried out under an exploration permit.

The Minister must determine the amount of security to be deposited by an applicant for an exploration permit, taking into consideration the program of work proposed and the conditions and obligations imposed on the grant of the permit.

#### Term

The term of an exploration permit is for a period up to five years. It may be renewed for a further term of not more than five years.

# Rights

An exploration permit:

- allows the holder to take action to determine the existence, quality and quantity of minerals
  on, in or under land by methods which include prospecting, geophysical surveys, drilling,
  and sampling and testing of materials to determine mineral bearing capacity or properties
  of mineralisation; and
- may eventually lead to an application for a mineral development licence or mining lease.

# Mineral development licence

#### General

A mineral development licence is available as a retention and evaluation tenement at the exploratory stage. The Minister must determine the amount of security to be deposited by an applicant for a mineral development licence.

# Term

The initial term of a mineral development licence is a period not greater than five years (or longer, at the Minister's discretion). It may be renewed for a further period not exceeding five years.

## Rights

The Minister may specify the activities which must be carried out under a mineral development licence. The activities specified by the Minister could include activities to evaluate and determine the economics of developing an ore body including carrying out geological, geophysical and geochemical programs, mining feasibility, environmental, marketing, engineering and design studies, and metallurgical tests.

# Mining claim

# General

A mining claim is limited to small scale mining operations. The holder of a prospecting permit may apply for a mining claim over any part of the land in the prospecting permit.

The Mining Registrar must determine the amount of security to be deposited by an applicant for a mining claim, taking into consideration the program of work.

#### Term

A mining claim must have an initial term not exceeding ten years. The term may be renewed, for a period not exceeding 10 years, by making an application to the Mining Registrar.

## Rights

A mining claim:

- entitles the holder to prospect and hand-mine for specified minerals; and
- cannot be granted in respect of coal.

## Mining lease

#### General

In Queensland, all commercial mineral extraction activities must be carried out under a mining lease.

The Minister must determine the amount of security to be deposited by an applicant for a mining lease, taking into consideration the program of work proposed and the conditions and obligations imposed on the grant of the permit.

## Term

The Minister may approve the initial term for any period. On application, the Minister may approve the renewal of the mining lease. Where a mining lease would otherwise expire while an application for renewal is pending, the duration of the mining lease is automatically extended until the application is determined.

## Rights

A mining lease:

- entitles the holder to machine-mine specified minerals and carry out activities associated with mining or promoting the activity of mining; and
- can be granted for those minerals specified in either the prospecting permit, exploration permit or mineral development licence held prior to the grant of the lease.

#### Infrastructure mining lease

The Mineral Resources Act provides for a special purpose mining lease called an infrastructure mining lease. It may be granted to the holder of a current mining lease over land not covered by the person's current mining lease for the transportation of something through, over or under that land. The infrastructure mining lease must be for the purpose associated with or arising from activities performed under the mining lease.

## Overlapping tenements

There is the possibility of overlap in Queensland between coal, petroleum, coal seam gas and oil shale tenements. It may be necessary for tenement holders to enter into appropriate coordination agreements.

# GENERAL PROVISIONS RELATING TO MINING TENEMENTS IN QUEENSLAND

# Conversion of prospecting permit, exploration permit or mineral development licence to mining lease

The holder of a prospecting permit, exploration permit or mineral development licence may apply to convert such permit or part thereof to a mining lease. If the underlying permit would otherwise expire while the application for a mining lease is pending, it is automatically extended until the application is determined or the mining lease is granted.

# Security

Security may take the form of a bond or a guarantee or indemnity by an insurance company, a financial institution or another credit provider.

The Minister may use the security to rectify any damage to pre-existing improvements, remedy any breach of the tenement or the Mineral Resources Act, or to pay any penalty imposed.

# Cancellation

The Minister may cancel a tenement where the holder has carried out activities that are not bona fide for the purposes for which the permit was granted, has failed to pay money due, has failed to comply with a condition of the permit or (for an exploration permit) failed to report the discovery of a mineral.

# **Environmental impact statement**

An environmental authority (mining activities) granted under the *Environmental Protection Act* 1994 (Qld) is required for mining activities authorised under a tenement. The Environmental Protection Agency must decide whether an environmental impact statement is required for the application.

#### Rehabilitation of land

A tenement will usually contain a condition that the holder will carry out 'improvement restoration'. After termination of the tenement, the Mining Registrar or the Minister may give reasonable written directions as to restoration if satisfied that the holder has not carried out improvement restoration.

## **Royalties**

The holder of a prospecting permit, mining claim or mining lease must pay royalties in respect of all minerals mined. The holder of an exploration permit or mineral development licence may only dispose of minerals with the consent of the Minister who may require payment of royalties on those minerals.

## Fees payable and rent

Charges are payable in respect of the various types of tenements on application and by way of rent. Rent is payable annually in advance. Failure to pay that rent may result in cancellation of the tenement.

## Rates

Payment of local rates and charges is a standard condition of tenements. These are paid to the Local Government for the area.

## Liability to pay compensation

The holder of a tenement is liable to pay compensation for damage or injury suffered or loss incurred by the owner of the land in question or by the Crown.

#### Native title law

For a general overview of native title law and the Commonwealth native title legislation, please refer to the paragraph headed "Legal and regulatory regime in which the Target Group operates — Australia — Westen Australia — Native title law" above.

# Queensland legislation

Queensland has passed the *Native Title (Queensland) Act 1993* ("Qld Native Title Act"), which is complementary to the NTA.

The Qld Native Title Act validates all 'past acts' and 'intermediate period acts' attributable to the State of Queensland, provides for the extinguishment or suspension of native title in respect of such acts in line with the provisions of the NTA, and provides that any compensation claimed by native title holders in respect of past and intermediate period acts of the State is to be paid by the State in accordance with the principles of compensation under the NTA (unless that compensation burden is passed on by the State pursuant to certain legislation or contractual terms).

The Qld Native Title Act was updated in line with the 1998 amendments to the NTA to confirm the extinguishment of native title by certain 'exclusive possession tenures' granted by the State of Queensland on or before 23 December 1996.

## Alternative procedures

Queensland established its own alternative native title procedures for the determination of mining tenement applications with the Land and Resources Tribunal replacing the NNTT. The procedures were similar to that which are prescribed by the NTA.

The alternative procedures were inserted into the Mineral Resources Act by the *Native Title* (Queensland) State Provisions Amendment Act (No. 2) 1998, the Native Title (Queensland) State Provisions Amendment Act 1999 and the Native Title Resolution Act 2000.

The alternative State provisions provided for alternative procedures to the right to negotiate under section 26A of the NTA for the granting of low impact exploration and mining and under section 43 of the NTA for the granting of high impact exploration and mining.

The validity of the alternative State procedures was the subject of court proceedings. On appeal, the Full Federal Court upheld the validity of the alternative State procedures for low impact exploration and mining tenements. In turn, the Full Federal Court overruled the decision of Justice Wilcox in the Federal Court and held that the alternative State provisions with respect to high impact exploration and mining tenements were valid and had always been valid.

Following the decision of the Full Federal Court, the Queensland Government commenced a review of the alternative State provisions on 28 November 2002. This review culminated in the decision being made to revert to the right to negotiate process under the NTA, which is described below.

Accordingly, from 31 March 2003, the NTA applied to all new mining and exploration tenure applications under the Mineral Resources Act. Applications made before 31 March 2003 continued to proceed under the alternative State provisions.

#### **Exclusion condition tenements**

Some exploration permits granted under the Mineral Resources Act were granted subject to a condition that excluded land which is subject to native title from the grant ("Exclusion Condition"). The State imposed the Exclusion Condition between the period commencing 1 January 1994 (the date of the commencement of the NTA) through to 23 December 1996 (the date of the Wik decision) as a strategy for 'dealing with native title' by enabling the grant of exploration permit applications without the need to comply with any native title procedural requirements imposed by the NTA.

Exploration permits subject to an Exclusion Condition do not convey exploration rights under the exploration permit to the holder in relation to areas that have been excluded. A mining lease granted out of such an exploration permit will pick up the excluded areas in the exploration permit (unless the excluded land was added to the exploration permit in accordance with the future act provisions of the NTA before the grant of the mining lease). Mining activities cannot be conducted in the excluded areas.

A holder of a tenement with excluded land may apply for the addition of the excluded land back into their tenements. However, unless native title has been wholly extinguished within the area of the excluded land since the grant of the tenement, such an application triggers the right to negotiate provisions of the NTA. Alternatively, an ILUA can be negotiated and registered to validly add the excluded land back into the tenement.

# CULTURAL HERITAGE LAW

For a general overview of cultural heritage law and the Commonwealth cultural heritage legislation, please refer to the paragraph headed "Legal and regulatory regime in which the Target Group operates — Australia — Westen Australia — Cultural heritage law" above.

The principal legislation relating to the recognition, protection and conservation of Aboriginal heritage in Queensland is the *Aboriginal Cultural Heritage Act 2003* (Qld) ("ACHA"), which is currently under review. The *Torres Strait Islander Cultural Heritage Act 2003* (Qld) essentially mirrors the ACHA in relation to Torres Strait Islander heritage.

# **Duty of care**

The ACHA introduces a duty of care to take all reasonable and practicable measures to ensure that any activity conducted does not harm Aboriginal cultural heritage ("**Duty of Care**").

The Duty of Care will not be breached if the person acts:

- under the authority of another provision of the ACHA that applies to Aboriginal cultural heritage;
- under an approved cultural heritage management plan;
- under a native title agreement or another agreement with an Aboriginal party (such as a cultural heritage agreement);
- in compliance with the Cultural Heritage Duty of Care Guidelines; or
- with the consent of the owner of the Aboriginal cultural heritage.

Further, an object of Aboriginal cultural heritage cannot be harmed, excavated, relocated, removed or unlawfully possessed where the person knows or ought to reasonably know that such object is Aboriginal cultural heritage.

## Cultural heritage management plan ("CHMP")

The relevant administering authority must not grant a lease, licence, permit, approval or other authority for a project that requires an Environmental Impact Statement ("EIS"), or for a prescribed project that requires an environmental assessment, unless:

- the project is already the subject of native title or other agreement with the relevant Aboriginal parties that deals with cultural heritage;
- CHMP has been developed for the project and approved under the ACHA; or
- the authority is given subject to conditions to ensure that no excavation, construction or other activity that may cause harm to Aboriginal cultural heritage takes place for the project without a CHMP being developed and approved.

## **ENVIRONMENT**

## Legislative framework

The primary responsibility for regulating environmental management of mining in Queensland rests with the Department of Environment and Resource Management ("**DERM**"). State legislation provides for environmental licensing of mining operations. The primary legislation in Queensland is the *Environmental Protection Act 1994* (Qld) ("**EPA**"). Other Queensland environmental legislation which may impact on mining operations include:

- State Development and Public Works Organisation Act 1971 (provides a framework for the Coordinator-General to supervise significant projects and acquire land for the development of infrastructure);
- Nature Conservation Act 1992 (may affect how mining projects operate in protected areas);
- Dangerous Goods Safety Management Act 2001 (may affect how mining projects handle any hazardous materials on site);
- Coastal Protection & Management Act 1995 (may affect how coastal resources are dealt with by mining operations);
- Water Act 2000 (all rights to use a watercourse, lake or spring in Queensland are vested in the State);
- Fisheries Act 1994 (may affect offshore activities, in that fisheries resources must not be taken from one area (whether in Queensland or elsewhere) to another area in Queensland without an authority);
- Land Protection (Pest and Stock Route) Management Act 2002 (landowners may be required to take reasonable steps to remove designated pests from the relevant property);

- Sustainable Planning Act 2009 (mining projects may have to obtain a development approval to undertake development in certain circumstances);
- Vegetation Management Act 1999 (may affect those parts of the mining operations not located on mining leases); and
- numerous regulations accompanying the above legislation.

The EPA mandates that an operating mine have the following environmental requirements in place before mining operations may commence:

- an Environmental Management Plan;
- a Plan of Operations;
- a Financial Assurance; and
- an Environmental Authority.

These requirements are summarised below.

# Environmental management plans ("EMP")

When applying for a mining lease, it is necessary to prepare an EMP which is then, if satisfactory, approved by the DERM. The purpose of the EMP is to assist the DERM in preparing an EA

An EMP sets out the strategies and commitments for protecting the environment and managing environmental impacts on and around the land to be covered by the proposed lease, as well as strategies for progressive and final rehabilitation of the land.

## Plan of operations ("POP")

After a mining lease has been granted, the EPA requires that a POP be submitted for assessment by the EPA at least 28 days before commencing mining activities.

The purpose of the POP is to give effect to the conditions of the EA. The POP must disclose the location of planned activities, how the EMP will be implemented, the rehabilitation program applicable for the location and any other matter which may be prescribed under an environmental protection policy or regulation.

The POP must be accompanied by an audit statement confirming that the POP is compliant with the EPA, the conditions of the EA, and that the stated financial assurance (set out below) is correct.

#### Financial assurance ("FA")

The DERM may require EA holders to lodge FA to ensure compliance with the mining conditions and to further ensure the lease holders rectify actual damage caused by operations. The major issue of concern is rehabilitation of disturbed surfaces, and an assessment of the need for financial assurance will be primarily based on the degree of risk of environmental harm, the likelihood of action being required to rectify any environmental damage, and the environmental record of the EA holder.

#### Environmental authority ("EA")

As a brief overview:

- Mining activities are environmentally relevant activities ("ERAs") and require an EA issued under the EPA. ERAs must be conducted in accordance with the conditions of the EA applicable to that activity.
- EAs for mining are either 'code compliant' or 'non-code compliant'. Code compliant EAs are issued for mining operations that can operate under a standard set of conditions known as the *Code of Compliance for Mining Lease Projects* ("Code"). Mining projects operating under a code compliant EA are known as 'level 2 mining projects' and are required to provide the DERM with an annual report and an annual fee.

Any EA which has conditions other than those in the Code is considered to be a non-code compliant EA. Mining operations with non-code compliant EAs are generally considered 'level 1 mining projects'. However, in certain circumstances, mining operations which do not comply with the standard conditions may still be determined to be Level 2 mining projects, and subject to the applicable obligations.

• Operations associated with mining, such as mineral processing, the storage of regulated waste or the operation of sewerage treatment facilities, are also considered ERAs, and may in some cases be caught under the primary mining EA.

# Pollution and environmental damage

The EPA also contains various mechanisms to regulate pollution and environmental damage. The most significant of these are summarised below.

## **Environmental harm**

The EPA places a general environmental duty on all persons to refrain from carrying out any activity that causes or is likely to cause 'environmental harm' unless all reasonable steps have been taken to prevent or minimise the harm. Environmental harm that is not permitted by an EA or a Code is unlawful environmental harm, which attracts a maximum penalty of A\$2,082,500 for a corporation, or 5 years imprisonment. The EPA also prohibits environmental nuisance (an unreasonable interference with an environmental value) which attracts a maximum fine of A\$417,500.

A duty to notify of environmental harm applies to different persons in different ways and arises once a person who is carrying out an activity becomes aware that 'serious or material environmental harm' is caused or threatened by themselves or a third party in carrying out the activity or an associated activity.

#### Contaminated land

An 'owner' (including a lessee) or occupier of land must notify the DERM if it becomes aware that:

- a 'notifiable activity' (an activity likely to cause contamination) is being carried out on the land; or
- the land has been or is being 'contaminated' by a 'hazardous contaminant' as defined under the EPA.

The EPA provides an order of liability for remediation costs, which the DERM must apply as follows:

- The Polluter is primarily responsible, if known and still in existence.
- If the polluter is not held responsible or it is not in existence, the local government may be held responsible.
- If neither the polluter nor local government are held responsible, the DERM may then require the 'owner' of the land (this includes the registered proprietor of the land) to remediate.

In addition to responsibility for remediation, the EPA imposes extensive criminal and civil penalties for contamination of land. Individuals who caused the harm, corporations and their officers may all be held liable for contamination.

## OCCUPATIONAL HEALTH AND SAFETY

## Key Queensland legislation

The principal legislation regulating mining workplaces (other than coal mining workplaces) in Queensland is the:

- Mining and Quarrying Safety and Health Act 1999 (Qld) ("MQSH Act");
- Mining and Quarrying Safety and Health Regulation 2001 (Qld) ("MQSH Regulations").

## **Duty holders**

The MQSH Act and MQSH Regulation impose health and safety obligations on a range of duty holders connected with mining workplaces, including workers, operators, contractors, designers, manufacturers, importers and suppliers of plant for use at a mine, erectors and installers of plant at a mine, manufacturers, importers and suppliers of substances for use at a mine, people who supply services at a mine and other people who may affect safety and health at mines.

#### **Penalties**

Penalties for breach of this legislation range up to A\$200,000 or 3 years imprisonment (if the contravention caused multiple deaths) for a person on whom a safety and health obligation is imposed. The MQSH Act does not differentiate between a corporation and an individual in prescribing penalties.

## **TASMANIA**

#### INTRODUCTION

The primary law in respect of mineral tenements held in Tasmania is the *Mineral Resources Development Act 1995* (Tas) ("MRD Act"). The MRD Act sets out the legislative framework in regard of mineral tenements granted in Tasmania.

With limited exceptions, minerals in Tasmania are the property of the Crown. The only minerals that vest in the owner of the surface of the land are Category 3 minerals (set out below) or minerals held in private ownership prior to the commencement of the MRD Act.

There are six categories of minerals under the MRD Act. The categories are:

- Category 1 minerals any metallic mineral and atomic substance;
- Category 2 minerals coal, peat, lignite and oil shale;
- Category 3 minerals any rock, stone, gravel, sand and clay used in construction, bricks and ceramics;
- Category 4 minerals any petroleum products except oil shale;
- Category 5 minerals any industrial mineral, prescribed precious stone and prescribed semi-precious stone; and
- Category 6 minerals any geothermal substance.

Due to the nature of the minerals that comprise these categories, there are differences in the legislative regime governing the exploitation of each group.

#### MINERAL TENEMENTS

The main types of tenements granted under the MRD Act are:

- mining leases;
- exploration licences;
- retention licences; and
- prospecting licences

Some of the basic features of these tenements are outlined below.

## **Exploration licence**

#### General

An exploration licence authorises the licensee to explore the licence area for any minerals specified in the licence. The licensee is not allowed to sell any mineral recovered during this exploration without the approval of the Director of Mines. If any minerals are sold with the approval of the Director of Mines, then the licensee must pay a royalty in respect of those minerals.

An application for an exploration licence is to be made to the Minister. Any person with an interest in the land the subject of an application may object to the granting of that licence.

Once an exploration licence is granted, the licensee must pay rent in respect of the land over which the licence is granted and must make the annual minimum expenditure that the Minister determines.

## Term

An exploration licence will remain in force for:

- a period of five years from the date on which the application is granted in respect of Category 1, 2 and 3 minerals; and
- a period determined by the Minister from the date on which the application is granted in respect of Category 4 minerals.

Although there is no prescribed term in the MRD Act for Category 5 or 6 minerals, Mineral Resources Tasmania ("MRT") has confirmed that an exploration licence in respect of these minerals will be granted for a period of 5 years. The term of an exploration licence may be extended by the Minister for any further period that the Minister determines. Where an exploration licence would otherwise expire while an application for renewal is pending, the duration of the exploration licence is automatically extended until the application is determined.

#### Private land

If compensable loss is suffered, or likely to be suffered due to exploration activities, the tenement holder is liable to pay compensation to the owner or occupier. For further discussion of compensation, please refer to the paragraph headed "Legal and regulatory regime in which the Target Group operates — Australia — Tasmania — General provisions relating to mineral tenements in Tasmania — Compensation" below.

## Rights

The holder of an exploration licence has the exclusive right to apply for a retention licence or a mining lease in respect of the area of land and the minerals specified in that licence.

#### Revocation

The Minister may revoke an exploration licence in whole or in part if the licensee either fails to comply with the MRD Act or a condition of the licence, or if the Minister is satisfied that any area of land comprised in the licence is required for a public purpose. If the Minister revokes an exploration licence because the land is required for a public purpose, then the licensee is entitled to compensation.

## Special exploration licence

A special exploration licence authorises the holder to explore for specified minerals in a specified area of land. A special exploration licence may be granted in respect of a larger area of land than that described above in respect of the relevant category of minerals and may also overlap an existing mineral tenement provided that the mineral specified in the special exploration licence is not the same as any mineral specified in the pre-existing mineral tenements.

A special exploration licence will remain in force for a period of 5 years, which may be extended by the Minister up to a maximum of 10 years.

#### Standard conditions

It is a standard condition of exploration, retention and special exploration licences that the licensee observe, perform and fulfil the conditions in the Schedules, as attached to the licences, and as amended from time to time.

#### Retention licence

## General

A retention licence permits the licensee to retain title to an identified mineral resource which they do not intend to mine for economic or other reasons. A security deposit is required in respect of each retention licence held.

An application for a retention licence will only be granted where:

- the subject land is likely to be effectively and efficiently mined for the minerals to which the licence is to relate;
- there is a sufficient quantity of minerals to justify mining;
- the applicant is justified for economic or other reasons not to proceed to mine; and
- the applicant has provided a security deposit.

An application for a retention licence is to be made to the Minister. Any person with an interest in the land the subject of the application may object to the granting of that licence. Once a retention licence is granted, the licensee must pay rent in respect of the land over which the licence is granted. There is no minimum expenditure requirement.

Any minerals recovered whilst carrying out the activities authorised by the retention licence cannot be sold without the approval of the Director of Mines. If any minerals are sold with the approval of the Director of Mines, then the licensee must pay a royalty in respect of those minerals.

#### Term

The term of the licence is for a period, which the Minister determines, of no more than five years. An application for an extension must be lodged before the licence ceases to be in force.

# Private land

If compensable loss is suffered, or likely to be suffered due to exploration activities, the tenement holder is liable to pay compensation to the owner or occupier. For further discussion of compensation, please refer to the paragraph headed "Legal and regulatory regime in which the Target Group operates — Australia — Tasmania — General provisions relating to mineral tenements in Tasmania — Compensation" below.

## Revocation

The Minister may revoke a retention licence in whole or in part if the licensee either fails to comply with the MRD Act or a condition of the licence, or if the Minister is satisfied that any area of land comprised in the licence is require for a public purpose.

# Notice to apply

If the Minister is of the opinion that mining operations should commence on any area of land comprised within a retention licence, subject to certain procedures, the licensee may be directed to apply for a lease over the whole or part of the area. If the licence holder then does not apply for a mining lease or, having applied, does not meet the requirements for the grant of a lease, the licence may be revoked or amended to exclude the part in issue.

#### Mining lease

#### General

The holder of an exploration licence or a retention licence has the exclusive right to apply for a mining lease over the area the subject of the exploration licence or retention licence.

An application for a mining lease is made to the Minister and must be accompanied by six months' rent in advance and a security deposit. Any person with an interest in the land the subject of the application may object to the granting of that licence. An application for a mining lease will only be granted where the applicant:

- has demonstrated that there is a sufficient quantity of minerals to justify mining;
- intends to mine;
- intends to comply with the MRD Act;
- has an appropriate mining plan;
- is likely to have sufficient financial and technical resources to carry out the mining plan;
- has provided the Director of Mines with sufficient information regarding the likely impact on the environment:
- has entered into a compensation agreement with any owner or occupier of the land (if relevant); and
- has provided a security deposit.

# Term

A mining lease is in force for the period that the Minister determines. A lessee may apply to the Minister for a renewal of a mining lease for a term determined by the Minister of no greater than 20 years. The Minister must grant the renewal if satisfied that the lessee has submitted a mining plan for the renewal period, the lessee has complied with the conditions of the lease and the MRD Act (or any failure to comply with a condition of the lease has been exempted under the MRD Act), and that the lessee has provided a security deposit.

# Rights and obligations

The holder of a mining lease is entitled to carry out mining operations in respect of the minerals specified in the lease.

The holder of a mining lease must pay an annual rent on 1 July each year. If the lessee fails to pay the annual rent by 1 January in the following year, the Registrar will cancel the lease.

A royalty is also payable to the owner of the minerals in respect of all minerals sold under a mining lease.

#### Private land

An application for a mining lease cannot be granted unless the applicant has entered into a compensation agreement with the owner or occupier of the land.

If compensable loss is suffered, or likely to be suffered due to mining operations, the tenement holder is liable to pay compensation to the owner or occupier. For further discussion of compensation, please refer to the paragraph headed "Legal and Regulatory Regime in which the Target Group Operates — Australia — Tasmania — General provisions relating to mineral tenements in Tasmania — Compensation" below.

#### Sublease

Subject to certain conditions and Ministerial approval, the holder of a mining lease may sublease the whole or part of the lease area. If the mining lease is revoked or terminated for any reason not due to the default of the holder of the sublease, then the Minister may grant the sublessee a mining lease in respect of that area.

#### Revocation

The Minister may revoke a mining lease in whole or in part if:

- the lessee fails to comply with the MRD Act;
- the lessee fails to comply with a condition of the mining lease;
- any area of land comprised in the lease is require for a public purpose; or
- the Minister is satisfied that mining has not taken place for 12 months.

# **Prospecting licence**

A prospecting licence authorises the holder to enter the land to prospect for all minerals by hand. The holder of a prospecting licence may prospect on any Crown land not subject to a mineral tenement, or any other land subject to a mineral tenement with the written consent of the tenement holder.

An application for a prospecting licence is to be made to the Director of Mines, and any licence granted has a term of not more than one year.

#### GENERAL PROVISIONS RELATING TO MINERAL TENEMENTS IN TASMANIA

#### Use of surface water

The holder of an exploration licence or a retention licence may use surface water sufficient for drilling.

In respect of a mining lease, the department or authority responsible for the *Water Management Act 1999* (Tas) is to ensure, as far as practicable, that a lessee has sufficient access to water for the purposes of the mining lease.

#### Compensation

If compensable loss is suffered, or likely to be suffered due to exploration activities, the tenement holder is liable to pay compensation to the owner or occupier. Compensation is payable at a rate specified in a compensation agreement, or where there is no agreement, as determined by the Mining Tribunal. Parties to a compensation agreement may also apply to the Mining Tribunal to determine a dispute arising out of the agreement.

#### NATIVE TITLE LAW

For a general overview of native title law and the Commonwealth native title legislation, see the paragraph headed "Legal and regulatory regime in which the Target Group operates — Australia — Western Australia" above.

#### Cultural heritage law

For a general overview of cultural heritage law and the Commonwealth cultural heritage legislation, please refer to the paragraph headed "Legal and regulatory regime in which the Target Group operates — Australia — Western Australia — Cultural heritage law" above.

The Aboriginal Relics Act 1975 (Tas) ("Relics Act") protects Aboriginal relics, protected sites and protected objects.

#### **Offences**

Under sections 9 and 14 of the Relics Act, otherwise than in accordance with the terms of a permit granted by the Minister, it is an offence to:

- destroy, damage, deface, conceal, or otherwise interfere with a relic;
- carry out an act which is likely to endanger a protected object;
- make a copy or replica of a carving or engraving that is a relic;

- remove a relic from the place where it is found or abandoned or a protected object from a protected site. A protected site is land which the Minister has declared to be protected that contains a relic that requires protection, called a protected object
- sell or offer or expose for sale, exchange, or otherwise dispose of a relic or any other object that so nearly resembles a relic as to be likely to deceive or be capable of being mistaken for a relic;
- take a relic, or cause or permit a relic to be taken, out of Tasmania;
- cause an excavation to be made or any other work to be carried out on Crown land for the purpose of searching for a relic; and
- destroy, damage, or deface, or otherwise interfere with any fencing or notice erected, or any other work carried out, in or in respect of a protected site

#### **ENVIRONMENT**

The Environmental Management and Pollution Control Act 1994 (Tas) ("EMPC Act") sets out the primary legislative requirements for the management of the environment and pollution in Tasmania. We note that environmental matters in Tasmania are also subject to the provisions of the Commonwealth EPBC Act.

# General environmental duty

The general environmental duty set out under the EMPC Act, is that a person must take such steps as are practicable or reasonable to prevent or minimise environmental harm or environmental nuisance caused, or likely to be caused, by an activity conducted by that person. Failure to comply with the general environmental duty does not constitute a criminal offence, however, the Director of Environmental Management or a council officer may serve an environment protection notice on the occupier or person in charge of a place to secure compliance with the general environmental duty.

In addition to the general environmental duty, the EMPC Act creates offences of causing:

- serious environmental harm;
- material environmental harm;
- a pollutant to be deposited; and
- environmental nuisance.

# Offences and criminal liability

Under the EMPC Act, a person will be liable for 'polluting' if that person's actions cause 'material environmental harm' or 'serious environmental harm'.

The EMPC Act provides that 'material environmental harm' will be caused if the offending activity involves actual or potential environmental harm or harm to the health and safety of humans that is not trivial or negligible or results in an actual or potential property damage greater than \$5,000. In Tasmania, the commission of an environmental nuisance of a high impact or high scale will also amount to 'material environmental harm'.

'Serious environmental harm' will be caused if the offending activity involves actual or potential environmental harm or harm to the health and safety of humans that is of a high impact or a wide scale or results in an actual or potential property damage greater than A\$50,000.

Under the EMPC Act, an occupier or a person in charge of a place from which a pollutant escapes or is discharged will be presumed to have polluted the environment. An 'occupier of a place' is a person who has any right at law to use or carry on operations at the place.

A corporation found guilty of 'polluting' that causes material environmental harm or serious environmental harm may be punished by a fine up to A\$120,000 or A\$250,000 respectively. More serious penalties (up to A\$1 million) also apply if the polluting activities were undertaken intentionally or recklessly and with the knowledge that they might result in serious or material environmental harm.

In addition to criminal liability, environmental authorities have extensive powers to direct a polluter to clean up the consequences of that pollution, cease a polluting activity or not commence an activity which the EPA considers is likely to cause serious or material environmental harm.

# Liability to report incidents

Persons responsible for activities, including environmentally relevant activities, must report certain incidents involving the release of pollutants as a result of any incident in relation to that activity.

# Liability to report contamination under EMPC Act

Under the EMPC Act, an occupier of a contaminated site must notify the director of the EPA if the occupier knows, reasonably believes or should in the circumstances reasonably believe that the area of land is or is likely to be a contaminated site.

# Liability to investigate, remediate or manage contamination under the EMPC Act

The director of the EPA has the power to issue notices requiring investigation, remediation or site management where the Director of Mines reasonably believes the site is (or in the case of an investigation notice, may be) a contaminated site.

The director of the EPA may serve a notice on any person who the director of the EPA believes is or may be wholly or partly responsible for contaminating or possibly contaminating the site. This may include the owner or former owner or occupier or former occupier of the land if that person, while the owner or occupier of the site, in the opinion of the Director of Mines:

- knew or reasonably suspected there was or possibly was a pollutant in the ground above the background level, and
- allowed, or is likely to have allowed or possibly allowed the pollutant to escape or be discharged or released onto or under that land.

#### Assessment of planning activities and environmental impact assessments

Under Part 3 of the EMPC Act, proposed activities under the *Land Use Planning and Approvals Act 1993* ("**LUPA Act**") may be required to be assessed by the EPA board depending on the category of the proposed activity. Such board may require the planning authority to impose certain conditions in granting a planning permit for the activity.

Level 2 activities requiring approval by the Board include mineral works, extractive industries and materials handling.

An environmental impact assessment may be required when an environmentally relevant activity is proposed to be undertaken by the public or the private sector. Section 74 of the EMPC Act sets out principles to be followed when conducting an Environmental Impact Assessment.

### OCCUPATIONAL HEALTH AND SAFETY

# **Key Tasmanian legislation**

The principal legislation regulating workplaces (including a mine) in Tasmania is:

- the Workplace Health and Safety Act 1995 (Tas) ("WHS Act"); and
- the Workplace Health and Safety Regulations 1998 (Tas) ("WHS Regulations").

We note that this legislation applies to both the mining and non-mining workplace.

#### **Duty holders**

The WHS Act and WHS Regulations impose health and safety obligations on a range of duty holders connected with their work, including employers, employees, responsible officers, self-employed persons, designers, manufacturers, importers, suppliers and installers of plant or structures, service providers and people in control of workplaces.

The WHS Act also provides for employers to appoint responsible officers under the WHS Act to carry out its duties.

Duties include, for example, an employer's duty to, so far as practicable, provide and maintain a safe working environment and safe system of work and any training or supervision necessary to ensure that employees are safe from injury and risks to health.

#### **Penalties**

Penalties for breach of this legislation range up to A\$195,000 for a corporation, and A\$65,000 for an individual. The WHS Act does not differentiate between a corporation and an individual in prescribing penalties.

# **CANADA**

**NUNAVUT** 

# MINING LAW

## **Background**

The Nunavut Land Claims Agreement ("NLCA") was adopted in 1993 to settle the land claim of the Inuit peoples in Canada's Eastern Arctic. To fully implement the NLCA, and to give the Inuit a form of self-government, the federal government established the new territory of Nunavut on April 1, 1999.

Lands in Nunavut are classified as Crown land, Surface Inuit Owned Lands ("IOL"), Subsurface IOL, Commissioner's land or municipal land. The legislation governing mining related activities varies depending on which of these types of lands is impacted.

# Crown land

The Crown retains control over approximately 80% of Nunavut's total land mass. This land is administered by Indian and Northern Affairs Canada ("INAC"), a department of federal government, under the *Territorial Lands Act* ("TLA"). Surface and mineral rights on Crown land in Nunavut are governed by the TLA and the *Territorial Land Use Regulations* ("TLUR").

The Northwest Territories and Nunavut Mining Regulations ("NTNMR") provide for exploration rights on Crown land in the form of licences to prospect, prospecting permits, mineral claims and mineral leases.

#### Inuit owned lands

In respect of IOL, there are three basic categories to consider:

• For Surface IOL in which the mineral rights are held by the Crown, mineral rights continue to be administered by INAC, pursuant to the NTNMR. Permission to enter these lands for the purpose of carrying out mining activities must be obtained from the appropriate Regional Inuit Association ("RIA") or the Nunavut Surface Rights Tribunal. Surface rights that are issued by the RIAs generally take the form of Land Use Licences, Quarry Licences, or Commercial Leases.

- For Subsurface IOL, which is subject to pre-existing mineral rights grandfathered under the NLCA, the holder of the mineral rights can continue to have the rights administered by INAC under the NTNMR or may elect to come under the authority of the Nunavut Tunngavik Incorporated ("NTI"), a body that represents beneficiaries under the NLCA, and have the rights administered by it.
- For Subsurface IOL for which there are no pre-existing, grandfathered mineral rights, the mineral rights are automatically administered by the NTI. Permission to enter these lands for the purpose of carrying out mining activities must be obtained from the NTI. Generally, these rights will be set forth in the form of Exploration Agreements and Production Leases.

# Commissioner's and municipal lands

Surface rights on Commissioner's lands are governed by the *Commissioner's Land Act* and INAC is responsible for the administration of the subsurface rights on Commissioner's lands. In the case of municipal lands, municipal corporations are responsible for the administration of built-up areas within their incorporated communities. The lzok Lake and High Lake claims are not located on Commissioner's or municipal land.

Some of the basic features of the above noted tenures are outlined below.

# **MINING TENURES**

# Crown lands

#### Licence to prospect

A licence to prospect is required to:

- prospect for minerals on territorial lands;
- make an application to record a claim;
- acquire any recorded claim or any interest in a recorded claim by transfer;
- submit an application for a certificate of work or a certificate of extension; or
- acquire a lease of a recorded claim.

# Prospecting permits

Prospecting permits provide exclusive exploration rights within assigned boundaries, but do not include mineral rights or surface rights.

#### Mineral claims

The holder of a recorded claim has the exclusive right to prospect for minerals and to develop any mine on the land within the boundaries of the claim. However, without a mineral lease, the claim holder can not remove, sell or otherwise dispose of minerals or mineral-bearing substances exceeding a gross value of C\$100,000, other than for assay or testing purposes. In addition, the holder of a recorded claim also must not erect any dwelling or any mill, concentrator or mine building without a surface lease of the land which is subject to the claim.

# Mining leases

#### (i) General

Mineral claims cannot be taken past the tenth year unless a lease is applied for. A mining lease allows the holder to prospect, develop, extract and sell minerals from the land within the lease area, but does not convey surface rights.

# (ii) Term

Mining leases are issued for a 21-year period and may be renewed for additional 21-year periods, provided all rents are paid. Annual rent is one dollar per acre during the first 21 year period, and two dollars per acre in the subsequent renewal periods.

#### (iii) Rights

Once mineral tenure has been acquired, surface tenure is necessary in order to facilitate a number of exploratory activities. Surface tenure on Crown land in Nunavut is administered by INAC pursuant to the TLUR.

# Land use permits

Class A land use permits are required for significant types of activities on land (e.g., establishment of certain campsites or petroleum fuel storage facilities, etc.) and are screened by the Nunavut Impact Review Board ("NIRB"). Class B land use permits are required for lower-impact activities.

The development of a mine site may require aggregates or other construction materials which are subject to other legislation and operating conditions. Industrial minerals and building stones such as construction stone, carving stone, limestone, soapstone, marble, gypsum, shale, clay, sand, gravel, volcanic ash, earth, ochre, marl, and peat are specifically excluded from the NTNMR and are regulated on Crown lands by the *Territorial Quarrying Regulations* pursuant to the TLA.

# Land leases

If land use is anticipated to exceed two to three years, a lease is normally obtained. Surface leases are issued under the authority of the *Territorial Lands Regulations* ("TLR"), and give the lease-holder exclusive rights to the surface. Land leases may not exceed 30 years, but may be renewed

for another maximum term of 30 years. Annual rent payable cannot be less than ten percent of the appraised value of the land and must be at least C\$150 per annum. In order to be binding on the Crown, all surface leases must be approved by INAC's Lands Administration Manager.

#### Inuit owned lands

#### Land use licence (surface)

For Surface IOL, in which mineral rights are held by the Crown, mineral rights continue to be administered by INAC. Permission to enter these lands for the purpose of carrying out any exploration activity, including prospecting and staking, however, must be obtained in advance in the form of a Land Use Licence or lease from the appropriate RIA.

The land use licence conveys no subsurface rights to the recipient. There are three levels of land use licence. The levels, and the application criteria for each, vary with respect to the proposed activity (e.g., prospecting to establishment of campsites and use of explosives).

# Quarry licence (surface)

To the extent any quarrying will take place on IOL, a quarry licence must be obtained from the appropriate RIA.

#### Commercial lease (surface)

A person wishing to obtain an exclusive right of occupancy to a limited area of IOL for commercial or public purposes is required to enter into a Commercial Lease with the appropriate RIA.

# Exploration agreement

# (i) General

An Exploration Agreement grants the right to conduct "Exploration Work" over a particular area.

# (ii) Term

Exploration Agreements are granted for an initial term of one year, which will be extended annually to a maximum of 20 years if annual work requirements are met.

# (iii) Rights

An Exploration Agreement does not grant the right to use the surface for exploration purposes.

The NTI may require a deposit in order to provide security against a deficiency in Exploration Work requirements.

Within three months after each anniversary of an Exploration Agreement, the holder is required to provide the NTI a written report that includes all data, analysis and interpretation of all Exploration Work not previously reported. The NTI accepts a limited obligation to keep the information in confidence.

If the holder of an Exploration Agreement wishes to develop the project beyond the exploration stage, it will require a Production Lease. The Exploration Agreement provides that the holder is entitled to a Production Lease if the holder:

- delivers three copies of a feasibility study that demonstrates that a resource exists and that
  production of minerals from the Production Lease area at a profit is possible under
  economic conditions that are specified and accepted as reasonable by the mining industry;
- applies for a Production Lease and pays the initial rent and application fee; and
- enters into an agreement with the NTI on the boundaries and description of the Production Lease area.

#### Production lease

#### (i) General

The holder of a Production Lease has the exclusive right to explore for, develop, mine, extract and produce minerals on IOL lands.

# (ii) Term

A Production Lease is for an initial term of ten years. The Production Lease may be renewed, without commercial production having been attained, for up to two five year terms following the primary term if the lessee has met requirements determined by the NTI and specified in the Production Lease, and has paid the application fee. Following the commencement of commercial production, the lessee has the right to surrender the balance of the primary term or any renewal term and replace it with a renewal term of 21 years if the lessee has met requirements determined by the NTI and specified in the Production Lease, and has paid the application fee. If the level of commercial production specified in the Production Lease has been achieved during the 21 year renewal term, the NTI will grant a five year renewal term and, provided the specified level of production has been achieved in the five-year renewal term, grant one or more additional five year renewal terms on the same basis. Extensions are also available for final mill production, shut down of operations, abandonment and reclamation.

# (iii) Rights

The lessee is required to pay annual rent and a production royalty, the terms of which will be specified in the Production Lease.

It is noteworthy that under the NLCA, subject to one caveat discussed below, the RIAs and the NTI are under no obligation to issue surface or subsurface rights on application being made. If they do issue tenures, there is no obligation for them to follow the Guide or the Rules (each as defined below) and the NTI and the RIAs do not adhere to them strictly.

As noted above, subject to any contractual commitments the RIAs and the NTI might make, they are under no obligation to issue surface or subsurface rights on IOL. The exception is the circumstance in which the land comprises Surface IOL and Crown mineral rights. Permission to enter these lands for the purpose of carrying out mining activities must be obtained from the appropriate RIA but where that cannot be obtained, application can be made to the Nunavut Surface Rights Tribunal for an order permitting access on payment of appropriate compensation.

#### GENERAL PROVISIONS RELATING TO MINING TENURES

#### Crown lands

# Representation work

In order to keep a mineral claim in good standing, the claim holder must satisfy minimum annual requirements of "representation" work under the NTNMR. Adjacent and contiguous claims can be grouped to a maximum of 5,165 acres. Work performed in one claim area can be applied to any or all of the other areas within the group.

An extension of time is allowed to perform representation work due to illness or other reasons. For an extension due to a reason other than illness, a deposit equivalent to the representation work owing is required.

If a claim holder fails to file the required representation work, or apply for an extension, the Mining Recorder will send a lapsing notice 30 days after the anniversary date of the claim. The claim will lapse automatically if the required remedy is not made within 60 days.

# Government royalty

The NTNMR provide for payment of an annual royalty based on the value of the output of a mine on a sliding scale from 0% on the first C\$10,000 up to 14% on any value over and above C\$45 million.

# Inuit owned lands

# IOL Rights

The NTI has published "A Guide to Mineral Exploration and Development on Inuit Owned Lands in Nunavut" (the "Guide") and "Rules and Procedures for the Management of Inuit Owned Lands" (the "Rules"). They set out the circumstances in which each form of surface tenure is appropriate and the application procedure.

The Guide and the Rules also define the forms of subsurface tenures that can be obtained, on application, from the NTI. The description of subsurface tenures included herein is taken from the Guide and the Rules. As noted above, subject to one exception, the RIAs and the NTI are under no obligation to issue surface or subsurface rights on application being made and, if they do issue tenures, there is no obligation for them to follow the Guide or the Rules. The Guide and the Rules state that they are of no legal force or effect.

#### **ABORIGINAL**

#### **Background**

The NLCA granted the ownership of large tracts of land to the Inuit people in exchange for Aboriginal title to the Inuit's traditional land and water in Nunavut. These IOL include areas with high mineral potential. Further, as a result of other rights granted to the Inuit in the NLCA, Inuit organizations play an important role in the management and protection of natural resources and the environment in Nunavut. These duties are shared among the federal and territorial governments and Inuit organizations.

As discussed in the paragraph headed "Legal and regulatory regime in which the Target Group operates — Canada — Nunavut — Mining law" above, mining projects in Nunavut often cover a combination of Crown land, Surface IOL and Subsurface IOL.

# Inuit Consultation and Inuit Impact and Benefit Agreements

Article 26 of the NLCA requires that an Inuit Impact and Benefit Agreement ("IIBA") be signed with the appropriate RIA before commencing a "major development project" involving the development or exploitation of resources wholly or partly under IOL. The IIBA must be consistent with the terms and conditions of project approvals and is intended to ensure that local employment, training and business opportunities arising from all phases of the proposed project are accessible to the Inuit. The IIBA also generally outlines the special considerations and compensation that the proponent agrees to provide to the Inuit regarding traditional, social, wildlife, environmental and cultural matters. Water compensation agreements are also required by Article 20 of the NLCA with respect to any loss or damage that may be caused by the change in quality, quantity or flow of water on IOL. Water compensation agreements may be negotiated alongside the IIBA or separately.

Finally, Article 27 of the NLCA requires the federal government to consult the Inuit before developing any resources on Crown lands in Nunavut regarding, among other matters, Inuit employment, training and business, as well as traditional, social, wildlife, environmental and cultural matters. In general, the context of this Crown duty is proportionate to the anticipated impact of a proposed mining project on the Inuit interests. This duty may also extend to accommodating the interests of the Inuit by addressing potential effects on their rights. Although this duty is the duty of the Crown, mining companies risk having government approvals invalidated by the courts where the Crown has failed to discharge the duty. Therefore, it is important that mining companies ensure adequate Crown consultations with potentially affected Inuit have taken place.

#### **ENVIRONMENT**

# **Background**

The environment in Nunavut is regulated by a wide variety of environmental laws and regulations. This overview highlights the most significant of those that are relevant to mining operations in Nunavut, which are derived from three overlapping sources: the federal government; the NLCA; and the laws of the territory of Nunavut. Five key institutions created under the NLCA have responsibilities to manage lands and resources in Nunavut: the Nunavut Planning Commission ("NPC"); the NIRB; the Nunavut Water Board ("NWB"); the Nunavut Surface Rights Tribunal and the Nunavut Wildlife Management Board.

#### Nunavut planning commission

The NPC's role is to ensure proposed projects conform to approved land use plans prepared in accordance with the NLCA. To date, only two regions in Nunavut have approved land use plans pursuant to the NLCA (*i.e.*, the North Baffin and the Keewatin). If a proposed project is located within one of these land use planning regions, the proposed project will be reviewed by the NPC in accordance with the NLCA. If the NPC determines that the project proposal is in conformity with the approved land use plan, or a variance has been approved, the NPC will forward the proposal to the NIRB for screening.

In the absence of an approved land use plan, all project proposals are referred directly to the NIRB for screening in accordance with the NLCA. The federal and territorial governments and Inuit organizations have been working with the NPC to formulate a draft territory-wide Nunavut Land Use Plan as required by the NLCA. A working draft of such plan was released by the NPC for public comment in June, 2010.

# **Environmental impact assessment**

Mining operations in Nunavut are subject to an extensive environmental and socio-economic impact assessment process administered by the NIRB. Under this regime, projects on lands in Nunavut, or that may affect lands in Nunavut, are screened by the NIRB to determine whether they pose a significant potential impact. On the basis of this initial screening, the NIRB and the federal Minister of Indian Affairs and Northern Development ("Minister") determine whether further review is required in accordance with the NLCA. Most mining exploration projects are disposed of by the NIRB with a screening level assessment, while the development and operation of mining projects generally proceed to a full review by the NIRB, which includes a public consultation process, technical review and public hearing.

After such hearing, the NIRB issues a report on the project proposal to the Minister. The report contains the NIRB's assessment of the project proposal and its impacts, and based on this assessment, a determination of whether or not the proposed project should proceed. Where the NIRB concludes that the proposed project should proceed, terms and conditions are included to ensure the integrity of the development process. Although the NIRB makes a determination on proposed projects under review, it is the Minister who makes the final decision.

In the event that it has been determined that a proposed project should be permitted to proceed, the NIRB will issue a project certificate to the proponent, including any terms and conditions.

# Secondary approvals

In the event that the NIRB issues a project certificate for a proposed mining project, proponents generally require numerous other regulatory licences and permits to build and operate the proposed project from the federal and territorial governments and Inuit organizations such as water licences from the NWB (which has the responsibility over the regulation, use and management of water in Nunavut), land use permits from the RIAs, federal *Fisheries Act* approvals for tailings impoundment areas, federal species at risk permits, etc.

# Compliance and offences

#### Offences

As environmental protection is not exclusively a federal or territorial responsibility in Nunavut, both levels of government have regulatory frameworks the may impose offence liability on the owners and operators of mining operations. As a result, failing to comply with a condition in an environmental approval or causing unlawful releases of contaminants into the environment may result in fines of up to C\$1 million per offence under several applicable environmental statutes.

#### Administrative orders

In addition to prosecution, federal and territorial environmental authorities also have a range of powers that enable them to intervene in the conduct of the mining operations to protect the environment as well as to order the remediation of contamination.

# Greenhouse gases

Under the Copenhagen Accord, Canada has committed to reducing greenhouse gas emissions by 17%, relative to 2005 levels, by 2020, but this commitment is subject to future alignment with reduction targets in the United States. Canada is currently developing new regulatory requirements to address greenhouse gas emissions. As a result, new regulatory requirements and the additional costs required to comply may ultimately have a material effect on mining operations in Nunavut.

# Mine reclamation and financial assurance

Approved mine closure and reclamation plans (including appropriate financial assurance) are generally required by the federal and territorial environmental authorities before mining activities are permitted to commence in Nunavut. In general, these plans integrate the requirements associated with leasing surface rights and water licensing. However, regulatory authority in Nunavut to require financial assurance for mine reclamation is not contained in a single statute. As a result, financial security has become an important multi-jurisdictional issue in Nunavut and co-ordination is an important consideration for mining companies.

# OCCUPATIONAL HEALTH AND SAFETY

# **Key Nunavut legislation**

Prescriptive legislation regulates health and safety at mining workplaces in Nunavut.

The principal legislation enacted by the Government of Nunavut consists of the following:

- Mine Health and Safety Act (Nunavut), R.S.N.W.T. 1994
- Mine Health and Safety Regulations (Nunavut), R-125-95
- Public Health Act, R.S.N.W.T. (Nu) 1988
- Camp Sanitation Regulations, R.R.N.W.T. (Nu) 1990, c. P-12
- Safety Act (Nunavut), R.S.N.W.T. (Nu) 1988, c. S-1
- General Safety Regulations (Nunavut), R.R.N.W.T. (Nu) 1990
- Work Site Hazardous Materials Information System Regulations (Nunavut), R.R.N.W.T. 1990
- Transportation of Dangerous Goods Act, 1990, R.S.N.W.T. (Nu) 1988
- Transportation of Dangerous Goods Regulations, 1991, N.W.T. Reg. (Nu.) 095-91
- Explosives Use Act, R.S.N.W.T. (Nu) 1988
- Workers' Compensation Act, S.Nu 2007, c.15

# **Duty holders**

The legislation imposes obligations principally on employers.

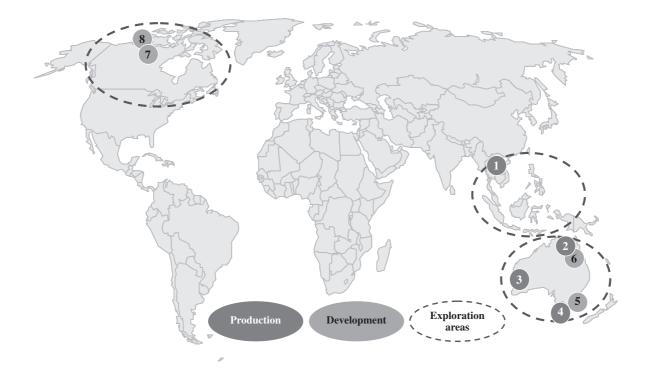
#### **Enforcement**

Substantial fines and imprisonment of corporate officials are possible.

# **OVERVIEW**

The Target Company holds a portfolio of international mining assets known as MMG.

MMG is a significant producer of zinc, copper, lead, gold and silver. MMG currently operates four mines: (i) the Sepon copper and gold operations located in Laos; (ii) Century, one of the world's largest zinc mines, located in Queensland, Australia, also producing lead and silver; (iii) Golden Grove, a zinc, copper, lead and precious metals mine located in Western Australia; and (iv) Rosebery, a zinc, lead, copper and precious metals mine located in Tasmania, Australia. In addition, MMG owns the Avebury nickel mine in Tasmania, Australia (which is currently on care and maintenance) and has several other Development Projects and an active minerals exploration programme in Australia, Indonesia and Canada. The following map illustrates the location of MMG's key projects:



The key assets of MMG are summarised in the following table:

No. Note 1	Mines/projects	Interest	Location	Status	Minerals
1 2	Sepon Century Golden	90% 100%	Laos Australia	Producing Producing	Copper/gold Zinc/lead/silver
3 4 5	Grove Rosebery Avebury Dugald	100% 100% 100%	Australia Australia Australia	Producing Producing Care and maintenance	Zinc/copper/gold/silver/lead Zinc/lead/copper/gold/silver Nickel
6 7 8	River Izok Lake High Lake	100% 100% 100%	Australia Canada Canada	Development project Development project Development project	Zinc/lead/silver Zinc/copper Zinc/copper

Source: MMG

Note

The number of concessions and their key terms (area and expiry date) that are associated with each of the Operating Mines and Development Projects are summarised in the following table. These concessions are legally owned by MMG through its wholly-owned subsidiaries, save for:

- the Sepon project where the Government of Laos holds a 10% interest in the relevant MMG subsidiary and that subsidiary is party to the MEPA with the Government of Laos.
- the exploration permits in Century, Queensland, Australia and the minerals claim in High Lake, Nunavut, Canada which are either held by MMG through its wholly-owned subsidiaries that are party to agreements which provide for the right by the relevant MMG entity to acquire a direct interest in the relevant tenements or shares in the company that holds the relevant tenements. In some cases, less than 100% of the relevant tenements or the company that holds the relevant tenements may be acquired by MMG. In such cases, joint ventures will be formed in relation to the exploitation of the relevant exploration permits.

The section headed "Legal and regulatory regime in which the Target Group operates" in this circular describes the key terms of the regulatory framework pursuant to which each of the concessions are subject to. In particular, such section describes the basis upon which concessions are granted and renewed, and the rights and obligations that a holder of a concession has. Importantly, the relevant regulatory regime in each jurisdiction generally allows for concessions to be renewed upon the expiry of a concession if the concession holder has complied with the conditions of the concession and the relevant regulation.

Each of the number references in this table may be cross-referenced to the map illustrating the location of MMG's key projects above.

Concession	Number	Area (ha)	Expiry date
Operations			
Century, Queensland, Australia			
Mining lease	2	23,184	18 September 2037
Exploration permit	14	251,720	18 March 2011 to 3 August 2015
Avebury, Tasmania, Australia			
Mining lease	3	878	1 December 2021 to 15 October 2024
Retention licence	1	300	30 November 2011
Exploration licence	6	6,900	29 August 2010 to 24 October 2012 <sup>Note 4</sup>
Rosebery, Tasmania, Australia			
Mining lease	2	5,453	1 September 2013 and 1 May 2024
Exploration licence	2	3,400	22 November 2010 <sup>Note 5</sup> and 6 May 2012
Golden Grove, Western Australia, Australia			
Mining lease	17	12,913	17 May 2011 to 9 May 2031
General purposes lease	6	50	25 July 2011 and 5 June 2031
Miscellaneous licence	6	128	30 October 2011 to 26 February 2015
Sepon, Laos			
МЕРА	1	124,700	March 2033 with a right to apply for two extensions of 10 years each
Developments			
Dugald River, Queensland, Australia			
Mining lease	33	1,505	As at the Latest Practicable Date, applications for renewal have been lodged in respect of 13 of the mining leases that have expiry dates prior to the Latest Practicable Date Note 1. The remaining 20 mining leases have expiry dates ranging from 31 December 2010 to 30 September 2014
Mineral development licence	1	256	30 September 2011
Exploration permit	1	1,680	26 June 2012
lzok Lake, Nunavut and Northwest Territories, Canada			
Minerals claim	62	145,763	11 July 2016 to 20 August 2019
Mining lease	6	21,883	28 February 2023 to 18 October 2026
High Lake, Nunavut, Canada			
Minerals claim	16	31,754	3 April 2012 to 8 October 2012
Mining lease	15	4,257	7 November 2011 to 15 April 2013
Inuit owned land			-
— exploration agreement Note 2	1	15,249	1 October 2021
— land use licence Note 3	1	N/A <sup>Note 6</sup>	1 May 2011

#### Notes:

- 1 The Mineral Resources Act 1989 (Qld) provides that if a mining lease would otherwise expire while an application for a mining lease is pending, the duration of the mining lease is automatically extended until the application is determined or the mining lease is granted. Please refer to the paragraph headed "Legal and regulatory regime in which the Target Group operates Queensland Mining tenements Mining lease Term".
- 2. The subsurface rights are owned and administered by Nunavut Tunngavik Inc. ("NTI"). A subsidiary of MMG has an exploration agreement granted by NTI which allows the subsidiary to explore for minerals within, upon and under the relevant area, to remove reasonable quantities of minerals for assay and testing purposes and, subject to the terms of the exploration agreement, to acquire a production lease.
- 3. The surface rights are administered by the Kitikmeot Inuit Association ("KIA"). A subsidiary of MMG has a land use licence granted by KIA which allows the subsidiary to use the surface for certain exploration activities, subject to the terms of the land use licence.
- 4. Where an exploration licence has an expiry date prior to the Latest Practicable Date, an application for renewal has been lodged in respect of that licence. Please refer to the paragraph headed "Legal and regulatory regime in which the Target Group operates Tasmania Mineral Tenements Exploration licence Term".
- 5. An application has been made for renewal of this exploration licence. Please refer to the paragraph headed "Legal and regulatory regime in which the Target Group operates Tasmania Mineral Tenements Exploration licence Term".
- 6. N/A denotes not applicable.

In addition to the concessions described above, the Target Group has made certain applications for concessions associated with the Century project and Dugald River project and holds, or has benefit to, a portfolio of concessions associated with its exploration projects around the world.

The decision as to whether to renew a mining or exploration title is generally a cost-benefit analysis based upon a comparison of the expected or potential return or benefit from retaining the title to the holding cost of retaining the title.

The expected or potential return might be in the form of either the right to extract ore through mining operations; resources and reserves; the opportunity to increase resources and reserves; or in the case of greenfields exploration, the right to have access to an area to investigate its prospectivity. The holding cost of the title includes, without limitation, annual rental, expenditure conditions or minimum work programme conditions and access payments to landholders and indigenous titleholders.

For example, if MMG completed a drilling programme on a greenfields exploration tenement that yielded no positive result, in all likelihood, the title would not be renewed as the holding cost of retaining the title would far outweigh any potential benefit that could be derived from retaining the area. Conversely, MMG would seek to renew a mining title that became due for renewal and was located within the current mine plan. There is a spectrum of potential scenarios between those two examples.

The decision as to whether to renew mining or exploration titles is always approached from the perspective of maximising shareholder value.

The following table summarises MMG Ore Reserves and Mineral Resources (contained metals) as at 30 June 2009:

A. Total MMG resources (contained metal) Note								
	Zinc (Mt)	Copper (Mt)	Lead (Mt)	Silver (Moz)	Gold (Moz)	Nickel (Mt)		
Sepon	_	1.6	_	14.5	3.2	_		
Century	5.1	_	0.6	47.3	_	_		
Golden Grove	1.2	0.7	0.1	38.7	0.9	_		
Rosebery	1.8	0.1	0.6	63.5	0.8	_		
Avebury	_	_	_	_	_	0.2		
Dugald River	6.6	_	1.0	61.9	_	_		
Izok Lake	1.9	0.4	0.2	33.5	_	_		
High Lake	0.6	0.4	0.1	38.9	0.5			
Total resources	17.1	3.2	2.5	298.3	5.4	0.2		

Source: MMG

Note: Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding. Ore Reserves and Mineral Resources have been prepared in accordance with the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Resources (the "JORC" Code).

B. Total MMG reserves (contained metal) <sup>Note</sup>							
	Zinc	Copper	Lead	Silver	Gold		
	(Mt)	(Mt)	(Mt)	(Moz)	(Moz)		
Sepon	_	0.8	_	0.3	0.2		
Century	3.4	_	0.3	19.3	_		
Golden Grove	0.3	0.1	0.0	7.8	0.2		
Rosebery	0.5	0.0	0.1	13.2	0.2		
Total reserves	4.1	0.9	0.5	40.6	0.5		

Source: MMG

Note: Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding. Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding.

C. Production (000's)							
Seven months to Six m							
Metal	31 December 2009	30 June 2010					
Zinc (tonnes)	266.6	318.2					
Copper (tonnes)	56.4	49.1					
Lead (tonnes)	25.7	25.9					
Silver (oz)	3,010.6	4,025.0					
Gold (oz)	94.6	91.5					

Source: MMG

MMG is the owner of the relevant mineral tenements of the Operating Mines, through wholly-owned subsidiaries (other than the Sepon Project, where the Government of Laos holds a 10% shareholding in the relevant MMG subsidiary and that subsidiary is party to the MEPA with the Government of Laos).

Completion of the acquisition of the Operating Mines, the Development Projects and various exploration projects (which are currently held through the Target Company) took place on 16 June 2009 (but with effect as of 1 June 2009). The original purchase price of such assets to CMN and its subsidiaries amounted to US\$1,386,000,000 (equivalent to approximately HK\$10,810,800,000). Upon completion of such acquisition, the acquired assets and the related financing were structured among CMN and its subsidiaries, such that the Target Company, which has an issued and paid-up share capital of US\$337,000,000 (equivalent to approximately HK\$2,628,600,000) and came to hold the acquired assets, became a wholly-owned subsidiary of Album Enterprises. Subsequent to the aforementioned acquisition by CMN and its subsidiaries, MMG has since undertaken significant additional capital expenditure at the Operating Mines, the Development Projects and the various exploration projects and there has also been a general increase in commodity prices.

#### BUSINESS OF MMG

# **OPERATING MINES**

MMG is the operator of the following four Operating Mines and owner of the relevant mineral tenements of the following four Operating Mines, through wholly-owned subsidiaries (other than the project in Sepon, where the Government of Laos holds a 10% shareholding in the relevant MMG subsidiary and that subsidiary is party to the MEPA with the Government of Laos).

#### **SEPON**

# Project overview

MMG has a 90% interest in the Sepon copper and gold operations located in Laos, which include a number of open pit mines from which gold or copper ores are extracted, a gold processing plant and a copper processing plant.

The Sepon copper and gold operations are located immediately adjacent to each other approximately 40 kilometres north of the town of Sepon, in the Savannakhet Province, Laos. The location of Sepon in Laos is illustrated below:



Source: MMG

The Government of Laos holds the remaining 10% interest in the Sepon operations. MMG Laos Holdings Limited is a party to the MEPA. Lane Xang Minerals Limited ("LXML") has the title, rights and interests in and to the contract area delineated in the MEPA, which includes the right to explore for and mine minerals within the contract area delineated in the MEPA for a period of 30 years commencing from the first day of the calendar month during which the average daily throughput achieves the target specified in the MEPA, with a right to apply for two extensions, with each extension being for a period of 10 years. The average daily throughput achieved the target specified in the MEPA in March 2003. The Government of Laos exercised its right to purchase 10% of the projects' holding company LXML on 30 June 2007.

Exports from Sepon constitute a significant proportion of Lao's total exports. Currently, around a third of Laos' total exports come from the Sepon copper and gold operation (although this was almost 50% in 2006). Sepon's share in Laos' total government revenue has increased from 1% in 2003 to around 15% to 20% currently. As a share of Laos' GDP, Sepon's revenue has increased from 0.1% in 2003 to 2.8% currently.

As at 30 September 2010, 1,599 employees and 2,065 contractors worked for the Sepon project.

# Sepon copper operations ("Sepon Copper")

#### Overview

Feasibility studies into the development of the Sepon Copper project began in 2002 and construction commenced in 2003. Processing started in February 2005 and the first copper cathodes were produced in March 2005. Current mine life is estimated to extend to approximately 2020. It is one of the most modern and technically sophisticated plants of its kind in Asia.

#### Ore Reserves and Mineral Resources

Sepon Copper's Ore Reserves and Mineral Resources (on 100% basis) as at 30 June 2009 are summarised below:

Sepon Copper — Ore Rese	rves and M	Iineral Re	sources	as at 30	June 200	9 (100%	basis)
	Tonnes	Copper	Gold	Silver	Copper	Gold	Silver
	(Mt)	(%)	(g/t)	(g/t)	(kt)	(Moz)	(Moz)
Ore Reserves <sup>2</sup>							
Supergene							
Proved	13.6	4.1	_	_	557.1	_	_
Probable	5.0	4.1			206.3		
<b>Total Ore Reserves</b>	18.6	4.1			763.4		
Mineral Resources <sup>3</sup>							
Supergene							
Measured	19.7	3.2	_	_	626.5	_	_
Indicated	8.2	3.3	_	_	271.4		
Inferred	30.9	1.7			509.4		
Sub-total	58.8	2.4	_	_	1,407.2	_	_
Primary							
Measured	2.1	1.7	0.2	7	35.2	0.0	0.5
Indicated	1.2	1.7	0.2	7	19.7	0.0	0.3
Inferred	20.1	0.9	0.3	6	176.5	0.2	3.9
Sub-total	23.3	1.0	0.3	6	231.4	0.2	4.6
<b>Total Mineral Resources</b>					1,638.6	0.2	4.6

Source: MMG

#### Notes:

- 2. Ore Reserves have been estimated using cut off grades in the range 1.0% to 1.8% copper depending on metallurgical recovery and haulage distance using a US\$2.00/lb copper price.
- 3. Mineral Resources have been estimated using a cut-off grade of 0.5% copper. Mineral Resources are inclusive of Ore Reserves.
- 4. Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding.

<sup>1.</sup> Ore Reserves and Mineral Resources have been prepared in accordance with the JORC Code.

#### Mining and processing

Sepon Copper produces copper cathode. The copper operation is based on mining the high-grade Khanong ore body with the newer Thengkham and Phabing regions set to be mined shortly. The Khanong ore body, which has an average head grade of 5.2% is one of the highest grade deposits in the world. The Khanong deposit is mined by conventional open pit truck and excavator methods by a contractor. The Thengkham and Phabing deposits are also expected to be mined using conventional open pit mining methods.

The initial plant design had a nameplate capacity of 1.35 million tonnes per annum allowing for the production of 65,000 tonnes of copper cathode, although the plant has routinely exceeded nameplate capacity and current annual production of high quality copper cathode is 70,000 tonnes. Ore is treated through an atmospheric leaching/pressure oxidation and solvent extraction and electro-winning. It is currently undergoing expansion to produce up to 80,000 tonnes of copper cathode annually.

Equipment and consumables are trucked to Sepon via Savannakhet some 270km away on the Mekong River bordering Thailand. The majority of copper cathode is trucked to customers via the same route to Savannakhet. However, some products are trucked directly to customers in Vietnam. Power is supplied from Thailand and a second power line is currently being installed, which will increase demand capability and also improve reliability of supply. The use of water on site is drawn from nearby rivers.

For further details, please refer to sections 1.8 - 1.12 of the Competent Person's Report set out in Appendix IV to this circular.

# Operating performance

Sepon Copper's operating performance for the five years ended 31 December 2009 and the six months ended 30 June 2010 (on 100% basis) is summarised below:

# Sepon Copper — Operating statistics (100% basis)

Six

						months to
			30 June			
	2005	2006	2007	2008	2009	2010
Ore mined (kt)	908	2,320	1,942	1,551	2,418	1,087
Ore milled (kt)	644	1,231	1,225	1,328	1,405	724
Copper milled grade (%)	5.80	5.56	5.65	5.40	5.35	5.28
Copper cathode produced (kt)	30.5	60.8	62.5	64.1	67.6	34.3
Total cash costs (US¢/lb copper)	78	78	85	106	89	108

Source: MMG

#### Marketing

Since Sepon Copper cathode may be delivered by truck directly to end-user factories, Sepon copper cathode has natural markets in Thailand and Vietnam.

Approximately 65% of Sepon's cathode production is delivered to Thailand, 25% to Vietnam, and 10% to the PRC in any one year with the exact geographical allocation varying slightly, depending on commercial terms achievable in each market.

Approximately 80-85% of annual production is sold under long term annual contract arrangements, with terms for most of this tonnage negotiated each year in November or December, prior to commencement of the next contract year. The balance of production is sold on the spot market to a range of buyers in Thailand and Vietnam. The quantity sold on a spot basis each month is dependant on Sepon's actual production levels.

All sales contracts are consistent with market practices and commercial terms are based on an LME base price for copper plus a metal premium negotiated in line with market supply and demand conditions. Sepon's proximity to its customers provides their factories with security of supply and flexibility in use of raw materials compared to competitors' of copper on a CIF basis, and this is reflected in the commercial terms achieved in the market for Sepon copper.

Sepon copper sales are managed by the marketing team of MMG in Melbourne with assistance from a local sales and logistics team based in Vientiane, Laos.

#### Expansion and exploration

In July 2009, MMG recommenced planning work on the Sepon Copper expansion project, which was initially approved by Oxiana in December 2007 and partially suspended by OZL in November 2008. In late October 2009, the MMG's board approved revised plans to increase nameplate capacity to 2 million tonnes per annum, lifting the expected annual copper production from 70,000 tonnes to 80,000 tonnes. In addition to the installation of the second autoclave commissioned in March 2009, the expansion includes an upgrade of the crushing circuit, the addition of leach tanks and flotation cells and a new counter-current decantation train. MMG estimates that the capital expenditure for the year ending 31 December 2010 will total approximately US\$60 million and expects commissioning to be completed in November 2010. Including the addition of the autoclave mentioned above, the expansion is expected to reduce overall life-of-mine cash operating costs by approximately 10% and will allow Sepon Copper to bring forward the treatment of lower grade ore that would otherwise only be treated towards the end of the project life.

In late 2008, OZL started construction of a second power line and associated infrastructure to address the increased power demand from the proposed plant expansion, mitigate the risks associated with the dependency on a single transmission line and reduce line losses at higher power transmission rates. The capital cost of the project was initially estimated at approximately US\$30.6 million. Work on the project was suspended in November 2008 because of capital constraints but was restarted in August 2009. The project is expected to be commissioned in the fourth quarter of 2010 at a cost to MMG of approximately US\$12 million.

In 2009, copper exploration continued with a focus on the extensive Thengkham system of deposits. Step out drilling programs continue to identify new zones of primary and supergene copper-gold mineralisation and infill drilling programs have identified new extensions beneath and lateral to existing resources. Recent exploration drilling has identified a number of primary copper targets, with one copper deposit occurring in a horse shoe shape within a five square kilometre area. Resource definition drilling is also ongoing at the known deposits.

For further details, please refer to section 1.7 of the Competent Person's Report set out in Appendix IV to this circular.

#### Closure

MMG reviews on an annual basis the closure cost estimates that are in place for its operational sites. This involves an external review of existing closure plans and closure cost estimates. The aim of these reviews is to identify key assumptions included in the plans and existing cost estimates as well as any major gaps that have not been included.

Key issues that are addressed in the closure plan for Sepon include:

- Water quality
- Topsoil management
- Post closure maintenance and monitoring
- Rehabilitation of pits
- Groundwater
- Closure of roads and tracks
- Infrastructure decommissioning, decontamination and demolition

MMG's closure cost estimate for Sepon is US\$120.1 million (undiscounted, in dollars as of December 2009, 80% confidence level).

# Sepon gold operations ("Sepon Gold")

# Overview

Exploration between 1993 and 1999 resulted in the delineation of approximately 3Moz of gold resources in various deposits at Sepon. Following further exploration and development, and Oxiana's acquisition of the project, production commenced in December 2002. Since then, the Sepon Gold operation has produced over 1Moz.

#### Ore Reserves and Mineral Resources

Sepon Gold's Ore Reserves and Mineral Resources (on 100% basis) as at 30 June 2009 are summarised below:

Sepon Gold — Ore Reserves and Mineral Resources as at 30 June 2009 (100% basis)

Sepon Gold — Ore Reserves a			_	009 (100%	basis)
	Tonnes	Gold	Silver	Gold	Silver
	(Mt)	(g/t)	(g/t)	(Moz)	(Moz)
Ore Reserves <sup>2</sup>					
Oxide Gold					
Proved	2.4	1.0	1	0.1	0.1
Probable	1.2	2.1	5	0.1	0.2
<b>Total Ore Reserves</b>	3.5	1.4	2	0.2	0.3
Mineral Resources <sup>3</sup>					
Oxide Gold					
Measured	4.2	1.0	3	0.1	0.4
Indicated	3.3	1.9	5	0.2	0.5
Inferred	2.9	1.0	5	0.1	0.5
Sub-total	10.4	1.3	4	0.4	1.4
Partial Oxide Gold					
Measured	2.4	1.6	9	0.1	0.7
Indicated	5.9	2.1	8	0.4	1.5
Inferred	1.8	0.7	6	0.0	0.4
Sub-total	10.1	1.7	8	0.6	2.6
Primary Gold					
Measured	5.4	3.0	7	0.5	1.2
Indicated	13.5	2.6	8	1.1	3.5
Inferred	5.6	1.8	7	0.3	1.3
Sub-total	24.4	2.5	8	2.0	5.9
<b>Total Mineral Resources</b>				3.0	9.9

Source: MMG

Notes:

- 1. Ore Reserves and Mineral Resources have been prepared in accordance with the JORC Code.
- Ore Reserves have been estimated using cut off grades in the range 0.45g/t to 0.6g/t gold depending on metallurgical recovery and haulage distance using a US\$900/oz gold price.
- 3. Mineral Resources have been estimated using a cut-off grade of 0.5g/t for oxide and partial oxide gold and 1.0g/t for primary gold. Mineral Resources are inclusive of Ore Reserves.
- 4. Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding.

# Mining and processing

The Sepon Gold operation is a conventional open pit oxide mining operation. Gold mining is focused on the Houay Yeng and Dankoy pits. Ore is mined by a contractor from a number of open pits and is treated in a conventional carbon-in-leach processing plant to produce a gold and silver doré. In 2005, the capacity of the plant was increased to 2.5Mt per annum from the design capacity of 1.25Mt per annum.

Note that Sepon Gold shares all infrastructure with Sepon Copper.

For further details, please refer to sections 1.8 — 1.12 of the Competent Person's Report set out in Appendix IV to this circular.

# Operating performance

Sepon Gold's operating performance for the five years ended 31 December 2009 and the six months ended 30 June 2010 (on 100% basis) is summarised below:

# Sepon Gold — Operating statistics (100% basis)

Six

						months to	
		Year e	nded 31 D	December		30 June	
	2005	2006	2007	2008	2009	2010	
Ore mined (kt)	3,078	2,880	1,510	1,613	2,830	1,310	
Ore milled (kt)	2,660	2,909	2,161	2,322	2,468	1,085	
Gold milled grade (g/t)	2.77	2.25	1.79	1.60	1.66	2.01	
Gold produced (koz)	200	176	102	93	105	55	
Total cash costs (US\$/oz gold)	260	330	445	538	494	503	

Source: MMG

#### Marketing

Gold doré bars are transported by air freight to a refinery in Australia where they are refined into gold bullion. These bars are then sold to jewellers, manufacturers and banks.

#### Expansion and exploration

Ore Reserves at Sepon Gold have recently been increased through successful exploration at the Houay Yeng and Dankoy deposits.

The focus of exploration at Sepon Gold in 2009 was on drilling oxide gold prospects located 5-15 kilometres west of the Sepon Gold and primary gold targets close to the mine infrastructure. In particular, there is some prospect that additional oxide mineralisation will be delineated at the Hanong, Phavat and Thengkham Southwest targets.

Primary gold resources have already been delineated and there is substantial upside potential in the area. As the ore is refractory, it would require a treatment process different from that used for the oxide ore. A number of options have been investigated, including pressure oxidation and bacterial oxidation. A scoping study contemplating roasting has been commenced. It appears that additional mineralisation would need to be delineated to make exploitation of the primary gold resource economic.

For further details, please refer to section 1.7 of the Competent Person's Report set out in Appendix IV to this circular.

#### Closure

Please refer to the closure plan for Sepon Copper.

#### **CENTURY**

#### Project overview

The Century mine is the largest zinc mine in Australia and the third largest open pit zinc mine in the world. Since 2003, Century has consistently produced around 500,000 tonnes per annum of zinc in concentrate. Century produces zinc concentrate and lead concentrate containing silver.

Century is located in north-west Queensland, approximately 250 kilometres north-west of Mount Isa. It comprises two sites — the mine at Lawn Hill, and associated concentrate dewatering and ship-loading facilities at Karumba, on the Gulf of Carpentaria. The location of Century in Queensland, Australia is illustrated below:



Source: MMG

While the area around Century has been mined (although not continuously) for zinc and lead for close to 100 years, the Century deposit was only discovered in 1990. The Century project was later acquired by Pasminco Limited in 1997. Development of the mine commenced soon afterwards and concentrate shipments began in 1999. Current mine life is estimated to extend until 2015.

MMG owns 100% of the Century mining operations and, through its wholly-owned subsidiaries, holds all relevant mineral tenements covering the area of the Century mining operations.

As at 30 September 2010, 738 employees and 263 contractors worked for the Century mine.

#### Ore Reserves and Mineral Resources

Century's Ore Reserves and Mineral Resources as at 30 June 2009 are summarised below:

Century — Ore Reserves and Mineral Resources as at 30 June 2009 **Tonnes** Zinc Lead Silver Zinc Lead Silver (Mt) (%) (%) (g/t)(kt) (kt) (Moz) Ore Reserves<sup>2</sup> Proved 20.5 11.6 1.0 18 2,378.0 205.0 11.9 Probable 9.7 10.5 1.2 24 116.4 7.5 1,018.5 1.1 **Total Ore Reserves** 30.2 11.2 20 3,396.5 321.4 19.3 Mineral Resources<sup>3</sup> Measured 32.2 12.3 1.5 34 3,960.6 483.0 35.2 Indicated 9.6 11.3 1.6 37 1,087.8 152.6 11.5 Inferred 0.4 11.4 1.1 33 45.6 4.4 0.6 **Total Mineral Resources** 42.2 12.1 1.5 35 5,094.0 640.0 47.3

Source: MMG

#### Notes:

- 1. Ore Reserves and Mineral Resources have been prepared in accordance with the JORC Code.
- 2. Ore Reserves have been estimated using a zinc equivalent cut off grade of 4.85%, calculated using a zinc price of US\$0.74/lb, lead price of US\$0.65/lb, silver price of US\$12/oz and an exchange rate of A\$1.00 = US\$0.73.
- 3. Mineral Resources have been estimated using a cut-off grade of 3.5% zinc. Mineral Resources are inclusive of Ore Reserves.
- 4. Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding.

# Mining and processing

Mining at Century is based on open pit extraction using conventional hydraulic excavators and haul trucks. The ore body is flat-lying and covers an area of 1.4 kilometres by 2.5 kilometres with a final pit depth of 336 metres. The Century mining fleet consists of 4 Liebherr 996 shovels and a fleet of 170 tonnes to 240 tonnes haul trucks and a number of smaller 180 tonnes to 250 tonnes hydraulic excavators for selective ore mining plus other ancillary equipment. The fleet moves more than 100 million tonnes of material a year.

A dedicated and well-equipped treatment plant employs a conventional grinding and froth flotation circuit. The plant is operated to maximise zinc output. It has consistently treated in excess of 5.6 million tonnes per annum of ore, although milled tonnage was lower in 2009 because of a failure of the Karumba pipeline. The resultant zinc and lead concentrates are pumped as slurry to the port facility at Karumba via a 304 kilometres pipeline. At Karumba, the slurry is dewatered, filtered, stockpiled and transported to bulk carriers moored off-shore.

The remoteness of the Century site has required the establishment of key infrastructure for mining and processing operations. Supply of power to the mine site is by a 220kV overhead transmission line from Mica Creek Power Station at Mount Isa. Existing public roads were upgraded and a new mine access road capable of carrying heavy loads was built for the supply of goods and services to the mine site. Telecommunication services in the region were significantly upgraded and an all weather airstrip was constructed at the mine site to cater for Century's commute workforce.

Century's zinc and lead concentrates are pumped as a slurry via the 304km long underground pipeline to Karumba. At Karumba, the slurry is dewatered, filtered, stockpiled and transported to bulk carriers moored off-shore via a 5,000 tonnes capacity barge. All equipment and consumables including fuel and reagents are trucked to Century from Cloncurry which is 400km away.

For further details, please refer to sections 2.6-2.9 of the Competent Person's Report set out in Appendix IV to this circular.

# Operating performance

Century's operating performance for the five years ended 31 December 2009 and the six months ended 30 June 2010 is summarised below:

# **Century** — **Operating statistics**

Six

						months
						to
			nded 31 I			30 June
	$2005^{1}$	$2006^{1}$	$2007^{1}$	$2008^{2}$	$2009^{3}$	2010
Ore mined (Mt)	5.3	5.3	5.4	5.3	5.1	2.5
Ore milled (Mt)	5.2	5.4	5.7	5.7	4.2	2.5
Zinc milled grade (%)	12.1	11.8	11.7	10.5	11.0	11.8
Lead milled grade (%)	2.0	1.6	1.3	1.6	0.6	1.3
Silver milled grade (g/t)	59.0	55.0	30.0	40.8	12.0	28.9
Zinc recovery (%)	79.6	78.3	79.3	79.6	78.2	79.7
Lead recovery (%)	69.0	65.7	64.2	67.1	49.2	51.0
Contained metal						
Zinc (kt)	500.3	497.4	525.3	513.6	360.0	238.5
Lead (kt)	73.0	57.0	48.5	56.4	16.0	11.0
Silver (koz)	6,781	6,582	3,869	4,179	953	1,793
Total cash costs (US¢/lb zinc)	51	45	42	58	53	45

Source: MMG

Notes:

- 1. As reported in Zinifex's explanatory memorandum in relation to the merger with Oxiana.
- 2. As reported by OZL.
- 3. Century was operated by OZL until acquired by MMG in June 2009. The reported operating statistics is based on the full year performance.

#### Marketing

Century zinc concentrates are shipped from Karumba to smelters in Australia, Europe, and the PRC. Approximately 90% of Century's zinc concentrate production is sold to Nyrstar under separate life-of-mine sales contracts between MMG Century and Nyrstar's zinc smelting operations in Netherlands, Australia, and USA. The contracts with Nyrstar were established at the time Nyrstar was formed in 2007 by Zinifex and price terms under each contract are annually negotiated referable to international benchmark terms for zinc concentrates. Zinc concentrates not covered by the sales contracts with Nyrstar are sold to external third parties under a combination of long-term and spot contracts. MMG believes that, in the event that Nyrstar fails to perform its obligations under the aforementioned sales contracts, it will be able to attract other customers.

All of Century's lead concentrate production is committed under a life-of-mine sales contract to Nyrstar's Port Pirie lead smelter in South Australia at international benchmark terms.

Export vessels are chartered by MMG's marketing team to carry Century concentrates to market from Karumba port throughout each month using a combination of contractual and spot vessel chartering arrangements.

# **Expansion and exploration**

MMG has extensive holdings around Century and significant exploration has been conducted with the objective of identifying satellite ore bodies to extend the life of Century operations. An 18-month diamond drilling program commenced in October 2009 to identify new zinc deposits within the Century mine lease and on adjacent tenements. The key exploration target is shale-hosted zinc mineralisation, similar to the Century ore body.

Phosphate deposits have also been identified within the Century exploration licences in the Georgina Basin, approximately 15 kilometres from the Century mine. A 2008 conceptual study to develop these phosphate deposits has confirmed the feasibility of utilising the existing processing facilities (after modifications), the pipeline to port and the port facilities for a phosphate operation following the completion of zinc mining and treatment. MMG intends to review and update the study in 2011.

For further details, please refer to section 2.5 of the Competent Person's Report set out in Appendix IV to this circular.

#### Closure

MMG reviews on an annual basis the closure cost estimates that are in place for its operational sites. This involves an external review of existing closure plans and closure cost estimates. The aim of these reviews is to identify key assumptions included in the plans and existing cost estimates as well as any major gaps that have not been included.

Key issues that are addressed in the closure plan for Century include:

- Tailings dam closure
- Final landforms and water management of waste rock dumps
- Stakeholder transition
- Infrastructure decommissioning, decontamination and demolition
- Port facility and slurry pipeline
- Post closure maintenance and monitoring
- Final pit water quality.

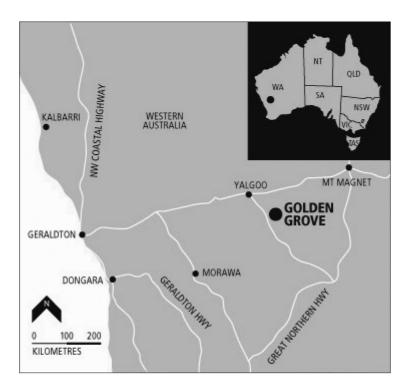
MMG's most recent closure cost estimate for Century is A\$102.2 million (undiscounted, in dollars as of June 2010).

#### **GOLDEN GROVE**

# Project overview

The Golden Grove operations include Gossan Hill, a copper-zinc-lead-gold-silver underground mine, the Scuddles zinc-copper underground mine, a treatment plant and the surrounding tenement package covering 12,306 hectares. Golden Grove produces zinc concentrate, copper concentrate, lead and precious metals concentrate (HPM).

Golden Grove is located approximately 450 kilometres north-east of Perth and 280 kilometres east of Geraldton in Western Australia. The location of Golden Grove is illustrated below:



Source: MMG

Both Gossan Hill and Scuddles mines are a source of copper ore containing minor amounts of lead, zinc and precious metals and of zinc ore containing significant amounts of copper, lead, silver and gold. Operations commenced in 1990 with mining currently estimated to end in approximately 2016.

MMG owns 100% of Golden Grove and, through its wholly-owned subsidiaries, holds all relevant mineral tenements covering the area of the Golden Grove mining operations.

As at 30 September 2010, 394 employees and 202 contractors worked for the Golden Grove project.

# Ore Reserves and Mineral Resources

Golden Grove's Ore Reserves and Mineral Resources as at 30 June 2009 are summarised below:

Golden Grove — Ore Reserves and Mineral Resources as at 30 June 2009											
	Tonnes	Zinc C	opper	Lead	Silver	Gold	Zinc	Copper	pper Lead		Gold
	(Mt)	(%)	(%)	(%)	(g/t)	(g/t)	(kt)	(kt)	(kt)	(Moz)	(Moz)
Ore Reserves <sup>2</sup>											
Primary Zinc											
Proved	1.2	12.5	0.4	1.5	73	1.6	148.2	4.7	17.6	2.8	0.1
Probable	0.9	11.0	0.4	1.7	95	2.0	101.2	3.2	15.5	2.8	0.1
Sub-total	2.1	11.8	0.4	1.6	82	1.7	249.4	8.0	33.1	5.6	0.1
Primary Copper	2.1	11.0	0.4	1.0	02	1.7	249.4	0.0	33.1	3.0	0.1
Proved	2.6	0.4	3.5	0.0	18	0.4	11.5	90.0	0.5	1.5	0.0
Probable	1.0	0.4	3.2	0.1	21	0.5	4.2	33.4	0.6	0.7	0.0
Sub-total	3.6	0.4	3.4	0.0	19	0.5	15.7	123.4	1.1	2.2	0.1
<b>Total Ore Reserves</b>							265.1	131.3	34.1	7.8	0.2
Mineral Resources <sup>3</sup>											
Primary Copper											
Measured	10.2	0.6	3.1	0.0	19	0.6	63.7	318.3	3.2	6.3	0.2
Indicated	3.2	0.4	2.8	_	14	0.5	12.7	89.0	_	1.4	0.1
Inferred	5.8	0.9	3.2		28	0.7	49.7	187.0		5.2	0.1
Sub-total	19.1	0.7	3.1	0.0	21	0.6	126.1	594.3	3.2	12.9	0.4
Oxide Copper											
Measured	_	_	_	_	_	_	_	_	_	_	_
Indicated	_	_	_	_	_	_	_	_	_	_	_
Inferred	2.5		2.3					58.0			
Sub-total	2.5		2.3	_	_	_	_	58.0	_	_	_
Zinc											
Measured	4.1	12.1	0.4	1.2	84	1.6	495.4	18.3	49.2	11.1	0.2
Indicated	0.8	12.0	0.6	2.1	120	2.2	96.3	4.9	16.6	3.1	0.1
Inferred	4.0	11.1	0.7	0.7	64	1.0	439.5	26.4	27.8	8.1	0.1
Sub-total	8.9	11.6	0.6	1.1	78	1.4	1,031.2	49.7	93.6	22.3	0.4
Gold											
Measured	_	_	_	_	_	_	_	_	_	_	_
Indicated	_	_	_	_	_	_	_	_	_	_	_
Inferred	1.1				100	3.2				3.6	0.1
Sub-total	1.1	_	_	_	100	3.2	_	_	_	3.6	0.1
Total Mineral											
Resources							1,157.3	702.0	96.9	38.7	0.9

Source: MMG Notes:

<sup>1.</sup> Ore Reserves and Mineral Resources have been prepared in accordance with the JORC Code.

- 2. Ore Reserves have been estimated using a cut off grade based on nett smelter return values ranging from A\$100/t to A\$110/t, using a copper price of US\$2.00/lb, zinc price of US\$0.90/lb, lead price of US\$0.70/lb, silver price of US\$11/oz, gold price of US\$750/oz and an exchange rate of A\$1.00 = US\$0.75.
- Mineral Resources have been estimated using a cut-off grade based on the nett smelter return value of A\$70/t.
   Mineral Resources are inclusive of Ore Reserves.
- 4. Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding.

## Mining and processing

Underground mining at Golden Grove is by sublevel open stoping for the primary zinc ore body. Ore from Gossan Hill is trucked to the surface where it is crushed and delivered to the mill via a three kilometre overland conveyor.

Zinc and copper ores are treated separately on a batch basis using the same process plant, which consists of a two stage grinding circuit followed by sequential flotation. Copper ore contains only minimal amounts of other metals, which allows the copper ore to be floated in a single stage circuit, although ore with high talc content requires a pre-float to remove the talc. Lead, gold and silver from the zinc ore is recovered to a precious metal concentrate prior to zinc flotation. The plant has a throughput capacity of 1.7Mt per annum. The fact that zinc and copper ores are found in distinct deposits and are batch processed in the same plant affords MMG the flexibility to focus production on one metal or the other.

Equipment and consumables for Golden Grove are trucked to the site from Geraldton (280km to the west) and Perth (around 450km to the southwest). Zinc, copper and HPM concentrates produced at site are trucked to the port of Geraldton where they are stockpiled and loaded onto bulk carriers. Golden Grove is connected to the state grid by a 132kV transmission line with potable water sourced from an onsite bore and raw water pumped from the underground operations.

For further details, please refer to sections 4.12 — 4.17 of the Competent Person's Report set out in Appendix IV to this circular.

# Operating performance

Golden Grove's operating performance for the five years ended 31 December 2009 and the six months ended 30 June 2010 is summarised below:

Golden Grove — Operating statistics

C:--

		Year (	ended 31	December		Six months to 30 June
	2005	2006	2007	2008	2009	2010
Zinc ore mined (kt)	309	994	1,043	1,043	409	312
Zinc ore milled (kt)	306	1,004	1,021	1,051	398	323
Average zinc head grade (%)	13.8	15.1	14.0	14.5	16.8	13.6
Copper ore mined (kt)	326	386	404	751	1,140	234
Copper ore milled (kt)	352	363	432	611	1,012	487
Average copper head grade (%)	3.4	3.4	4.0	3.6	3.4	3.6
Contained metals in						
concentrates:						
Zinc (kt)	70.4	138.8	132.0	139.9	56.9	43.8
Copper (kt)	21.5	10.8	15.4	18.5	30.8	14.2
Gold (koz)	25.3	50.2	48.8	47.8	29.1	21.7
Silver (koz)	2,175	3,064	3,165	3,158	1,381	1,070.7
Lead (kt)	4.9	11.6	8.1	13.3	4.4	4.5
Total cash costs (US¢/lb zinc)	39	27	32	43	159	73

 $Source:\ MMG$ 

## Marketing

Golden Grove concentrates are shipped typically in parcels of 5,000 or 10,000 dry metric tonnes from MMG's storage facility at the port of Geraldton to smelters within the Asian region, with a number of parcels often shipped on one vessel to minimise freight costs.

The PRC is the most common destination but concentrates are also shipped to smelters in Japan, Korea, Thailand and Australia.

The concentrates are sold under a mixture of long term "frame" contracts and spot sales contracts. Frame contracts typically cover several shipments per year and commercial terms are negotiated annually in accordance with market conditions. Long term contracts are currently in place with both smelters and a number of international trading companies.

Spot contracts can cover single or multiple shipments in any one year with no ongoing commitment between the parties. Because the quantities of copper, zinc and lead concentrates produced at Golden Grove can vary from year to year, significant production is sold on the spot market to ensure that sales obligations are met in a timely fashion. The spot market has been particularly attractive during 2010.

#### **Expansion and exploration**

Construction of a new tailings storage facility started in late 2009 and is substantially completed with total capital costs of US\$24 million.

MMG is currently undertaking a feasibility study to assess development of an open pit copper mine to supplement current underground operations at Golden Grove. The feasibility study commenced in May 2010 and the project will be reviewed for approval by the end of 2010.

When approved, the open pit will produce approximately 240,000 tonnes of copper concentrate containing 59,000 tonnes of copper metal in concentrate at 25% copper from 2011 to 2014. The current processing plant throughput of 1.7 million tonnes per annum of ore will be maintained throughout the project. Mining of the copper pit might also allow the subsequent recovery of zinc ore-bearing pillar remnants from the top of the underground mining operation.

The open pit copper project will include development of an open pit mine, waste rock dump and supporting infrastructure including haul and access roads. Concentrates produced will be transported along with existing Golden Grove products through the Yalgoo Ninghan Road and Geraldton Mount Magnet Road to the Port of Geraldton for export.

The area around the Golden Grove operations remains prospective for further discoveries. Exploration at Golden Grove was suspended in late 2008 due to capital constraints but drilling recommenced at Gossan Hill and Scuddles in October 2009 and at Gossan Valley, located 8-10 kilometres south of the Golden Grove operations, in the March 2010 quarter. At Gossan Hill, underground exploration has been promising, including at Xantho Deeps, at Amity and between Gossan Deeps and Hougoumont. At Scuddles, exploration is continuing and an update to resources is expected soon. Ore from Scuddles is expected to contribute to production when the Gossan Hill mine depletes. At Gossan Valley, MMG has had a number of promising results.

For further details, please refer to section 4.11 of the Competent Person's Report set out in Appendix IV to this circular.

#### Closure

MMG reviews on an annual basis the closure cost estimates that are in place for its operational sites. This involves an external review of existing closure plans and closure cost estimates. The aim of these reviews is to identify key assumptions included in the plans and existing cost estimates as well as any major gaps that have not been included.

Key issues that are addressed in the closure plan for Golden Grove include:

- Tailings dam closure
- Waste rock dump closure
- Infrastructure decommissioning, decontamination and demolition

- Water treatment
- Closure of roads, pits and tracks.

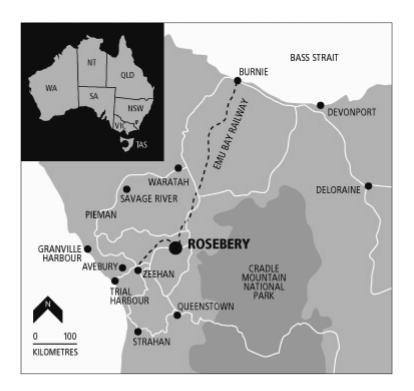
MMG's closure cost estimate for Golden Grove is A\$55.3 million (undiscounted, in dollars as of December 2009, 80% confidence level).

## ROSEBERY

## Project overview

The Rosebery mine in Tasmania is a polymetallic underground mine. It is considered Australia's largest volcanic-hosted polymetallic sulphide deposit. Rosebery produces zinc concentrate, copper concentrate, lead concentrate and gold and silver doré.

Rosebery is located next to the town of Rosebery in north-west Tasmania, approximately 300 kilometres north-west of Hobart and 100 kilometres south of Burnie. The location of Rosebery in Tasmania, Australia is illustrated below:



Source: MMG

Mineralisation was first discovered at Rosebery in 1893 and mining commenced in 1900. Following the construction of a flotation plant on-site, full scale production of base metal concentrates commenced in 1936. It has the potential to extend its mine life beyond 2020.

MMG owns 100% of Rosebery and, through its wholly-owned subsidiaries, holds all relevant mineral tenements covering the area of the Rosebery mining operations.

As at 30 September 2010, 232 employees and 218 contractors worked for the Rosebery mine.

#### Ore Reserves and Mineral Resources

Rosebery's Ore Reserves and Mineral Resources as at 30 June 2009 are summarised below:

	Rosebery	— Ore	Reserv	es and	Mineral	Resour	ces as at 3	0 June 2009	9		
	Tonnes	Zinc C	opper	Lead	Silver	Gold	Zinc	Copper	Lead	Silver	Gold
	(Mt)	(%)	(%)	(%)	(g/t)	(g/t)	(kt)	(kt)	(kt)	(Moz)	(Moz)
Ore Reserves <sup>2</sup>											
Proved	1.7	13.3	0.4	3.6	131	1.8	229.9	6.6	62.2	7.3	0.1
Probable	1.4	15.7	0.5	3.8	129	1.8	223.1	6.5	54.0	5.9	0.1
<b>Total Ore Reserves</b>	3.2	14.4	0.4	3.7	130	1.8	453.1	13.1	116.2	13.2	0.2
Mineral Resources <sup>3</sup>											
Measured	3.8	14.3	0.5	3.9	147	2.1	543.4	19.0	148.2	17.9	0.3
Indicated	2.9	15.5	0.5	3.9	130	2.1	448.7	14.5	112.9	12.1	0.2
Inferred	7.4	11.1	0.3	3.9	140	1.6	822.6	22.2	289.0	33.5	0.4
Total Mineral											
Resources	14.1	12.9	0.4	3.9	140	1.9	1,814.7	55.7	550.1	63.5	0.8

Source: MMG Notes:

1. Ore Reserves and Mineral Resources have been prepared in accordance with the JORC Code.

- 2. Ore Reserves have been estimated using a cut off grade based on nett smelter return of A\$175/t, using a copper price of US\$2.00/lb, zinc price of US\$0.90/lb, lead price of US\$0.70/lb, silver price of US\$11/oz, gold price of US\$750/oz and an exchange rate of A\$1.00 = US\$0.75.
- 3. The cut-off grade for the estimation of Mineral Resources is based on metallurgically recoverable total metal units expressed as a dollar value (A\$125/t). Mineral Resources are inclusive of Ore Reserves.
- Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding.

# Mining and processing

Rosebery mine uses mechanised underground mining methods, notably bench stoping, and sub-level open stoping with some mechanised cut and fill. Access to the mine is by a decline and all ore is trucked directly to the surface. The mine is currently undergoing a major ventilation upgrade with most mine production from depths of greater than 900 metres. It is estimated that the mineral deposit extends to 1.5 kilometres underground.

The treatment plant produces zinc, lead and copper concentrates, as well as gold doré. The relatively soft Rosebery ore is subjected to two stages of crushing and two stages of grinding, where a single flotation feed is produced and subject to sequential flotation to produce the various concentrates.

Rosebery's equipment and consumables are trucked from Burnie. Zinc, lead and copper concentrates are railed to Burnie from the operations and then shipped to customers. Power at Rosebery is sourced from the local power grid with water supplied by the nearby Pieman River.

For further details, please refer to sections 3.6 - 3.11 of the Competent Person's Report set out in Appendix IV to this circular.

# Operating performance

Rosebery's operating performance for the five years ended 31 December 2009 and the six months ended 30 June 2010 is summarised below:

## Rosebery — Operating statistics

Six

						months
						to
		Year	ended 31	December		30 June
	$2005^{1}$	$2006^{1}$	$2007^{1}$	$2008^{2}$	$2009^{3}$	2010
Ore mined (kt)	733	711	682	735	725	305
Ore milled (kt)	709	641	726	815	795	340
Zinc milled grade (%)	13.3	14.3	12.4	11.1	12.1	12.1
Lead milled grade (%)	4.4	4.7	3.8	4.1	4.0	4.0
Copper milled grade (%)	0.4	0.4	0.4	0.3	0.4	0.3
Silver milled grade (g/t)	130.9	153.4	156.0	123.2	134.9	124.9
Gold milled grade (g/t)	1.8	2.3	1.7	1.4	1.7	1.7
Zinc recovery (%)	89.9	89.7	89.7	88.6	88.6	87.6
Lead recovery (%)	81.3	81.2	77.8	79.2	79.0	77.6
Copper recovery (%)	65.0	60.2	60.2	53.0	53.6	55.6
Gold recovery (%)	79.3	80.9	71.6	24.7	21.3	25.0
Contained metals:						
Zinc (kt)	88.8	86.8	84.2	84.9	85.1	35.9
Lead (kt)	25.1	24.4	21.6	28.7	25.0	10.4
Copper (kt)	1.7	1.4	1.7	2.1	1.9	0.6
Gold (koz)	33.2	37.7	27.9	30.7	34.1	15.2
Silver (koz)	2,694	2,812	3,033	2,985	3,088	1,143
Total cash costs (US¢/lb zinc)	41.0	41.0	49.1	40.2	32.1	24.9

Source: MMG

# Notes:

- 1. As reported in Zinifex's explanatory memorandum in relation to the merger with Oxiana.
- 2. As reported by OZL.
- 3. Rosebery was operated by OZL until acquired by MMG in June 2009. The reported operating statistics is based on the full year performance.

#### Marketing

100% of Rosebery's zinc and lead concentrate production is sold on an FOB. Burnie Port basis to Nyrstar Hobart and Port Pirie operations respectively, under life-of-mine contract arrangements established with these operations at the time Nyrstar was formed in 2007 by Zinifex. These concentrates are sold at terms negotiated each year referable to international benchmark settlements for zinc and lead concentrates.

Shipment of Rosebery zinc and lead concentrates is made from Burnie Port in Tasmania on vessels chartered by Nyrstar under the FOB terms of the contracts.

Rosebery's production of copper concentrates is sold under a single multi-year sales contract with the concentrates shipped to Asian copper smelting operations. The high precious metals content of Rosebery copper concentrates restricts the available smelting outlets for this material, hence it is committed on a longer term contract basis rather than on the spot market to ensure a single secure outlet for this high value material. Shipment of Rosebery copper concentrates is arranged on vessels chartered by MMG and effected twice yearly (in June and December) in bulk from Burnie Port in Tasmania.

Rosebery's total production of gold doré is delivered to The Perth Mint in Western Australia for refining. Gold and silver is out-turned to a metals account held with a bank, and the refined fine gold and fine silver is subsequently regularly sold at prevailing spot gold and silver prices.

## **Expansion and exploration**

Historically, the Rosebery mine has operated with only around three years of reserves. In 2006, Zinifex commenced a US\$19 million exploration project, titled Project Horizons, with the objective of extending the life of the mine to 2020. The project focussed on infill drilling and exploration of the deeper K and PK Lenses. In May 2007, Zinifex announced that successful exploration drilling from the initial stages of Project Horizons had increased the Rosebery resources by 65% and substantially extended the life of the mine. Resources were further increased in 2008 but reserves have been decreasing.

MMG believes there remains considerable potential for further increases at the Rosebery mine through exploration and delineation drilling. A deep exploration drilling programme commenced in November 2009 with two deep surface drill holes targeting prospective areas below the lower parts of the Rosebery ore body. Drilling also commenced on the Jupiter prospect, approximately 7 kilometres south of the Rosebery mine, and will further test a new mineralised horizon identified from drilling during 2008.

A US\$1 million study assessing the potential development of the Hercules deposit is expected to be completed in 2011. Re-establishment of site access and bulk sampling is planned as part of a staged approach to the potential extraction of the resource, which is subject to confirmation that the South Hercules mineralisation is amenable to treatment through the Rosebery plant. The above reported resource estimates do not include the South Hercules resources, which have been estimated at 1 million tonnes at an average silver and gold grade of 133g/t and 2.4g/t respectively.

No major expansions are planned at Rosebery but there is an ongoing continuous improvement program to optimise the operations and reduce costs.

The processing plant at Rosebery was commissioned in the 1970s and no major upgrade has been carried out in more than 20 years. In the past, the reserves were insufficient to justify major capital spending on the concentrator. With Project Horizons extending the mine life, a prefeasibility study was undertaken in 2008 for the replacement of the concentrator with a more modern plant. The new plant was estimated to cost approximately US\$140 million and was expected to have a throughput of 1Mt per annum. However, MMG believes that greater value can be generated through the appropriate optimisation of the crushing and grinding circuits.

For further details, please refer to section 3.5 of the Competent Person's Report set out in Appendix IV to this circular.

## Closure

MMG reviews on an annual basis the closure cost estimates that are in place for its operational sites. This involves an external review of existing closure plans and closure cost estimates. The aim of these reviews is to identify key assumptions included in the plans and existing cost estimates as well as any major gaps that have not been included.

Key issues that are addressed in the closure plan for Rosebery include:

- Final closure of tailings dams
- Soil contamination
- Groundwater
- Infrastructure decommissioning, decontamination and demolition
- Legacy sites.

MMG's closure cost estimate for Rosebery, at the projected end of mine life is A\$35.6 million (undiscounted, in dollars as of December 2009, 80% confidence level).

## **DEVELOPMENT PROJECTS**

MMG has a large portfolio of development, and advanced and early stage exploration projects throughout Australia, Asia and Canada.

MMG's Development Projects include the following:

(i) a 100% interest in the Avebury nickel mine located in Tasmania, Australia, which is currently on care and maintenance

Avebury is an underground nickel mine, which started production in July 2008 and has been on care and maintenance since December 2008. MMG owns 100% of Avebury and, through its wholly-owned subsidiaries, holds all relevant mineral tenements covering the Avebury nickel mine.

(ii) a 100% interest in the Dugald River zinc project located in Queensland, Australia

The Dugald River deposit is an undeveloped zinc, lead and silver resource in north western Queensland, Australia. A feasibility study completed in 2008 confirmed the resource to 53Mt at 12.5% zinc, 1.9% lead and 36g/t silver. Work has determined that Dugald River is a robust project capable of an annual production of approximately 200,000 tonnes of zinc, 25,000 tonnes of lead and one million ounces of silver for a period of 23 years. The project remains a very attractive zinc deposit for MMG to bring on line in the future. Geological interpretation and permitting are on-going and the project will be reviewed by MMG this year. MMG, through its wholly-owned subsidiaries, holds all relevant mineral tenements covering the area of the proposed Dugald River development. These mineral tenements are currently the subject of a renewal application by the relevant MMG subsidiaries as part of the review being conducted by MMG.

(iii) a 100% interest in the Nunavut projects located in Canada

MMG has several polymetallic base metals and gold assets in the Nunavut Territories of northern Canada. Principal assets include the Izok Lake copper, zinc, lead and silver resource, the High Lake copper, zinc, lead and silver resource, gold resources at Lupin and Ulu and base metal deposits at Gondor and Hood. Assets also include gold mining and processing plant and equipment on care and maintenance at Lupin mine.

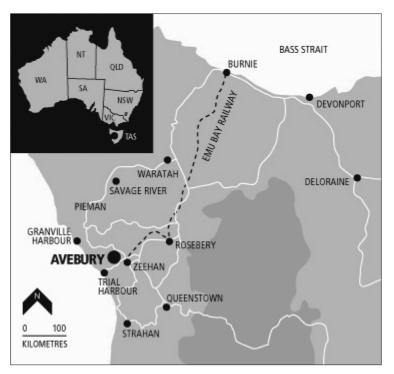
MMG, through its wholly-owned subsidiaries, holds all relevant mineral tenements covering the Izok Lake copper, zinc, lead and silver resource, the High Lake copper, zinc, lead and silver resource, the gold resources at Lupin and Ulu and the base metal deposits at Gondor and Hood.

#### **AVEBURY**

## Project overview

Avebury is a nickel sulphide deposit and lies within the western Tasmanian mineral province, which hosts a number of major mineral deposits including copper, gold, lead, zinc and magnetite. The region has a long history of exploration and prospecting and was actively mined for silver-lead deposits during the 1890s and early 1900s.

The Avebury deposit is located on the north-west coast of Tasmania, 6 kilometres west of Zeehan. The location of Rosebery in Tasmania, Australia is illustrated below:



Source: MMG

The Avebury deposit was discovered by Allegiance Mining NL in 1998 and mining commenced in December 2006. Zinifex acquired Avebury through a takeover of Allegiance during the first half of 2008. Commissioning of the processing plant commenced in June 2008. The original mine life, based on reserves at the time production commenced, was around eight years, with an expectation that additional resources would be identified to support a larger and longer life operation. However, in response to declining nickel prices, OZL announced in December 2008 that the project would be put on care and maintenance. MMG is currently reviewing the operations with a view to recommencing production subject to the outcome of current technical and economic assessments.

There is significant potential for exploration success as the area contains numerous significant orebodies and many small scale historic workings. The area in which MMG has tenure to the south-west of the Avebury mine lease is highly prospective for ultramafic nickel sulphide and skarn style deposits.

MMG owns 100% of Avebury and, through its wholly-owned subsidiaries, holds all relevant mineral tenements covering the area of the Avebury project.

#### **Mineral Resources**

Avebury's Mineral Resources as at 30 June 2009 are summarised below:

Avebury — Mineral Resources as at 30 June 2009

	Tonnes (Mt)	Nickel (%)	Nickel (kt)
Mineral Resources <sup>2</sup>			
Measured	3.4	1.1	37.9
Indicated	4.7	1.0	44.4
Inferred	14.0	0.9	131.3
<b>Total Mineral Resources</b>	22.0	1.0	213.5

Source: MMG

#### Notes:

- 1. Mineral Resources have been prepared in accordance with the JORC Code.
- 2. Mineral Resources have been estimated using a cut-off grade of 0.4% nickel.
- 3. Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding.

# Mining and processing

Mining at Avebury is by underground mining methods, primarily by transverse and longitudinal open stoping methods. Access to the mineral deposits is through two declines: the North Avebury decline to the North Avebury mineral deposit and further eastward extensions to the Avebury ore systems, and the Viking decline to the Viking mineral deposit and westward extensions.

The conventional processing plant was designed with capacity to process 900,000 tonnes of ore to produce approximately 8,500 tonnes of nickel per annum in a nickel concentrate grading around 20%. The process includes 3-stage crushing, milling and flash flotation before treatment through a flotation circuit to produce nickel concentrates. The plant has the capacity to treat nickel sulphides locked in magnetite, through a magnetic separator, regrind mill and retreat flotation cells.

Throughout its operation, the Avebury equipment and consumables were primarily trucked from Burnie. The nickel concentrate was trucked to Burnie and loaded onto bulk carriers for export.

For further details, please refer to sections 5.6 - 5.9 of the Competent Person's Report set out in Appendix IV to this circular.

## Operating performance

Commissioning of the Avebury processing plant commenced in June 2008 and the first nickel concentrate was produced in mid-July. Ramp up was ahead of schedule and the operations had reached a throughput rate of approximately 800,000 tonnes per annum by the time it was put on care and maintenance in December 2008 in response to declining nickel prices. Below is a summary of the operating performance of Avebury for the six months it was in operation:

Avebury — Operating statistics Quarter to Quarter to Six months to 30 Sep 2008 31 Dec 2008 31 Dec 2008 Ore milled (kt) 336.5 135.0 202.0 Nickel head grade (%) 0.9 0.9 1.0 Nickel recovery (%) 62.5 68.5 68.6 Nickel concentrate (kt) 4.8 7.0 11.8 Concentrate grade (% nickel) 17.0 16.1 16.7 Contained nickel (kt) 0.9 1.1 2.1 9.9 Total cash costs (US\$/lb nickel) 11.0 7.1

Source: MMG

Assuming that modifications to overcome the materials handling difficulties, the recruitment and training of operators and capital refurbishment of the plant are implemented, it has been estimated that Avebury could achieve its designed throughput rate after resumption of operations.

## **Expansion and exploration**

Substantial near-mine and district wide exploration has been undertaken since the discovery of the main Avebury deposit. MMG recommenced near mine exploration and resource definition drilling in May 2010 to increase the Avebury mineral resources. This drilling programme also targets to join East Avebury with the main Avebury deposit and assists in gaining a better understanding of the mineralisation controls within the Avebury deposit.

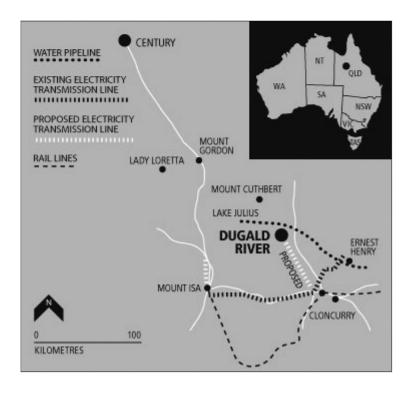
There is also a significant potential for exploration success in the Zeehan Mineral Field and the Mt Read Volcanics area, which contains numerous significant orebodies and many small scale mining operations in the past. The area to the south-west of the Avebury mine lease is highly prospective for ultramafic nickel sulphide and skarn style deposits. Additional exploration for a more traditional higher grade nickel sulphide style mineralization will also be undertaken around the Melba Flats area.

For further details, please refer to section 5.5 of the Competent Person's Report set out in Appendix IV to this circular.

#### **DUGALD RIVER**

#### **Project overview**

Dugald River is one of the world's largest known undeveloped lead-zinc-silver deposits. It is located in north-west Queensland, approximately 65 kilometres north-west of Cloncurry and approximately 85 kilometres north-east of Mount Isa. The project is located close to power, water and transport infrastructure. The location of Dugald River in Queensland, Australia is illustrated below:



Source: MMG

The Dugald River deposit was discovered in the 1870s and is a tabular deposit with a strike length of approximately 2,200m, a down dip extent of 1,100m and a gradual increase in thickness from north to south. Notwithstanding the size and attractive zinc grades of the deposit, it was not developed by previous owners because of marginal project economics and elevated manganese content that made the Dugald River zinc concentrates unattractive to zinc smelters at the time.

Growth in the smelting industry, technological changes and the increase in zinc prices from late 2005 prompted Zinifex to conduct a pre-feasibility study, which was completed in December 2006. A feasibility study followed and was completed in December 2008. Since then, MMG has completed documentation and the environmental impact statement has been submitted. MMG expects to seek Board approval in early 2011 to advance the project into the execution phase.

MMG, through its wholly-owned subsidiaries, holds all relevant mineral tenements covering the area of the proposed Dugald River development.

#### **Mineral Resources**

Dugald River's Mineral Resources as at 30 June 2009 are summarised below:

Dugald River — Mineral Resources as at 30 June 2009										
	Tonnes	Zinc	inc Lead S		Silver Zinc		Silver			
	(Mt)	(%)	(%)	(g/t)	(kt)	(kt)	(Moz)			
Mineral Resources <sup>2</sup>										
Measured	20.6	13.1	1.9	56	2,698.6	391.4	37.1			
Indicated	23.0	12.6	2.0	28	2,898.0	460.0	20.7			
Inferred	9.4	10.7	1.4	<u>14</u>	1,005.8	131.6	4.1			
<b>Total Mineral Resources</b>	53.0	12.5	1.9	36	6,602.4	983.0	61.9			

Source: MMG
Notes:

- 1. Mineral Resources have been prepared in accordance with the JORC Code.
- 2. Mineral Resources have been estimated using a cut-off grade of 6% zinc.
- 3. Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding.

A large copper target has been identified and there is potentially an opportunity to treat the copper mineralisation through the plant.

## Mining and processing

The feasibility study concluded that a two million tonnes per annum underground mine with a mine life of over 20 years was optimal. Given the narrow, steeply dipping nature of the ore body, mining would be by conventional underground mining methods within two separate mining areas, each accessed via separate declines. High metal recovery rates could be achieved with standard crushing, grinding and flotation processing (although a relatively fine grind will be required). Annual average production of more than 200,000 tonnes of zinc, 25,000 tonnes of lead and one million ounces of silver in concentrate is contemplated. Dugald River has the potential to replace up to 40% of Century's zinc production when Century operations cease. The presence of high grade ore will allow MMG to mine high grade zones selectively if required.

The project has good access to infrastructure, with a sealed two-lane highway only 10 kilometres to the east of the site and power and water readily available. Power could be supplied via a 220kV 60 kilometres line from the Chumvale substation. It is proposed that water will be supplied from the Lake Julius to Ernest Henry water pipeline which passes 6 kilometres to the north of the project. Zinc concentrates are likely to be railed to Townsville. It is currently contemplated that Dugald River would be a fly-in/fly-out operation through Cloncurry airport.

It is estimated that development and commissioning would take approximately three years from commencement of the project, allowing commercial production to commence in 2014. Initial capital costs are expected to be approximately US\$790 million.

For further details, please refer to sections 6.4 — 6.8 of the Competent Person's Report set out in Appendix IV to this circular.

## IZOK LAKE

## Project overview

Izok Lake is a massive high-grade copper-zinc sulphide deposit. It is located approximately 360 kilometres north of Yellowknife, Northwest Territories, Canada. The locations of Izok Lake and High Lake in Canada are illustrated below:



Source: MMG

Environmental baseline studies and infrastructure studies have commenced as well as a pre-feasibility study. At the same time exploration is underway with the aim of significantly expanding the mineral resources base at Izok Lake. An earlier preliminary economic assessment has been based on the production of 1.4Mt of ore annually producing 140,000 tonnes of zinc in concentrate and 30,000 tonnes of copper in concentrate annually.

#### **Mineral Resources**

Izok Lake's Mineral Resources as at 30 June 2009 are summarised below:

Izok Lake — Mineral Resources as at 30 June 2009									
	<b>Tonnes</b>	Zinc C	opper	Lead	Silver Zinc Copper			Lead	Silver
	(Mt)	(%)	(%)	(%)	(g/t)	(mt)	(mt)	(mt)	(Moz)
Mineral Resources <sup>2</sup>									
Measured	_	_			_	_		_	
Indicated	14.4	12.9	2.5	1.3	71	1.9	0.4	0.2	32.7
Inferred	0.4	6.4	3.8	0.3	<u>54</u>	0.0	0.0	0.0	0.6
Total Mineral									
Resources	14.8	12.8	2.5	1.3	71	1.9	0.4	0.2	33.5

Source: MMG

#### Notes:

- 1. Mineral Resources have been prepared in accordance with the JORC Code.
- 2. Mineral Resources have been estimated using a cut-off grade of 2% zinc equivalent.
- 3. Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding.

# Mining and processing

It is expected that the majority of Izok Lake will be mined by open pit with the ore processed through a traditional crushing and grinding circuit and sequential flotation design.

Given the remote location of Izok Lake, a significant part of MMG's studies are focused on understanding the various infrastructure challenges for the area and possible synergies with other projects. At this stage, it is envisaged that an all-weather road would be constructed to the coast where a new port facility would be constructed for export of product and receipt of consumables.

# HIGH LAKE

## Project overview

High Lake deposit is a volcanogenic massive sulphide deposit located 550 kilometres north of Izok Lake. MMG has reported additional promising exploration results from the High Lake area, as a result of limited but active exploration over the last 12 months. The area remains prospective for the discovery of additional mineral resources.

## **Mineral Resources**

High Lake's Mineral Resources as at 30 June 2009 are summarised below:

High Lake — Mineral Resources as at 30 June 2009

Tonnes Zinc Copper Lead Silver Gold Zinc Copper Lead Silver Gold

(Mt) (%) (%) (%) (g/t) (g/t) (Mt) (Mt) (Mt) (Moz) (Moz)

Mineral Resources <sup>2</sup>											
Measured		_	_	_	_	_	_		—		_
Indicated	17.2	3.4	2.3	0.3	70	1.0	0.6	0.4	0.1	38.7	0.5
Inferred	0.0	2.4	0.5	0.4	122	0.2	0.0	$\underline{0.0}$	$\underline{0.0}$	0.2	$\underline{0.0}$
<b>Total Mineral</b>											
Resources	17.2	3.3	2.2	0.3	70	0.9	0.6	0.4	0.1	38.9	0.5

Source: MMG

#### Notes:

- 1. Mineral Resources have been prepared in accordance with the JORC Code.
- 2. Mineral Resources have been estimated using a cut-off grade of 2% copper equivalent.
- 3. Significant figures do not imply precision. Figures have been extracted from information published by MMG and they are rounded according to JORC Code guidelines and may not total due to rounding.

MMG, through its wholly-owned subsidiaries, holds all relevant mineral tenements covering the Izok Lake copper, zinc, lead and silver resource, the High Lake copper, zinc, lead and silver resource, the gold resources at Lupin and Ulu and the base metal deposits at Gondor and Hood.

## Mining and processing

It is expected that the majority of High Lake will be extracted through underground mining with the ore processed through a traditional crushing and grinding circuit and sequential flotation design.

Given the remote location of High Lake, a significant part of MMG's studies are focused on understanding the various infrastructure challenges for the area and possible synergies with other projects. At this stage, it is envisaged that an all-weather road would be constructed to the coast where a new port facility would be constructed for export of product and receipt of consumables.

# **EXPLORATION PROJECTS**

MMG has interests in a number of regional exploration projects in Australia, Asia and Canada as well as exploration projects associated with, or close to its existing mining projects (near mine exploration). In addition, MMG has established Commodity Task-Force Project Generation Teams, one each for copper, zinc and nickel, which are dedicated to defining the best minerals belts for specific target styles and target sizes in their respective commodities with the aim of discovering significant growth projects for MMG.

MMG has a total global exploration budget for the year ending 31 December 2010 of US\$38.8 million, which includes US\$24.9 million for mine districts exploration, US\$11.5 million for regional exploration and US\$2.4 million for project generation. The mine districts exploration budget includes programmes at Sepon, Century, Avebury and Rosebery plus resource extension exploration programmes on the Izok Lake and High Lake projects in Canada. While the exploration budget for 2011 is yet to be finalised, it is envisaged that the exploration budget for 2011 will be similar to that of 2010, with the relative split between mine district and regional exploration roughly maintained. The Enlarged Group will regularly monitor the funding requirements and maintain sufficient cash and cash equivalents to cover any expected cash demands in connection with adjustments to the exploration budget of MMG for 2011.

Mine district exploration is conducted to add further resources at MMG's operating sites. Mine district exploration success generally translates to mine life extensions at existing operations and therefore has the potential to add incremental shareholder value. As such, It is a core part of MMG's business.

Regional exploration and project generation are focused on the discovery of new deposits remote from existing operations. The proportionally lower spend on this compared to mine district exploration reflects the lower likelihood of exploration success. However, this is still critical to the MMG business as a regional discovery has the potential to create an entirely new mine operation for MMG and create significant shareholder value.

MMG's various exploration projects in Australia, Indonesia and Canada include the following:

# (i) Australia

Near Cobar in New South Wales, MMG is exploring for Cobar-style copper-zinc-lead mineralisation at the Wagga Tank project. Drilling in 2009 encountered minor copper-zinc mineralisation. Further drilling to follow up on airborne electromagnetic survey targets is planned for 2010.

## (ii) Indonesia

MMG is undertaking exploration in a number of areas in Indonesia including Sulawesi and Java for copper-gold and nickel deposits in this highly mineralised, and under-explored region. In 2009 much work was undertaken to convert existing exploration licences to IUPs (new Indonesian Mining Law exploration tenements) and conduct scout drilling programs at a number of prospects.

## (iii) Canada

In the Nunavut Territories in Northern Canada, MMG has around 2,000 square kilometres of exploration tenements. During the 2009 and 2010 field seasons, drilling and surface geochemical sampling programs were undertaken. MMG is also exploring early stage nickel and copper projects through joint ventures in Ontario and the Nunavut Territories.

The mineral tenements covering the exploration tenements referred to above are either held by MMG through its wholly-owned subsidiaries or through wholly-owned subsidiaries that are party to agreements which provide for the right by the relevant MMG entity to acquire a direct interest in the relevant tenements or shares in the company that holds the relevant tenements. In some cases, less than 100% of the relevant tenements or the company that holds the relevant tenements may be acquired. In such cases, joint ventures will be formed in relation to the exploitation of the relevant mineral tenements.

#### **SUSTAINABILITY**

MMG is a member of the International Council on Mining and Metals ("ICMM") and the Minerals Council of Australia, committing to the sustainability frameworks of each organisation, respectively the Sustainable Development Framework and Enduring Value.

MMG's key sustainability objectives are to:

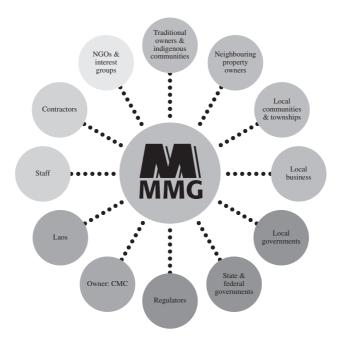
- Protect the safety, health and wellbeing of its employees and contractors;
- Minimise its impact on the environment;
- Ensure that the communities in which it operates receive real benefit from its activities;
- Engage our key stakeholders and ensure they are aware and supportive of our aims and objectives; and
- Be known for its integrity.

MMG supports the Extractive Industry Transparency Initiative ("EITI") in its efforts to improve transparency in countries rich in oil, gas and mineral resources. MMG contributes financially to EITI through its membership of ICMM.

In addition, MMG is committed to public reporting on its participation in the following programmes:

- Energy Efficiency Opportunities Assessment Programme
- National Pollutant Inventory
- National Greenhouse and Energy Reporting

MMG recognises the importance of working with and for its key stakeholders in order to continue to build a successful and sustainable business. MMG has targeted engagement and communication strategies and programmes to meet the needs of each of different stakeholder groups, the range of which are shown in the diagram below:



Source: MMG Sustainability Report 2009

MMG's targeted stakeholder programs are designed to achieve the following:

- Maintain its 'licence to operate' with stakeholders an intangible, informal, non-permanent approval to operate by host communities;
- Realise opportunities to contribute to the social and economic development of the areas in which it operates;
- Work closely with indigenous communities and establish mutually beneficial agreements with them;
- Contribute to the development of local infrastructure;
- Support local cultural heritage;
- Understand social impacts and develop appropriate management plans; and
- Effectively manage closure planning and impacts.

In order to achieve this, MMG has adopted a range of social, environmental and safety standards which guide the decision-making and operations of the business and cover the management of key sustainability issues. These standards apply regardless of where MMG's operations are based.

As part of its community engagement activities, MMG seeks to implement community development programs in the areas in which it works. These are assessed on the basis of delivering maximum long-term benefit to host communities and, to the extent possible, are aligned with the wishes of these communities. During the first half of 2010, MMG invested a total of A\$2,091,350 in local communities, as detailed in the table below.

H1 2010 MMG

community investment	Rosebery (A\$)	Golden Grove (A\$)	Century (A\$)	Sepon (A\$)	Exploration (A\$)	Total (A\$)
Community						
development	0	0	0	948,324	5,644	953,968
Local business						
development	0	14,267	0	0	0	14,267
Education and training	600	74,714	550,000	0	0	625,314
Sponsorships and						
donations	28,150	33,679	316,075	25,493	0	403,396
Compensation	0	0	0	94,405	0	94,405
	28,750	122,659	866,075	1,068,222	5,644	2,091,350

Source: MMG

By way of example, at Sepon, community development is managed through the Sepon Development Trust Fund and business development programmes. The Sepon Trust Fund has a goal of building an economy for the local community that is not dependent on the Sepon operations and which will continue to prosper well beyond eventual mine closure.

MMG's Century mine operates under the Gulf Communities Agreement, a unique tripartite agreement between MMG, the Queensland Government and local native title groups. Under it, MMG works closely with the Gulf communities to deliver social and economic benefits to the region including employment, education and training for local Aboriginal people. This unique, and landmark, agreement forms the foundation of a successful relationship between MMG and the local communities of the lower Gulf region.

MMG believes that it is important to have a sound understanding of the views, concerns and aspirations of the communities it is a part of. To this end, MMG actively undertakes community research to help it understand communities' and key stakeholders' awareness and attitudes towards MMG and its operations.

# COMPETITION, OPPORTUNITIES AND CHALLENGES

MMG's principal competitors are major international base metals producers, including, but not limited to, Antofagasta, BHP Billiton, Equinox Minerals, First Quantum Minerals, Freeport McMoran, Grupo Mexico, OZL, PanAust, Rio Tinto, Teck Resources, Vedanta and Xstrata. Major barriers to entry into the upstream base metals business include the ability to secure mining tenements and substantial capital expenditures and the time required to explore, develop and commission a mine.

The value of the payable metals contained in the products MMG produces is determined by reference to prices of these metals established on international terminal markets, notably the LME. Specific contract details are agreed by negotiation with customers. MMG competes with other producers through its customer relationships, market knowledge, product quality, reliability and lead time for supply.

The primary opportunity available and focus of a considerable effort at MMG is to create shareholder value through well executed growth of its metals and mining business. MMG is already a significant producer of base metals, including being the world's third largest producer of mined zinc, a strong platform from which to grow. It has a competitive pipeline of Development Projects which includes Dugald River, one of the largest undeveloped zinc deposits in the world, and highly skilled and well resourced teams focusing on growth through brownfield projects, greenfield developments, exploration and targeted acquisition. Coupling this with the support of its ultimate controlling shareholder, a major Chinese state owned enterprise in CMC, MMG is in a unique position to leverage the strengthening commodities markets through further business growth.

As is the case with all base metals mining companies, increasing shareholder value through cost control and cost reduction is both an opportunity and an ongoing challenge. MMG has a well established business excellence programme aimed at improving productivity and efficiency in all parts of the business. MMG has also recently introduced shared business services as part of its business excellence strategy, with a focus on improving MMG's efficiency in common business processes through a centralised, standardised, simplified and systematised approach.

MMG's operating site and head office management and operations teams are appropriately staffed with suitably qualified people. The ability to continue to attract and retain high caliber individuals is critical to the on-going success of the business and a challenge for all industry players. MMG has a competitive remuneration policy and regularly benchmarks its employee pay and conditions against its peers. MMG employs an established and dedicated in-house recruitment team to manage turn over and other new hiring.

## NO MATERIAL CHANGE

No material changes have occurred from the effective date (30 June 2010) of the Competent's Person Report up to the Latest Practicable Date.

#### **STRATEGIES**

It is envisaged that the Enlarged Group will pursue strategies that are designed to deliver sustainable growth in long-term shareholder value, which may include the development, restructuring or divestiture of existing assets, acquisition of new assets, and exploration.

The proposed strategy of the Enlarged Group is to maintain and expand its position as a leading internationally diversified base metals group with exposure to multiple commodities across various jurisdictions. It intends to pursue its strategy and enhance its competitive position across a range of base metals by pursuing organic growth initiatives and value-enhancing acquisition opportunities, as well as capitalising on its status as a member of the CMC Group of companies. The Enlarged Group will consider pursuing a number of initiatives to achieve its strategy, including:

## (i) Pursuing available organic growth opportunities

It is envisaged that the Enlarged Group will have a number of organic growth opportunities available to it, and will invest in capital expenditure to increase the production capacities, efficiency and mine lives of its Operating Mines (subject to project feasibility and economic fundamentals). Such proposed investment is expected to enhance the asset value of the Operating Mines. It is also expected that the Enlarged Group will invest, subject to project feasibility and economic fundamentals, in its Development Projects and will continue to explore for new mineral deposits. It is expected that the Enlarged Group will continue to focus on the on-going expansion of its Ore Reserves and Mineral Resources.

## (ii) Targeted value-focused acquisitions

It is envisaged that the Enlarged Group will also pursue, where appropriate, the acquisition and consolidation of base metal projects and assets, in particular, copper, zinc and nickel projects. In executing acquisition strategies, the Enlarged Group may consider acquiring mining operations and project assets directly or consider acquiring equity interests in other companies. A dedicated and experienced business development team will be established and responsible for identifying and evaluating prospective and value-accretive assets. Potential acquisition or consolidation targets will only include mines, projects or companies that satisfy the Enlarged Group's assessment criteria.

# (iii) Continuing to leverage on the expertise, experience and relationships of the Group's principal shareholder, CMC

CMC, the Company's ultimate controlling shareholder, is one of the leading PRC state-owned enterprises and a sizable international conglomerate. CMC is principally engaged in mining, development, production and trading of metals and minerals. It is also engaged in finance, real estate and logistics businesses. In 2009, CMC achieved revenue of US\$26.8 billion (equivalent to approximately HK\$209.0 billion). CMN is committed to remaining as the controlling shareholder of the Company and to hold no less than 51% of the issued share capital of the Company.

The Enlarged Group intends to continue to leverage on the expertise, experience and relationships of CMC, in particular, through the following ways:

- (a) having access to and insights into the PRC base metals market. Since CMC is one of the largest minerals and metals traders in the PRC, CMC has established distribution and marketing channels in the base metals market in the PRC and, as a state-owned enterprise, also has extensive relationships with other state-owned base metals consumers in the PRC. It is expected that CMC will be able to provide the Enlarged Group with valuable insights and marketing support in the largest base metals market in the world; and
- (b) being able to access, through CMC, low-cost and competitive financing from domestic and policy banks in the PRC so as to fund future mergers and acquisitions opportunities which the Enlarged Group may undertake.

# (iv) Commit to best practice in corporate governance, production standards, safety, operational excellence and environmental protection

MMG is one of the 19 members of the International Council of Mining and Metals ("ICMM"). ICMM, an organisation which brings together leading companies to highlight the importance of the minerals and metals sector in the world economy, to build a strong reputation for the industry and to share best practices in sustainable development. The ICMM includes the largest mining companies in the world (including BHP Billiton, Rio Tinto, Vale, Xstrata, Barrick, Newmont, Anglo American, Goldcorp, Freeport-McMoRan). MMG is the only PRC-affiliated mining company to have committed to the ICMM principles of sustainable development. Membership of ICMM requires members to implement the ICMM Sustainable Development ("SD") Framework throughout its business, which includes implementation of 10 ICMM SD principles throughout its business, the preparation of a sustainability report in line with the Global Reporting Initiative ("GRI") G3 framework and an independent audit of activities against the principles and content of the sustainability report.

Upon Completion, the Enlarged Group intends to continue as a member of the ICMM and to continue its commitment to maintain the highest international standard to protect the health, safety and wellbeing of its employees and contractors so as to achieve a fatality-free workplace. The Enlarged Group intends to continue to achieve improvement in performance through the use of robust management systems and effective governance and assurance processes, and to also minimise environmental and social impact by involving communities, reducing waste, using energy, water and other raw materials efficiently and effectively, planning for, managing and providing for closure of mining operations when appropriate.

# (v) Continue strong commitment to supporting local economies and communities

CMC and the Enlarged Group are committed to ensuring that local economies continue to receive tangible benefits from the operations of the Enlarged Group and to building strong and trusted partnerships with local communities through community development, local business development, education, training, sponsorship and capacity building. The Enlarged Group intends to continue to focus on attracting workforce from local communities to employment at its mine sites and to further develop their skills through training. Currently, at the Sepon mine, approximately 50% of the

workforce is drawn from local district communities and another 35% from other regions in Laos. At the Century mine, approximately 20% of the workforce is from local indigenous communities, supported by the MMG pre-employment training programs. At the Golden Grove mine, local indigenous communities are supported by providing people with training and skills to help them find future roles in mining and other industries.

#### **COMPETITIVE STRENGTHS**

# (i) The Company will be a unique international diversified base metals group listed in Hong Kong after Completion

MMG is one of the world's largest producers of zinc as well as a substantial producer of copper, lead, gold and silver. In particular, the Century mine is one of the world's largest open-pit zinc mines producing approximately 0.5Mt of zinc in concentrate annually. As of the date of this circular, there are no companies listed in Hong Kong which are engaged in the production of such a diversified range of base metals through predominantly international mining assets. Thus, upon Completion, the Enlarged Group will be uniquely positioned within the Hong Kong market, with a diversified portfolio of operating assets in Australia and Laos and development projects in Australia, Asia and North America. The Company believes that this unique position will attract the interest of investors building a portfolio of upstream raw materials for a number of key commodities across several geographic regions. In time, and by attracting the interest of external financing sources, the Company is expected to have improved access to funding for its expansion plans. Such improved access to financing is expected to give the Enlarged Group a competitive advantage and strengthen its leading market position.

# (ii) Strong financial performance

The table below highlights the strong financial performance of the Group which provides a strong foundation for growth.

				For the six months ended
	For the y	30 June		
	2007	2008	2009	2010
		(HK\$ million) (Restated <sup>Note</sup> )		(HK\$ million)
Revenue  Profit attributable to equity	7,337.2	8,450.3	6,215.8	5,403.7
holders	601.2	137.7	338.5	424.0

Note: The Group has changed its accounting treatment from the purchase method of accounting to merger accounting in accordance with the requirements set out in Accounting Guideline 5 "Merger Accounting for Common Control Combinations" to business combinations involving entities under the common control for the financial year beginning on 1 January 2010. This change in accounting policy has been applied retrospectively and certain previously reported figures are restated accordingly.

The major financial and operating indicators, including revenue and net profit, of the Group in the first half of 2010 significantly improved from those of the corresponding period of the previous year. Even when compared with the second half of 2009, the Group still sustained healthy growth in the period under review. Such growth reflected the prudent and pragmatic management strategy and successful measures taken in response to the volatile non-ferrous metals market in 2009, which resulted in a rapid resumption of sustainable growth momentum in the Group's various principal businesses.

The combination of low cost projects and robust commodity prices has supported strong operational and financial performance. MMG produced 318kt of zinc in concentrate, 15kt of copper in concentrate, 34kt of copper cathode, 26kt of lead in concentrate, 4moz of silver and 92koz of gold in the six months ended 30 June 2010 and delivered revenue of US\$844.7 million (equivalent to approximately HK\$6,588.7 million) and EBITDA of US\$403.9 million (equivalent to approximately HK\$3,150.4 million), representing an EBITDA margin of approximately 48%, for the six months ended 30 June 2010.

Through the Acquisition, it is expected that MMG's performance will contribute and strengthen the Enlarged Group's scale of operations and performance and allow it to pursue the above-mentioned strategies to develop into an international metals and mining conglomerate.

## (iii) Significant organic growth potential

It is believed that the Enlarged Group has significant potential to expand and achieve long-term sustainable growth through organic initiatives focusing on upstream mining operations. The Enlarged Group will have a portfolio of quality assets with a wide resource base as set out in the section headed "Information of the Target Group" in this circular.

The significant organic growth potential of MMG is supported by recent significant growth in earnings. For the six months ended 30 June 2010, the Target Group achieved an EBITDA growth of 15.8% while revenue remained largely unchanged as compared to the seven months ended 31 December 2009.

# (iv) Ability to leverage on the expertise, experience and relationships of the Enlarged Group's principal shareholder, CMC

CMC, the Company's ultimate controlling Shareholder, is a sizable international conglomerate principally engaged in development, production, trading and integration services of metals and minerals. It is also engaged in finance, real estate and logistics businesses. The Enlarged Group aims to leverage its expertise, experience and relationships as it seeks opportunities to expand its business internationally.

#### PROPOSED APPOINTMENT OF DIRECTORS

Upon Completion, the Board intends to appoint Mr. Andrew Gordon Michelmore as an executive Director and CEO, and Mr. David Mark Lamont as an executive Director and CFO. Mr. Michelmore, the current managing director and CEO of MMG, and Mr. Lamont, the current CFO of MMG. Both Mr. Michelmore and Mr. Lamont have extensive experience in the mining industry and in the management of listed companies. As such, the addition of Mr. Michelmore and Mr. Lamont to the Board will bring to the Board the experience in addressing the challenges and risks associated with MMG's business. The Board also intends to appoint Dr. Peter William Cassidy (presently an independent non-executive director of MMG) and Mr. Jiao Jian (presently a non-executive director of MMG) as an independent non-executive Director and a non-executive Director, respectively, upon Completion. Mr. Jiao is also the president of CMN.

The length of service of the proposed Directors is currently expected to be for a term of three years until the next following annual general meeting of the Company where the proposed Directors shall then be eligible for re-election at that meeting.

Brief biographical details of each of Mr. Andrew Michelmore, Mr. David Lamont, Dr. Peter Cassidy and Mr. Jiao Jian are set out below:

## Mr. Andrew Gordon Michelmore

Mr. Andrew Gordon Michelmore, aged 58, joined MMG as managing director and CEO on 17 June 2009 after his tenure as CEO of Zinifex and then OZL. Prior to his tenure as CEO of Zinifex, he spent two years working in London and Russia as CEO of EN+ Group. Mr. Michelmore has more than 28 years experience in the metals and mining industry including 12 years at WMC Resources Limited where he was CEO and prior to that, held senior roles in the company's nickel, gold, alumina, copper, uranium, and fertilizer businesses.

Mr. Michelmore holds a First Class Honours degree in Engineering (Chemical) from The University of Melbourne and a Master of Arts in Politics, Philosophy and Economics from Oxford University. Mr. Michelmore is a Fellow of the Institution of Chemical Engineers, the Institution of Engineers Australia and the Australian Academy of Technological Sciences and Engineering. He is also chairman of The Jean Hailes Foundation for Women's Health, chairman of the Council of Ormond College at The University of Melbourne and a member of each of the Minerals Council of Australia and the Business Council of Australia. Mr. Michelmore is a director of Century Aluminum Company (listed on the NASDAQ and the Iceland Stock Exchange).

A brief summary of Mr. Michelmore's relevant industry experience is set out below:

- June 2009 to present: managing director and CEO of MMG;
- June 2008 to June 2009: CEO of OZL;
- February 2008 to June 2008: CEO of Zinifex;

- January 2006 to October 2007: CEO of EN+ Group;
- January 1993 to June 2005: senior roles in WMC Resources Limited (as CEO of WMC Resources Limited during January 2003 to June 2005); and
- August 1989 to December 2002: general manager of Nabalco Pty. Ltd and CEO Alusuisse Australia Limited.

The directors' fee (including that for Mr. Michelmore) for the year ending 31 December 2010 will be proposed by the Board for approval by the Shareholders at the annual general meeting of the Company in 2011. His emoluments will be determined by reference to his duties and responsibilities with the Enlarged Group, his performance against agreed objectives, the Enlarged Group's performance and profitability, the Enlarged Group's remuneration policy and the market pay-level for similar positions.

#### Mr. David Mark Lamont

Mr. David Mark Lamont, aged 45, joined MMG as CFO on its formation in June 2009. He was previously CFO of OZL from October 2008. Mr. Lamont is a member of the Institute of Chartered Accountants and was an Audit Supervisor at Deloitte Haskins and Sells before commencing a corporate career. After progressing through a number of senior roles in the chemical and agricultural industries, Mr. Lamont was appointed CFO at Incitec Limited in 1999. Mr. Lamont joined BHP Billiton in 2001 where he held a number of senior roles including CFO of BHP Billiton's Energy Coal and Carbon Steel Materials Groups. Mr. Lamont joined OZL from PaperlinX Limited, where he had served as CFO since 2006 and was appointed an executive director in February 2008 resigning in September 2008. Mr. Lamont holds a Bachelor of Commerce degree and is a qualified Chartered Accountant.

A brief summary of Mr. Lamont's relevant industry experience is set out below:

- June 2009 to present: CFO of MMG;
- October 2008 to June 2009: CFO of OZL; and
- 2001 to 2006: senior roles in BHP Billiton's Energy Coal and Carbon Steel Materials Groups (as CFO of BHP Billiton's Energy Coal and Carbon Steel Materials Groups during June 2001 to February 2006).

The directors' fee (including that for Mr. Lamont) for the year ending 31 December 2010 will be proposed by the Board for approval by the Shareholders at the annual general meeting of the Company in 2011. His emoluments will be determined by reference to his duties and responsibilities with the Enlarged Group, his performance against agreed objectives, the Enlarged Group's performance and profitability, the Enlarged Group's remuneration policy and the market pay-level for similar positions.

# Dr. Peter William Cassidy

Dr. Peter William Cassidy, aged 64, is a metallurgical engineer, with almost 40 years of experience in the resource and energy sectors including almost 20 years as a director of major public companies set out below. He has most recently been involved in the development and operation of major mining and processing projects in Australia, the PRC, Laos, Papua New Guinea and Cote d'Ivoire.

He was CEO of Goldfields Limited from 1995 until its merger with Delta Gold Limited in 2002 to form Aurion Gold Limited. Prior to 1995 he was "Executive Director — Operations" of RGC Limited. He remained a director of AurionGold until January 2003.

Dr. Cassidy has been an independent non-executive director of each of Oxiana Limited (2002 to 2007), Zinifex Limited (2004 to 2008), Sino Gold Mining Limited (2002 to 2009), Lihir Gold Limited (2003 to 2010), OZ Minerals Limited (2008 to 2009) and Energy Developments Limited (2003 to 2009). He was also non-executive chairman of Allegiance Mining NL (April to July 2008) and a director of Eldorado Gold Corporation (2010). Since 2009, he has been an independent non-executive director of Minerals and Metals Group.

The director's fee (including that for Dr. Cassidy) for the year ending 31 December 2010 will be proposed by the Board for approval by the Shareholders at the annual general meeting of the Company in 2011. His emoluments will be determined by reference to his duties and responsibilities with the Enlarged Group, his performance against agreed objectives, the Enlarged Group's performance and profitability, the Enlarged Group's remuneration policy and the market pay-level for similar positions.

## Mr. Jiao Jian

Mr. Jiao Jian, aged 41, was appointed as the president of CMN in May 2010. Prior to that, he was a vice president of CMN since 2007. Mr. Jiao is currently the chairman of the board of directors of Shanxi Guanly Co., Ltd. (山西關鋁股份有限公司), which is a company listed on the Shenzhen Stock Exchange in the PRC. Mr. Jiao holds a Bachelor's degree in International Economics from the Nankai University in the PRC and a Master of Business Administration degree from the Saint Mary's University in Canada. Mr. Jiao joined the CMC Group in 1992 and is responsible for the copper and aluminium business. Mr. Jiao has extensive experience in international trade, investment and corporate management.

The directors' fee (including that for Mr. Jiao) for the year ending 31 December 2010 will be proposed by the Board for approval by the Shareholders at the annual general meeting of the Company in 2011. His emoluments will be determined by reference to his duties and responsibilities with the Enlarged Group, his performance against agreed objectives, the Enlarged Group's performance and profitability, the Enlarged Group's remuneration policy and the market pay-level for similar positions.

Save as disclosed above, each of Mr. Michelmore, Mr. Lamont, Dr. Cassidy and Mr. Jiao do not hold any directorships in any listed public companies in the last three years and do not hold any position in any member of the Enlarged Group nor do they have any relationship with any other Directors, senior management, substantial shareholders or controlling shareholders of the Company and any interests in the shares of the Company within the meaning of Part XV of the SFO.

Save as disclosed herein, there is no information to be disclosed pursuant to any of the requirements under rules 13.51(2)(h) to 13.51(2)(v) of the Listing Rules, nor are there other matters concerning them that need to be brought to the attention of the shareholders of the Company.

## SENIOR MANAGEMENT OF THE TARGET GROUP

The existing management and technical teams of the Target Group will continue to manage the operations of the Target Group after Completion. Brief biographical details of each of the senior management of the Target Group are set out below:

#### Mr. Brett Fletcher

Mr. Brett Fletcher, aged 46, was appointed as the Chief Operating Officer of Zinifex in April 2007. Mr. Fletcher has more than 21 years of experience in the metals and mining industry. Mr. Fletcher commenced his career in the mining industry in 1989 at Pasminco Limited in Broken Hill, New South Wales as a qualified mining engineer and he held various technical and management roles. For the last seven years, Mr. Fletcher has held general manager positions at Rosebery Mine, Century Mine and Hobart Smelter.

A brief summary of Mr. Fletcher's relevant industry experience is set out below:

- 2009 to present: COO of MMG
- 2007 to 2009: COO of Zinifex and OZL
- 2006 to 2007: General manager of Zinifex Hobart Zinc Smelter
- 2003 to 2006: General manager of Zinifex Century Mine
- 2000 to 2003: General manager of Pasminco Rosebery Mine
- 1996 to 2000: Manager of Pasminco Broken Hill Mine
- 1989 to 1996: Senior Mining Engineer of Pasminco Broken Hill Mine

Mr. Fletcher holds a Bachelor of Engineering in Mining from the University of New South Wales (Sydney) and is a member of the Australian Institute of Company Directors.

## Mr. Michael Nossal

Mr. Michael Nossal, aged 52, joined MMG as the Executive General Manager of the Business Development Department in January 2010. Mr. Nossal has 23 years of experience in the metals and mining industry. Mr. Nossal has held senior business development and strategy roles at WMC, Normandy Mining Limited and Macquarie Corporate Finance. Before joining MMG, Mr. Nossal was the Deputy CEO of En+ where he was responsible for corporate finance, strategy and business development and the execution of key mergers and acquisition projects.

A brief summary of Mr. Nossal's relevant industry experience is set out below:

- 2010 to present: Executive General Manager of Business Development of MMG
- 2006 to 2009: Deputy CEO of En+ Group Ltd
- 2003 to 2005: Executive General Manager of WMC
- 1996 to 2000: Executive General Manager of Normandy Mining Limited
- 1993 to 1996: Associate Director, Macquarie Bank
- 1987 to 1993: CFO of Kenmare Resources plc

Mr. Nossal holds a BSc (Monash University) and an MBA (the Wharton School, University of Pennsylvania) and is a member of the Institute of Directors, UK.

## Mr. Steve Ryan

Mr. Steve Ryan, aged 47, joined MMG as an Executive General Manager of the Exploration Department. Mr. Ryan has over 20 years of international experience in the mineral exploration industry. Mr. Ryan worked for the CRA / Rio Tinto Group and held positions including Country Exploration Manager positions in India, Papua New Guinea and Fiji and geologist positions in Russia, Australia and other countries. Mr. Ryan worked for Oxiana and held positions as Asia Exploration General Manager and China Country Exploration Manager. Mr. Ryan also has three years experience in the venture capital industry as an Investment & Business Development Manager for an international venture capital group. Mr. Ryan has degrees in Geology and an MBA in international business.

A brief summary of Mr. Ryan's relevant industry experience is set out below:

- 2009 to present: Executive General Manager of Exploration in MMG
- 2008: General Manager of Exploration of Oxiana / OZL
- 2004 to 2007: Exploration Manager of Oxiana
- 2001 to 2003: Investment Manager of Zernike Australia Ltd (Zernike Group BV-international venture capital group)
- 1988 to 2000: Exploration Manager of Rio Tinto

Mr. Ryan holds an MBA in International Business and a Bachelor of Science (Hons) Geology and is a Member of the Australian Institute of Mining and Metallurgy (AusIMM).

## Mr. Tim Scully

Mr. Tim Scully, aged 62, joined MMG as an Executive General Manager of the Business Support Department. Mr. Scully joined OZL in November 2008. Mr. Scully has 21 years of experience in the metals and mining industry. Mr. Scully has experience in leadership development, talent management, succession planning and the Human Resources systems and processes. Before joining OZL, Mr. Scully was the General Manager of the Organisation Development at Intrepid Mines Limited. Prior to that, Mr. Scully was the General Manager of the Organisation Development and Human Resources at Atlas Group Holdings. Prior to his position at Atlas Group Holdings, he was the General Manager of Human Resources at WMC where he worked from 1989 to 2005.

A brief summary of Mr. Scully's relevant industry experience is set out below:

- June 2009 to present: Executive General Manager of Business Support at MMG
- December 2008: Executive General Manager of Human Resources at OZL
- January to September 2008: General Manager of Organisation Development at Intrepid Mines Limited
- 2002 to 2005: General Manager of Human Resources at WMC
- 2001 to 2002: General Manager of Shared Services at WMC
- 1989 to 2000: Human Resources roles in WMC

Mr. Scully holds a BA (Hons) Melbourne University majoring in Economics and Politics.

## RECRUITMENT STRATEGY

The Company will continue to seek qualified professionals to join the Enlarged Group by offering competitive remuneration packages and benchmarking its employee pay and conditions against its peers.

#### ALLENDIA

#### 1. ACCOUNTANT'S REPORT OF THE TARGET COMPANY

The following is the text of a report, prepared for the purpose sole of incorporation in this circular, received from the reporting accountant, PricewaterhouseCoopers, Certified Public Accountants, Hong Kong.



羅兵咸永道會計師事務所

**PricewaterhouseCoopers** 22/F, Prince's Building Central, Hong Kong

22 November 2010

The Directors
Minmetals Resources Limited

Dear Sirs

We report on the financial information of Album Resources Private Limited (the "Target Company") and its subsidiaries (together, the "Target Group") which comprises the consolidated and company statements of financial position of the Target Company as at 31 December 2009 and 30 June 2010, and the consolidated income statements, the consolidated statements of comprehensive income, the consolidated statements of changes in equity and the consolidated statements of cash flows of the Target Company for the period from 8 April 2009 (date of incorporation) to 31 December 2009 and six months period ended 30 June 2010 (the "Relevant Periods"), and a summary of significant accounting policies and other explanatory notes. This financial information has been prepared by the directors of Minmetals Resources Limited (the "Company") and is set out in Sections I to III below for inclusion in Appendix I to the circular of the Company dated 22 November 2010 (the "Circular") in connection with the proposed acquisition of the entire issued share capital of the Target Company by the Company.

The Target Company was incorporated in Singapore on 8 April 2009 as a company limited by shares under the Singapore Companies Act and registered as a foreign company in Australia under the *Corporations Act 2001*.

As at the date of this report, the Target Company has direct and indirect interests in the subsidiaries as set out in Note 15 of Section II below.

The consolidated financial statements of the Target Company for the period from 8 April 2009 (date of incorporation) to 31 December 2009 and six months period ended 30 June 2010, prepared in accordance with Singapore Financial Reporting Standards ("SFRSs") and International Financial Reporting Standards ("IFRSs") respectively, were audited by PricewaterhouseCoopers Singapore and PricewaterhouseCoopers Melbourne in accordance with Singapore Standards on Auditing and International Standards on Auditing respectively, pursuant to separate terms of engagement with the Target Company.

The financial information has been prepared based on the audited consolidated financial statements of the Target Company with no adjustment made thereon.

#### Directors' responsibility for the financial information

The directors of the Target Company are responsible for the preparation and fair presentation of the consolidated financial statements of the Target Company for the period from 8 April 2009 (date of incorporation) to 31 December 2009 and six months period ended 30 June 2010 in accordance with SFRSs and IFRSs respectively. This responsibility includes designing, implementing and maintaining internal control relevant to the preparation and the fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

The directors of the Company are responsible for the preparation and the true and fair presentation of the financial information in accordance with the accounting policies as set out in Note 1 of Section II below which are in conformity with the accounting policies presently adopted by the Company and its subsidiaries (together, the "Group"). This responsibility includes selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

# Reporting accountant's responsibility

Our responsibility is to express an opinion on the financial information and to report our opinion to you. We carried out our procedures in accordance with the Auditing Guideline 3.340 "Prospectuses and the Reporting Accountant" issued by the Hong Kong Institute of Certified Public Accountants.

## **Opinion**

In our opinion, the financial information, for the purpose of this report, gives a true and fair view of the state of affairs of the Target Company and of the Target Group as at 31 December 2009 and 30 June 2010 and of the Target Group's results and cash flows for each of the Relevant Periods then ended.

## Review of stub period comparative financial information

We have reviewed the stub period comparative financial information set out in Sections I to III below included in Appendix I to the Circular which comprises the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows of the Target Company for the period from 8 April 2009 (date of incorporation) to 30 June 2009 and a summary of significant accounting policies and other explanatory notes (the "Stub Period Comparative Financial Information").

The directors of the Company are responsible for the preparation and presentation of the Stub Period Comparative Financial Information in accordance with the accounting policies set out in Note 1 of Section II below which are in conformity with the accounting policies presently adopted by the Group.

Our responsibility is to express a conclusion on the Stub Period Comparative Financial Information based on our review. We conducted our review in accordance with International Standard on Review Engagements 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the International Auditing and Assurance Standards Board. A review consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope that an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Based on our review, nothing has come to our attention that causes us to believe that the Stub Period Comparative Financial Information, for the purpose of this report, has not been prepared, in all material respects, in accordance with the accounting policies set out in Note 1 of Section II below which are in conformity with the accounting policies presently adopted by the Group.

The following is the financial information of the Target Group as at 31 December 2009 and 30 June 2010 and for each of the periods from 8 April 2009 (date of incorporation) to 31 December 2009, 8 April 2009 (date of incorporation) to 30 June 2009 and 1 January 2010 to 30 June 2010:

#### Consolidated income statements

	Notes	Period ended 31 December 2009	Period ended 30 June 2009	Period ended 30 June 2010
		(US\$m)	(US\$m)	(US\$m)
			(unaudited)	
Revenue	5	852.8	105.2	844.7
Other income	6	0.7	_	4.1
Cost of goods sold	7	(349.9)	(46.7)	(333.5)
Depreciation and amortisation expenses	7	(158.3)	(24.2)	(124.0)
Freight expenses	7	(55.1)	(5.7)	(35.3)
Other expenses	7	(99.9)	(9.6)	(76.1)
Profit before net financing expenses				
and income tax		190.3	19.0	279.9
Financing income	8	1.1	_	1.8
Financing expenses	8	(23.2)	(3.0)	(17.8)
Net foreign exchange gain/(loss)	8	1.6	(4.8)	(7.4)
Net financing expenses	8	(20.5)	(7.8)	(23.4)
Profit before income tax		169.8	11.2	256.5
Income tax benefit/(expense)	10	10.9	(2.0)	(22.5)
Profit for the period		180.7	9.2	234.0
Attributable to:				
Equity holders of the Target Company		172.5	8.5	222.6
Non-controlling interest	21	8.2	0.7	11.4
Profit for the period		180.7	9.2	234.0

Information in the above consolidated income statements is for the periods from 8 April 2009 (date of incorporation) to 31 December 2009, 8 April 2009 (date of incorporation) to 30 June 2009 and 1 January 2010 to 30 June 2010.

# Consolidated statements of comprehensive income

	Notes	Period ended 31 December 2009 (US\$m)	Period ended 30 June 2009 (US\$m) (unaudited)	Period ended 30 June 2010 (US\$m)
Profit for the period		180.7	9.2	234.0
Other comprehensive income:  Net change in fair value of   available-for-sale financial assets,   net of tax	21	0.2		
Other comprehensive income for the period		0.2		
Total comprehensive income for the period		180.9	9.2	234.0
Attributable to:  Equity holders of the Target Company Non-controlling interest		172.7 8.2	8.5 0.7	222.6 11.4
Total comprehensive income for the period		180.9	9.2	234.0

Information in the above consolidated statements of comprehensive income is for the periods from 8 April 2009 (date of incorporation) to 31 December 2009, 8 April 2009 (date of incorporation) to 30 June 2009 and 1 January 2010 to 30 June 2010.

# Consolidated statements of changes in equity

# Attributable to the equity holders

	of the Target Company					
	Issued capital (US\$m)		Retained earnings	Sub- total (US\$m)	Non- controlling interest (US\$m)	Total $(US\$m)$
For the period ended 31 December 2009 Balance as at 8 April 2009	_	_	_	_	_	_
Total comprehensive income for the period		0.2	172.5	172.7	8.2	180.9
Transactions with owners, recorded directly in equity: Contributions of equity Acquisition of non-controlling interest	337.0	_	_	337.0	_	337.0
through business combination (Note 4) Dividends paid to non-controlling	_	_	_	_	35.8	35.8
interest					(2.0)	(2.0)
Total transactions with owners	337.0			337.0	33.8	370.8
Balance as at 31 December 2009	337.0	0.2	<u>172.5</u>	509.7	42.0	551.7
For the period ended 30 June 2009 (Unaudited) Balance as at 8 April 2009	_	_	_	_	_	
Total comprehensive income for the period	<del>-</del>		8.5	8.5	0.7	9.2
Transactions with owners, recorded directly in equity:						
Contributions of equity Acquisition of non-controlling interest through business combination	337.0	_	_	337.0	_	337.0
(Note 4)					35.8	35.8
Total transactions with owners	337.0			337.0	35.8	372.8
Balance as at 30 June 2009	337.0		8.5	345.5	36.5	382.0

# Attributable to the equity holders of the Target Company

	- 0.	the larger				
	Issued capital (US\$m)		Retained earnings	Sub- total (US\$m)	Non- controlling interest (US\$m)	Total $(US\$m)$
For the period ended 30 June 2010						
Balance as at 1 January 2010	337.0	0.2	172.5	509.7	42.0	551.7
Total comprehensive income for the period  Transactions with owners, recorded	=		222.6	222.6	11.4	234.0
directly in equity: Dividends paid to non-controlling interest					(14.4)	(14.4)
Total transactions with owners					(14.4)	(14.4)
Balance as at 30 June 2010	337.0	0.2	395.1	732.3	39.0	771.3

Information in the above consolidated statements of changes in equity is for the periods from 8 April 2009 (date of incorporation) to 31 December 2009, 8 April 2009 (date of incorporation) to 30 June 2009 and 1 January 2010 to 30 June 2010.

# Consolidated statements of financial position

	Notes	As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Current assets			
Cash and cash equivalents	12	251.3	334.5
Trade and other receivables	13	90.0	50.8
Inventories	14	177.5	215.6
Financial and other assets	15	22.3	120.1
Total current assets		541.1	721.0
Non-current assets			
Deferred tax assets	10	65.5	95.1
Inventories	14	23.5	24.3
Financial and other assets	15	_	0.6
Property, plant and equipment	16	1,493.7	1,490.3
Total non-current assets		1,582.7	1,610.3
Total assets		2,123.8	2,331.3
Current liabilities			
Current tax payable	10	59.6	54.2
Trade and other payables	17	143.7	139.1
Interest-bearing liabilities	18	1.1	1.1
Provisions	19	35.5	35.7
Total current liabilities		239.9	230.1
Non-current liabilities			
Interest-bearing liabilities	18	1,100.8	1,099.2
Provisions	19	231.4	230.7
Total non-current liabilities		1,332.2	1,329.9
Total liabilities		1,572.1	1,560.0
Net assets		551.7	771.3

	Notes	As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Equity			
Total equity attributable to equity holders			
of the Target Company			
Issued capital	20	337.0	337.0
Reserves	21	0.2	0.2
Retained earnings	21	172.5	395.1
		509.7	732.3
Non-controlling interest	21	42.0	39.0
_			
Total equity		551.7	771.3
Total equity		=======================================	
			400.0
Net current assets		301.2	490.9
Total assets less current liabilities		1,883.9	2,101.2

# Consolidated statements of cash flows

	Notes	Period ended 31 December 2009 (US\$m)	Period ended 30 June 2009 (US\$m) (unaudited)	Period ended 30 June 2010 (US\$m)
Cash flows from operating activities				
Receipts from customers		786.9	115.7	908.9
Payments to suppliers and employees		(431.2)	(53.4)	(516.9)
Income taxes paid		(48.6)	(48.6)	(57.5)
Net cash inflows from operating activities	23	307.1	13.7	334.5
Cash flows from investing activities				
Payments for plant and equipment Payments for available-for-sale financial asset		(138.7)	(21.7)	(120.6)
Acquisition of subsidiary, net of cash acquire		(648.7)	(648.7)	(100.2)
Proceeds from disposal of investments	u	2.0	(040.7)	0.8
Interest received		1.1		1.8
Net cash outflows from investing activities		(784.3)	(670.4)	(218.2)
Cash flows from financing activities				
Proceeds from borrowings		1,312.8	1,312.8	_
Repayments of borrowings		(912.2)	(722.2)	(0.9)
Proceeds from issue of shares		337.0	147.0	_
Financing costs and interest paid		(15.2)	(1.6)	(11.9)
Dividends paid to non-controlling interest		(2.0)	_	(14.4)
Repayments of finance lease liabilities		(2.6)		(0.8)
Net cash inflows/(outflows) from				
financing activities		717.8	736.0	(28.0)
Not be seen to seek held		240.6	70.2	00.2
Net increase in cash held  Cash and cash equivalents at the beginning of	?	240.6	79.3	88.3
the period		_	_	251.3
Effects of exchange rate changes on foreign currency denominated cash balances		10.7	0.7	(5.1)
currency denominated cash barances				(5.1)
Cash and cash equivalents at the end				
of the period	12	<u>251.3</u>	80.0	334.5

Information in the above consolidated statements of cash flows is for the periods from 8 April 2009 (date of incorporation) to 31 December 2009, 8 April 2009 (date of incorporation) to 30 June 2009 and 1 January 2010 to 30 June 2010.

# Statements of financial position — the Target Company

	Notes	As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Current assets Other receivables and prepayments	15	2.1	2.5
Total current assets		2.1	2.5
Non-current assets Deferred tax assets		_	0.1
Receivables from subsidiaries Investment in subsidiaries	15 15	710.5 337.0	709.9 337.0
Total non-current assets		1,047.5	1,047.0
Total assets		1,049.6	1,049.5
Current liabilities Other payables	17	3.0	3.4
Total current liabilities		3.0	3.4
Non-current liabilities Interest-bearing liabilities	18	710.0	710.0
Total non-current liabilities		710.0	710.0
Total liabilities		<u>713.0</u>	713.4
Net assets		336.6	336.1
Equity Issued capital Accumulated losses	20 22	337.0 (0.4)	337.0 (0.9)
Total equity		336.6	336.1
Net current liabilities		(0.9)	(0.9)
Total assets less current liabilities		1,046.6	1,046.1

### II. NOTES TO THE FINANCIAL INFORMATION

#### 1 Summary of significant accounting policies

#### (a) Reporting entity

Album Resources Private Limited (the "Target Company") is a company incorporated in Singapore under the Singapore Companies Act, Chapter 50 and registered in Australia as a foreign company under the Corporations Act 2001. The registered address of the Company is One Marina Boulevard #28-06, Singapore 018989. This consolidated financial information comprises the Target Company and its subsidiaries (the "Target Group"). The Target Group is primarily involved in the exploration for, and the mining, processing and sale of zinc, copper, lead, gold, silver and other minerals into both metal and metal in concentrates.

#### (b) Statement of compliance

This financial information has been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB).

For the purpose of the Financial Information, no adjustments were considered necessary by the directors of Minmetals Resources Limited (the "Company") to comply with the accounting policies presently adopted by the Company and its subsidiaries (together, the "Group"), including the new accounting standards introduced that are effective for the six months ended 30 June 2010 and a change in accounting policy for business combinations under common control that was recently adopted by the Group, details of which are disclosed in the audited consolidated financial statements of the Company for the year ended 31 December 2009 and the unaudited interim consolidated financial information of the Company for the six months ended 30 June 2010, which could be found in the Company's Annual Report 2009 from pages 50 to 140 published on 20 April 2010 and Interim Report 2010 from pages 24 to 50 published on 6 September 2010 respectively. The accounting policies presently adopted by the Group are in conformity with Hong Kong Financial Reporting Standards issued by the Hong Kong Institute of Certified Public Accountants.

# (c) Basis of preparation of financial information

#### (i) Historical costs

This financial information has been prepared on a going concern basis under the historical cost convention, except for available-for-sale financial assets which are measured at fair value. The methods used to measure fair values are discussed further in Note 1(e) and Note 1(k) respectively.

#### (ii) Issued standards not early adopted

The following standards and interpretations were available for early adoption but have not been applied by the Target Group in this financial information:

- IFRS 9 Financial Instruments (effective for annual reporting periods beginning on or after 1 January 2013). IFRS 9 addresses the classification and measurement of financial assets and is likely to affect the Target Group's accounting for its financial assets. The standard is not applicable until 1 January 2013 and the Target Group is yet to assess its full impact.
- Revised IAS 24 Related Party Disclosures (effective for annual reporting periods beginning on or after 1 January 2011). In November 2009, the IASB issued a revised IAS 24 Related Party Disclosures. It is effective for accounting periods beginning on or after 1 January 2011 and must be applied retrospectively. The amendment clarifies and simplifies the definition of a related party and removes the requirement for government-related entities to disclose details of all transactions with the government and other government-related entities. The Target Group will apply the amended standard from 1 January 2011. It is not expected to have a material effect on the Target Group's or the Target Company's related party disclosures.
- IFRIC 14 Amendment Prepayments of a Minimum Funding Requirement (effective 1 January 2011) In November 2009, the IASB made an amendment to Interpretation 14 The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction. The amendment removes an unintended consequence of the interpretation related to voluntary prepayments when there is a minimum funding requirement in regard to the entity's defined benefit scheme. It permits entities to recognise an asset for a prepayment of contributions made to cover minimum funding requirements. The amendment is not expected to have a material impact on the Target Group's financial information.
- IFRIC 19 Extinguishing financial liabilities with equity instruments (effective 1 July 2010) IFRIC 19 clarifies the accounting when an entity renegotiates the terms of its debt with the result that the liability is extinguished by the debtor issuing its own equity instruments to the creditor (debt for equity swap). It requires a gain or loss to be recognised in profit or loss which is measured as the difference between the carrying value of the financial liability and the fair value of the equity instruments issued. The Target Group will apply the interpretation from 1 July 2010. It is not expected to have any impact on the Target Group or the Target Company's financial information since it is only retrospectively applied from the beginning of the earliest period presented (1 July 2009) and the Target Group has not entered into any debt for equity swaps since that date.

Other standards, amendments and interpretations issued and available for early adoption but not applied by the Target Group have not been included above as they are not expected to have any material impact on the financial information of the Target Group. The Target Group will adopt these standards during the applicable mandatory annual reporting periods.

#### (iii) Critical accounting estimates and judgments

The preparation of this financial information in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Target Group's accounting policies. The estimates and underlying assumptions are reviewed on an ongoing basis.

Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods. Please refer to Note 2 for more detail on critical accounting estimates and judgements.

#### (d) Basis of consolidation

#### (i) Subsidiaries

Subsidiaries are all those entities (including special purpose entities) over which the Target Group has the power to govern the financial and operating policies, generally accompanying a shareholding of more than one-half of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Target Group controls another entity.

For business combinations under common control the Target Group has elected to apply merger accounting. The consolidated financial statements incorporate the financial statements items of the combining entities or businesses as if they had been combined from the date when the combining entities or businesses first came under the control of the controlling party. The net assets of the combining entities or businesses are consolidated using the existing book values from the controlling parties' perspective. No amount is recognised in respect of goodwill or excess of acquirer's interest in the net fair value of acquiree's identifiable assets, liabilities and contingent liabilities over cost at the time of common control combination, to the extent of the continuation of the controlling party's interest. The consolidated income statement includes the results of each of the combining entities or businesses from the earliest date presented or since the date when the combining entities or businesses first came under the common control, where this is a shorter period, regardless of the date of the common control combination.

Subsidiaries are consolidated from the date on which control is transferred to the Target Group until the date that control ceases. Except for business combinations under common control, the purchase method of accounting is used to account for the acquisition of subsidiaries by the Target Group.

Intercompany transactions, balances and unrealised gains on transactions between Target Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of the impairment of the asset transferred.

Whilst the intercompany balances are eliminated on consolidation, any related foreign exchange gains or losses arising between entities that do not have the same functional currency, will not be eliminated. This is because the Target Group has a real exposure to a foreign currency since one of the entities will need to obtain or sell foreign currency in order to settle the obligation or realise the proceeds received.

Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies of the consolidated entity. Investments in subsidiaries are carried at their acquisition cost in the individual financial statements of the Target Company, less any impairment. On disposal of investments in subsidiaries, the difference between disposal proceeds and the carrying amounts of the investments are recognised in profit or loss.

#### (ii) Joint ventures

Joint ventures are those entities over whose activities the Target Group has joint control, established by contractual arrangement.

#### Jointly controlled assets

Where material, the proportionate interests in the assets, liabilities and expenses of a joint venture operation have been incorporated in the financial statements under the appropriate headings.

#### Joint venture entities

Where material, the interest in a joint venture entity is accounted for in the consolidated financial statements using the equity method and is carried at cost in the Target Company's financial statements. Under the equity method, the share of the profits or losses of the joint venture entities are recognised in the income statement, and the share of movements in reserves is recognised in reserves in the statement of financial position.

Profits or losses on transactions establishing the joint venture and transactions with the joint venture are eliminated to the extent of the Target Group's ownership interest until such time as they are realised by the joint venture on consumption or sale, unless they relate to an unrealised loss that provides evidence of the impairment of an asset transferred.

#### (iii) Transactions with non-controlling interests

The Target Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognised in a separate reserve within equity attributable to owners of the Target Company.

When the Target Group ceases to have control, joint control or significant influence, any retained interest in the entity is remeasured to its fair value with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, jointly controlled entity or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to profit or loss.

If the ownership interest in a jointly-controlled entity or an associate is reduced but joint control or significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income are reclassified to profit or loss, where appropriate.

### (iv) Changes in accounting policy

The Target Group has changed its accounting policy for transactions with non-controlling interests and the accounting for loss of control, joint control or significant influence from 1 January 2010 when a revised IAS 27 Consolidated and Separate Financial Statements became operative. The revisions to IAS 27 contained consequential amendments to IAS 28 Investments in Associates and IAS 31 Interests in Joint Ventures.

Previously transactions with non-controlling interests were treated as transactions with parties external to the Target Group. Disposals therefore resulted in gains or losses in profit or loss and purchases resulted in the recognition of goodwill. On disposal or partial disposal, a proportionate interest in reserves attributable to the subsidiary was reclassified to profit or loss or directly to retained earnings.

Previously when the Target Group ceased to have control, joint control or significant influence over an entity, the carrying amount of the investment at the date control, joint control or significant influence ceased became its cost for the purposes of subsequently accounting for the retained interests as associates, jointly controlled entity or financial assets.

The Target Group has applied the new policy prospectively to transactions occurring on or after 1 January 2010. As a consequence, no adjustments were necessary to any of the amounts recognised prior to 31 December 2009.

#### (e) Financial assets

#### Classification

The Target Group classifies its financial assets in the following categories:

- Loans and receivables
- Available-for-sale financial assets.

The classification depends on the purpose for which the investments were acquired. Management determines the classification of its investments at initial recognition.

# (i) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are presented as current assets, except for those maturing later than twelve months after the reporting date which are presented as non-current assets. Loans and receivables are presented as "trade and other receivables" and "receivables from subsidiaries" on the statement of financial position.

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less impairment. Trade receivables, other than concentrate sales receivables, are due for settlement within 30 days from the date of recognition. Concentrate sales receivables are recognised in accordance with Note 1(p).

#### (ii) Available-for-sale financial assets

The Target Group's investment in equity securities are classified as available-for-sale financial assets. Subsequent to initial recognition, they are measured at fair value and changes therein, other than impairment losses, are recognised as a separate component of equity, net of related income tax. Impairment losses are recognised in the income statement. When an investment is derecognised, the cumulative gain or loss in equity is transferred to the income statement. Fair value is determined by reference to the quoted price at the reporting date. Available-for-sale financial assets are presented as non-current assets unless management intends to dispose of the assets within twelve months after the reporting date.

#### Recognition and derecognition

Regular purchases and sales of investments and other financial assets are recognised on trade-date being the date on which the Target Group commits to purchase or sell the asset. Financial assets are initially recognised at fair value plus transaction costs. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Target Group has transferred substantially all the risks and rewards of ownership. On disposal of a financial asset, the difference between the carrying amount and the sale proceeds is recognised in profit or loss. Any amount in the reserve relating to that asset is transferred to profit and loss as gains or losses from financial assets.

#### Subsequent measurement

Loans and receivables are carried at amortised cost using the effective interest method. Available-for-sale financial assets are subsequently carried at fair value. Please refer to Note 1(k).

Changes in the fair value of monetary securities denominated in a foreign currency and classified as available-for-sale are analysed between translation differences resulting from changes in amortised cost of the security and other changes in the carrying amount of the security. The translation differences are recognised in the income statement and other changes are recognised in equity. Changes in the fair value of other monetary and non-monetary securities classified as available-for-sale are recognised in equity. Interest and dividend income on available-for-sale financial assets are recognised separately in other income.

The Target Group assesses at each balance date whether there is objective evidence that a financial asset or group of financial assets is impaired. Please refer to Note 1(k).

#### (f) Foreign exchange

#### (i) Functional and presentation currency

This financial information is presented in United States dollars ("US\$" or "US dollars"), unless otherwise stated. Items included in the financial information of each of the entities within the Target Group are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The functional currency of the Target Company and the majority of the entities it controls is US dollars.

#### (ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the income statement, except when deferred in equity as qualifying cash flow hedges and qualifying net investment hedges.

Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currency at the exchange rate at the date the fair value was determined. Translation differences on non-monetary assets and liabilities are reported as part of the fair value gain or loss. Translation differences on non-monetary items, such as equities classified as available-for-sale financial assets, are included in the available-for-sale asset reserve in equity.

#### (iii) Group companies

The results and financial position of all entities within the Target Group (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

• assets and liabilities for each statement of financial position presented are translated at the closing rate at the reporting date;

- income and expenses for each income statement are translated at average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions);
- all resulting exchange differences are recognised as a separate component of equity in the foreign currency translation reserve; and
- on consolidation, exchange differences arising from the translation of any net investment in foreign entities, and of borrowings and other currency instruments designated as hedges of such investments, are taken to equity. When a foreign operation is sold a proportionate share of such exchange differences is recognised in the income statement as part of the gain or loss on sale where applicable.

Whilst intercompany balances are eliminated on consolidation, any related foreign exchange gains or losses arising between entities that do not have the same functional currency, will not be eliminated. This is because the Target Group has a real exposure to a foreign currency since one of the entities will need to obtain or sell foreign currency in order to settle the obligation or realise the proceeds received. Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

#### (g) Inventories

Inventories including raw materials, stores and consumables, work in progress and finished goods are stated at the lower of cost and net realisable value. Cost comprises direct materials, direct labour, other direct costs and an appropriate proportion of variable and fixed overhead expenditure, the latter being allocated on the basis of normal operating capacity.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

Costs are assigned to individual items of inventory on the basis of weighted average costs. Cost include the costs of direct materials, overburden removal, mining, processing, labour, related transportation cost to the point of sale, mine rehabilitation costs incurred in the extraction process and other fixed and variable costs directly related to mining activities.

### (h) Income tax

Income tax expense or benefit for the period is the tax payable/recoverable on the current period's taxable income based on the national income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements, and to unused tax losses. Current and deferred tax expense attributable to amounts recognised directly in equity is also recognised directly in equity.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where the company's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial information. However, the deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the reporting date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets and liabilities are recognised for temporary differences at the tax rates expected to apply when the assets are recovered or liabilities are settled, based on those tax rates which are enacted or substantively enacted for each jurisdiction. The relevant tax rates are applied to the cumulative amounts of deductible and taxable temporary differences to measure the deferred tax asset or liability.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred tax liabilities and assets are not recognised for temporary differences between the carrying amount and tax bases of investments in subsidiaries where the Target Company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset when the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity.

Income taxes have not been provided on undistributed overseas earnings of subsidiaries to the extent the earnings are intended to remain indefinitely invested in those entities.

Tax consolidation — Australia

The Australian subsidiaries of the Target Company elected to form an income tax consolidation group as of 16 June 2009 and will be taxed as a single entity from this date. MMG Australia Limited, a wholly-owned subsidiary of the Target Company, was elected to be the head company of the Australian tax consolidated group.

The subsidiaries in the Australian tax consolidated group account for their own current and deferred tax amounts. These tax amounts are measured as if each entity in the tax consolidated group continues to be a stand alone tax payer in its own right. In addition to its own current and deferred tax amounts, the head entity also recognises the current tax liabilities (or assets) and the deferred tax assets arising from unused tax losses and unused tax credits assumed from the other entities in the tax consolidated group.

Assets or liabilities arising under tax funding agreements between entities within the tax consolidated group entities are recognised as amounts receivable from or payable to other entities within the tax consolidated group.

### (i) Leases

Leases of property, plant and equipment where the Target Group has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalised at the lease inception at the lower of the fair value of the leased property and the present value of the minimum lease payments. The corresponding rental obligations, net of finance charges, are included as interest-bearing liabilities. Each lease payment is allocated between the liability and financing expense. The financing expense is charged to the income statement over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. Initial direct costs incurred by the Target Group in negotiating and arranging finance leases are added to the carrying amount of the leased assets and recognised as an expense in profit or loss over the lease term on the same basis as the lease expense. The property, plant and equipment acquired under a finance lease are depreciated over the shorter of the asset's useful life and the lease term. Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the income statement on a straight-line basis over the period of the lease account. Initial direct costs incurred by the Target Group in negotiating and arranging operating leases are recognised in the profit or loss when incurred.

#### (j) Property, plant and equipment

Property, plant and equipment are stated at historical cost less accumulated depreciation and any impairment losses recognised. Historical cost includes expenditure that is directly attributable to the acquisition of the items and costs incurred in bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Cost also includes transfers from equity of any gains/losses on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment and borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset.

Major spare parts and stand-by equipment are carried as property, plant and equipment when an entity expects to use them during more than one period or when they can be used only in connection with an item of property, plant and equipment.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Target Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to the income statement during the financial period in which they are incurred.

Mine property and development assets include costs transferred from exploration and evaluation assets once technical feasibility and commercial viability of an area of interest are demonstrable, and also includes subsequent costs to develop the mine to the production phase.

#### (i) Depreciation and amortisation

Amortisation of mine property and development assets and the major categories of property, plant and equipment are calculated on the basis of units of production unless their useful life is less than that of the mine. Amortisation is based on assessments of proven and probable reserves and a proportion of resources available to be mined by the current production equipment to the extent that such resources are considered to be economically recoverable.

The amortisation of mine, property and development assets commences when the mine starts commercial production. All other items of property, plant and equipment are depreciated over the shorter of the asset's useful life and the life of mine on a straight-line basis, as follows:

- Freehold land and buildings lower of life of mine and 20 years
- Plant and equipment lower of life of mine and 3-5 years;

Gains and losses on disposals are determined by comparing proceeds with asset carrying amounts. These are included in the income statement.

#### (ii) Overburden and waste removal

Overburden and other waste removal costs incurred in the development of a mine before production commences are capitalised as part of the construction of the mine as mine property and development assets. These costs include direct costs and an allocation of relevant overhead expenditure. These costs are subsequently amortised over the life of mine on a units of production basis upon commencement of commercial production.

Overburden and other waste costs incurred once an operation commences production activity (production stripping costs) are capitalised as mine property and development assets. A proportion of the costs is charged to the income statement as an operating cost on the basis of the quantity of ore mined or the quantity of the minerals contained in the ore, as a proportion of the known mineral reserves of the operation.

Changes in the technical and or other economic parameters that impact on reserves will also have an impact on the depreciation and amortisation of capitalised mine property and development assets. These changes are accounted for prospectively from the date of change.

### (iii) Disposal of property, plant and equipment

On disposal of an item of property, plant and equipment, the difference between the disposal proceeds and its carrying amount is recognised in profit or loss within other income.

### (iv) Exploration and evaluation expenditure

Exploration and evaluation costs, including costs of acquiring licences, are capitalised as exploration and evaluation assets on an area of interest basis. Costs incurred before the Target Group has obtained the legal right to explore an area are recognised in the income statement.

Exploration and evaluation assets are classified as part of property plant and equipment. As the assets are not yet ready for use they are not depreciated.

Exploration and evaluation assets are only recognised if the rights to the area of interest are current and either:

- the expenditures are expected to be recouped through successful development and exploitation of the area of interest, or alternatively by its sale; or
- activities in the area of interest have not at the reporting date, reached a stage which permits
  a reasonable assessment of the existence or otherwise of economically recoverable reserves
  and active and significant operations in, or in relation to, the area of interest are continuing.

Exploration and evaluation assets are assessed for impairment if:

- sufficient data exists to determine technical feasibility and commercial viability; and
- facts and circumstances suggest that the carrying amount exceeds the recoverable amount (please see recoverable amount and fair value estimation accounting policy in Note 1(k)).

For the purposes of the impairment testing, exploration and evaluation assets are allocated to cash-generating units to which the exploration activity relates. The cash generating units shall not be larger than the area of interest. Please refer to Note 1(k) for further details.

Once the technical feasibility and commercial viability of the extraction of mineral reserves in an area of interest are demonstrable, exploration and evaluation assets attributable to that area of interest are first tested for impairment and then reclassified to mine property and development assets within property, plant and equipment.

Acquired mineral rights comprise identifiable exploration and evaluation assets including mineral reserves and mineral resources, which are acquired as part of a business combination and are recognised at fair value at date of acquisition. The acquired mineral rights are reclassified as mine property and development from commencement of development and amortised when commercial production commences on a unit of production basis over the estimated economic reserve of the mine.

#### (k) Impairment of assets, recoverable amount and fair value estimation

Non-financial assets and liabilities

Goodwill is allocated to cash-generating units for the purpose of impairment testing. Goodwill and intangible assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment or more frequently if events or changes in circumstances indicate that they might be impaired. Assets that have a finite life including property, plant and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use.

The asset's value in use is the net amount expected to be recovered through the cash flows arising from its continued use and subsequent disposal. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. transaction between knowledgeable, willing parties, less the costs of disposal.

The asset's fair value less costs to sell is the amount obtainable from the sale of an asset or cash-generating unit in an arm's length transaction.

For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or groups of assets (cash-generating units). Non-financial assets other than goodwill that have been impaired are reviewed for possible reversal of impairment at each reporting date. An impairment write-down for an asset other than goodwill is reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment write-down was recognised. The carrying amount of this asset is increased to its recoverable amount, provided that this amount does not exceed the carrying amount that would have been determined (net of any accumulated amortisation or depreciation) had no impairment loss been recognised for the asset in prior years.

Any impairment to the carrying amount of an asset is recognised as an expense in the income statement in the reporting period in which the recoverable amount write down occurs. Where this assessment of impairment indicates a loss in value of the assets of an operation, an appropriate write down is made. No assets are carried in excess of their recoverable amount. The recoverable amount of the Target Group's operations is subject to variation because of changes in internationally determined metal prices and exchange rates.

#### Financial assets and liabilities

The fair value of financial assets and financial liabilities must be estimated for recognition and measurement or for disclosure purposes. The fair value of financial instruments traded in active markets (such as available-for-sale securities), is based on quoted market prices at the balance sheet date. The quoted market price used for financial assets held by the Target Group is the current bid price; the appropriate quoted market price for financial liabilities is the current ask price.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined using recognised valuation techniques. The Target Group uses a variety of methods and makes assumptions that are based on market conditions existing at each balance date. Option contracts are fair valued using an option pricing model and prevailing market quoted economic variables existing at the balance date. Interest rate swaps are fair valued by determining the theoretical gain or loss had the swap contracts been terminated on market at the balance date. Other techniques, such as estimated discounted cash flows, are used to determine fair value for the remaining financial instruments.

The nominal value less estimated credit adjustments of trade receivables and payables are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Target Group for similar financial instruments. The fair values of current financial assets and liabilities carried at amortised cost approximate their carrying amounts.

The Target Group assesses at each reporting date whether there is objective evidence that a financial asset or group of financial assets is impaired.

In the case of loans and receivables, collectability is reviewed on an ongoing basis. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy and default or significant delay in payments in excess of their agreed credit terms are objective evidence that these financial assets are impaired. The carrying amount of loans and receivables is reduced through the use of an impairment provision account which is calculated as the difference between the carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. When the asset becomes uncollectible, it is written off against the provision account.

In the case of equity securities classified as available-for-sale, in addition to the objective evidence of impairment for loans and receivables, a significant or prolonged decline in the fair value of a security below its cost is considered objective evidence in determining whether the security is impaired. If any such evidence exists for available-for-sale financial assets, the cumulative loss — measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in the income statement — is removed from equity and recognised in the income statement. Impairment losses recognised in the income statement on equity instruments classified as available-for-sale are not reversed through the income statement.

# (1) Employee benefits

#### (i) Wages and salaries and annual leave

Liabilities for wages and salaries, including non-monetary benefits and annual leave expected to be settled within twelve months of the reporting date are recognised in provisions in respect of employees' services up to the reporting date and are measured at the amounts expected to be paid, inclusive of on costs, when the liabilities are settled. The expense for non-accumulating sick leave is recognised when the leave is taken and measured at the rates paid or payable.

### (ii) Long-term employee benefits

Long service leave is a period of paid leave granted to an employee in recognition of a long period of service to an employer. The liability for long service leave is recognised in the provision for employee benefits and measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

#### (iii) Defined contribution plans

Defined contribution plans are post-employment benefit plans under which the Target Group pays fixed contributions on a mandatory, contractual or voluntary basis to individual defined contribution superannuation plans for each Director and employee. The contributions are charged as an expense in the income statement when incurred.

#### (iv) Employee bonuses

A provision is recognised for the amount expected to be paid under short-term or long-term bonus entitlements if the Target Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the director or employee and the obligation can be estimated reliably.

#### (m) Workers' compensation

Provision is made for outstanding claims, including any incurred but not reported claims, where any subsidiary self-insures for risks associated with workers' compensation. Outstanding claims are recognised when an incident occurs that may give rise to a claim and are measured at the cost that the entity expects to incur in settling the claims, discounted using a rate that reflects current market assessments of the time value of money and risks specific to the liability. An independent actuary provides the calculation of the value of outstanding claims. Each period the impact of the unwind of discounting is recognised in the income statement as a financing cost.

# (n) Mine rehabilitation, restoration and dismantling obligations

Provisions are made for the estimated cost of rehabilitation, restoration and dismantling relating to areas disturbed during the mine's operations up to reporting date but not yet rehabilitated. Provision has been made in full for all the disturbed areas at the reporting date based on current estimates of costs to rehabilitate such areas, discounted to their present value based on expected future cash flows. The estimated cost of rehabilitation includes the current cost of recontouring, topsoiling and revegetation to meet legislative requirements. Changes in estimates are dealt with on a prospective basis as they arise.

Significant uncertainty exists as to the amount of rehabilitation obligations which will be incurred due to the impact of changes in environmental legislation, and many other factors, including future developments, changes in technology, price increases and changes in interest rates. The amount of the provision relating to mine rehabilitation, restoration and dismantling obligations is recognised at the commencement of the mining project and/or construction of the assets where a legal or constructive obligation exists at that time.

The provision is recognised as a liability, separated into current (estimated costs arising within twelve months) and non-current components based on the expected timing of these cash flows. A corresponding asset is included in mine property and development assets, only to the extent that it is probable that future economic benefits associated with the restoration expenditure will flow to the entity. The capitalised cost of this asset is recognised in property, plant and equipment and is amortised over the life of the mine.

At each reporting date the rehabilitation liability is re-measured in line with changes in discount rates, and timing or amounts of the costs to be incurred. Rehabilitation, restoration and dismantling provisions are adjusted for changes in estimates. Adjustments to the estimated amount and timing of future rehabilitation and restoration cash flows are a normal occurrence in light of the significant judgements and estimates involved. Changes in the liability relating to mine rehabilitation, restoration and dismantling obligations are added to or deducted from the related asset (where it is probable that future economic benefits will flow to the entity), other than the unwinding of the discount which is recognised as a finance cost in the income statement. Changes to capitalised cost result in an adjustment to future depreciation charges.

The provisions referred to above do not include any amounts related to remediation costs associated with unforeseen circumstances.

#### (o) Provisions

Provisions for legal claims and other liabilities are recognised when:

• The Target Group has a present legal or constructive obligation as a result of past events;

- It is more likely than not that an outflow of resources will be required to settle the obligation; and
- The amount has been reliably estimated.

Provisions are not recognised for future operating losses. Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the best estimate of the expenditure required to settle the present obligation at reporting date. The discount rate used to determine the present value reflects current market assessments of the time value of money and the risks specific to the liability. The increase in the provision due to the passage of time is recognised as a financing expense in the income statement. Changes in the estimated timing or amount of the expenditure or discount rate are recognised in profit or loss when the changes arise.

A provision for onerous contracts is recognised when the expected benefits to be derived by the Target Group from a contract is lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract.

#### (p) Sales revenue

Revenue from the sale of goods and disposal of other assets is recognised when persuasive evidence of an arrangement exists, usually in the form of an executed sales agreement, indicating there has been a transfer of risks and rewards to the customer, no further processing is required by the Target Group, the quantity and quality of the goods has been determined with reasonable accuracy, the price is fixed or determinable, and collectability is probable. This is generally when title passes, which for the majority of commodity sales is the bill of lading date when the commodity is delivered for shipment.

Revenue on provisionally priced sales is recognised at the estimated fair value of the total consideration received or receivable. Contract terms for many of the Target Group's zinc, copper, lead, gold, silver and metal in concentrate sales allow for a price adjustment based on a final assay of the goods by the customer to determine content. Recognition of the sales revenue for these commodities is based on the most recently determined estimate of product specifications with a subsequent adjustment made to revenue upon final determination.

The terms of concentrate sales contracts with third parties contain provisional pricing arrangements whereby the selling price for metal in concentrate is based on prevailing spot prices on a specified future date after shipment to the customer. Adjustments to the sales price occur based on movements in quoted market prices up to the date of final settlement. The period between provisional invoicing and final settlement is typically between 60 and 120 days.

The revenue adjustment mechanism embedded within provisionally priced sales arrangements has the character of a commodity derivative. Accordingly, the fair value of the final sales price adjustment is re-estimated continuously and changes in fair value are recognised as an adjustment to revenue. In all cases, fair value is estimated by reference to forward market prices.

Revenue is reported net of discounts and pricing adjustments. Royalties paid and payable are separately reported as expenses.

#### (q) Financing income and expenses

Financing income includes:

- Interest income on cash and cash equivalents; and
- Dividend income.

Interest income is recognised as it accrues using the effective interest method. Dividend income is recognised when the right to receive payment is established.

Financing expenses includes:

- Interest on short-term and long-term borrowings;
- Amortisation of discounts or premiums relating to borrowings;
- Amortisation of ancillary costs incurred in connection with the arrangement of borrowings;
- Finance lease charges; and
- The impact of the unwind of discount on long-term provisions for mine rehabilitation, restoration and dismantling and workers' compensation.

Financing expenses are calculated using the effective interest method. Financing expenses incurred for the construction of any qualifying asset are capitalised during the period of time that is required to complete and prepare the asset for its intended use or sale. Other financing expenses are expensed as incurred.

The capitalisation rate used to determine the amount of financing expenses to be capitalised is the weighted average interest rate applicable to the Target Group's outstanding interest-bearing liabilities.

#### (r) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with an original maturity of three months or less. Bank overdrafts are repayable on demand and are shown within interest-bearing liabilities in current liabilities on the statement of financial position. For the purposes of the statement

of cash flows, cash includes cash on hand and deposits at call which are readily convertible to cash and are subject to an insignificant risk of changes in value, net of any outstanding bank overdrafts which are recognised at their principal amounts.

#### (s) Trade and other payables

These amounts represent liabilities for goods and services provided to the Target Group prior to the end of the financial year which are unpaid. The amounts are non interest-bearing, unsecured and are usually paid within 30 days of recognition. Trade and other payables are initially recognised at fair value, and subsequently carried at amortised cost using the effective interest rate method.

#### (t) Interest-bearing loans and borrowings

Borrowings are initially recognised at fair value, net of transaction costs incurred. The fair value is equal to the principal amount received, adjusted for the difference in the actual interest rate at inception and the market interest rate for that instrument. The market interest rate is determined based on debt issues of comparable companies. The difference between the fair value and the principal amount received is recognised in equity.

Borrowings are subsequently measured at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in the income statement over the period of the borrowings using the effective interest method.

Borrowings are removed from the statement of financial position when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of a financial liability that has been extinguished and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in other income or other expenses.

Borrowings are classified as current liabilities unless the Target Group has an unconditional right to defer settlement of the liability for at least twelve months after the reporting date.

### (u) Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. A financial guarantee contract issued by the Target Group is recognised initially at its fair value less transaction costs that are directly attributable to the issue of the financial guarantee contract. Subsequent to initial recognition, the Target Group measures the financial guarantee contract at the higher of: (i) the amount determined in accordance with IAS 37 "Provisions, Contingent Liabilities and Contingent Assets"; and (ii) the amount initially recognised less, when appropriate, cumulative amortisation recognised in accordance with IAS 18 "Revenue".

# (v) Issued capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds. Incremental costs directly attributable to the issue of new shares or options, for the acquisition of a business, are included in the cost of the acquisition as part of the purchase consideration.

#### (w) Dividends payable

Provision is made for the amount of any dividend declared, being appropriately authorised and no longer at the discretion of the entity, on or before the end of the financial period not distributed at the reporting date.

#### (x) Goods and services tax

Revenues, expenses and assets are recognised net of the amount of goods and services tax ("GST"), unless the GST incurred is not recoverable from taxation authorities. In this case it is recognised as part of the cost of acquisition of the asset or as part of an item of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, taxation authorities is included with other receivables or payables in the statement of financial position.

Cash flows are included in the statement of cash flows inclusive of GST. The GST components of cash flows arising from investing and financing activities which are recoverable from, or payable to, taxation authorities are classified as operating cash flows. Commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to taxation authorities. The net GST payable/receivable is remitted to/refunded by the appropriate tax body in accordance with legislative requirements.

# (y) Operating segments

Operating segments are components of the Target Group about which separate financial information is available that is evaluated regularly by the Target Group's Chief Operating Decision Maker and the Executive Committee in deciding how to allocate resources and in assessing performance.

Segment information that is evaluated by key management is prepared in conformity with the accounting policies adopted for preparing the financial information of the Target Group.

The division of the Target Group's results and assets into segments has been ascertained by reference to direct identification of assets and revenue/cost centres and where interrelated segment costs exist, an allocation has been calculated on a pro rata basis of the identifiable assets and/or costs.

The assets and liabilities of the reportable segments do not include receivables and payables to related parties. It includes deferred tax assets and liabilities that are attributable to the segments. The additions to mine, property, property, plant and equipment as presented in the segment note are measured on an accruals basis.

#### (z) Business combinations

The purchase method of accounting is used to account for all business combinations, other than business combinations involving entities or businesses under common control, regardless of whether equity instruments or other assets are acquired. Cost is measured as the fair value of the assets given, shares issued or liabilities and contingent liabilities assumed at the date of exchange plus costs directly attributable to the acquisition. Where equity instruments are issued in an acquisition, the fair value of the instruments is their published market price as at the date of exchange unless, in rare circumstances, it can be demonstrated that the published price at the date of exchange is an unreliable indicator of fair value and that other evidence and valuation methods provide a more reliable measure of fair value. Transaction costs arising on the issue of equity instruments are recognised directly in equity.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest. The excess of the cost of acquisition over the fair value of the Target Group's share of the identifiable net assets acquired is recorded as goodwill. If the cost of acquisition is less than the fair value of the net assets of the subsidiary acquired, the difference is recognised directly in the income statement, but only after a reassessment of the identification and measurement of the net assets acquired.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions.

Non-controlling interests are that part of the net results of operations and of net assets of a subsidiary attributable to the interests which are not owned directly or indirectly by the Target Group. They are measured at the minorities' share of fair value of the subsidiaries' identifiable assets and liabilities at the date of acquisition by the Target Group and the minorities' share of changes in equity since the date of acquisition, except when the minorities' share of losses in a subsidiary exceeds its interests in the equity of that subsidiary.

#### (aa) Rounding of amounts

Amounts in the financial report have been rounded off in millions of US dollars to one decimal place except where rounding to the nearest one thousand dollars is required.

#### 2 Critical accounting estimates and judgements

Estimates and judgements used in developing and applying the Target Group's accounting policies are continually evaluated and are based on experience and other factors, including expectations of future events that may have a financial impact on the entity and that are believed to be reasonable under the circumstances. The Target Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and underlying assumptions are reviewed on an ongoing basis. The critical estimates and judgements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

#### (a) Critical judgements in applying the Target Group's accounting policies

#### Functional currency

An entity's functional currency is the currency of the primary economic environment in which the entity operates in accordance with accounting policy in Note 1(f). Determination of an entity's functional currency requires management judgement when considering a number of factors including the currency that mainly influences sales prices, costs of production, and competitive forces and regulations which impact sales prices. In addition, consideration must be given to the currency in which financing and operating activities are undertaken. Applying the principles described above, management have come to the conclusion that the functional currency of the majority of subsidiaries within the Target Group is US dollars based on the following factors:

- Sales are predominantly denominated in US dollars;
- A significant portion of costs are denominated in US dollars;
- Debt and finance costs are denominated in US dollars; and
- Senior management and Board reporting is conducted in US dollars.

### (b) Critical accounting estimates and assumptions

# (i) Mine rehabilitation, restoration and dismantling obligations

Provision is made for the anticipated costs of future restoration, rehabilitation and dismantling of mining areas from which natural resources have been extracted in accordance with the accounting policy in Note 1(o). These provisions include future cost estimates associated with reclamation, plant closures, waste site closures, monitoring, demolition, decontamination, water purification and permanent storage of historical residues. These future cost estimates are discounted to their present value. The calculation of these provision estimates requires assumptions such as application of environmental legislation, plant closure dates, available technologies, engineering cost estimates and discount rates. A change in any of the assumptions used may have a material impact on the carrying value of mine rehabilitation, restoration and dismantling provisions.

### (ii) Ore reserves and resources estimates

The estimated quantities of economically recoverable reserves and resources are based upon interpretations of geological and geophysical models and require assumptions to be made regarding factors such as estimates of short and long-term exchange rates, estimates of short and long-term commodity prices, future capital requirements and future operating performance. Changes in reported reserves and resources estimates can impact the carrying value of property, plant and equipment, provisions for mine rehabilitation, restoration and dismantling obligations, the recognition of deferred tax assets, as well as the amount of depreciation and amortisation charged to the income statement.

# (iii) Recoverability of assets

The recoverable amount of each 'cash-generating unit' is determined as the higher of the asset's fair value less costs to sell and its value in use in accordance with the accounting policy in Note 1(k). These value in use calculations require the use of estimates and assumptions including discount rates, exchange rates, commodity prices, future capital requirements and future operating performance.

#### (iv) Determination of fair values in a business combination

The Target Group has applied estimates and judgements in order to determine the fair value of assets acquired and liabilities and contingent liabilities assumed by way of a business combination.

The assets, liabilities and contingent liabilities recognised at acquisition date are recognised at fair value. In determining fair value the Target Group has utilised valuation methodologies including discounted cash flow analysis. The assumptions made in performing this valuation include assumptions as to discount rates, foreign exchange rates, commodity prices, the timing of development, capital costs, and future operating costs. Any significant change in key assumptions may cause the acquisition accounting to be revised including recognition of goodwill or a discount on acquisition. Additionally, the determination of the acquirer and the acquisition date also require significant judgement to be made by the Target Group.

### (v) Income tax, deferred tax assets and liabilities

The Target Group is subject to income taxes of Singapore and jurisdictions where it has operations including Australia, Laos and Canada. Significant judgement is required in determining the group provision for income taxes. There are transactions and calculations undertaken during the ordinary course of business for which the ultimate tax determination is uncertain. The Target Group recognises provisions for potential tax issues based on estimates of amounts that were initially recorded. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the current and deferred tax provision in the period in which the determination is made.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable profits will be available to utilise those temporary differences and losses, and the tax losses continue to be available having regard to the nature and timing of their origination and compliance with the relevant tax legislation associated with their recoupment. US\$104.2 million and US\$55.2 million of deferred tax assets are unbooked as at 31 December 2009 and 30 June 2010 respectively, based on management's long-run forecasts and operations under care and maintenance.

#### 3 **Operating segments**

Management has determined the operating segments based on reports reviewed by the Executive Committee. The Target Group's operations are managed on a site-by-site basis and the operating segments were as noted below. The Target Group has built a portfolio of exploration and development projects in Australia, Canada, Tunisia, Sweden, Mexico, Laos, Thailand, Cambodia, Indonesia and the People's Republic of China (the "PRC"). These exploration and development projects, including the Dugald River Project and the Canadian Project, are not required to be disclosed as a separate segment at this stage, and accordingly these amounts are included within 'other operations'. Other operations also include the Avebury Mine, which remains on care and maintenance and other head office entities.

#### (a) Segments

# Century Mine

The Century Mine is an open pit zinc and lead mine located approximately 250 kilometres north of Mount Isa, near to the Gulf of Carpentaria in Queensland.

# Sepon Mines

The Sepon operations include an open pit copper mine and open-cut gold mines which are located approximately 40 kilometres north of the town of Sepon, in Savannakhet Province of Lao People's Democratic Republic ('Laos').

# Golden Grove Mines

Golden Grove is a volcanic hosted massive sulphide base and precious metals deposit of zinc, copper, lead, silver and gold, located approximately 450 kilometres north-east of Perth and 280 kilometres east of Geraldton in Western Australia.

#### Rosebery Mine

The Rosebery Mine is a medium-scale underground zinc, lead, silver, gold and copper mine located on the west coast of Tasmania in Australia.

#### (b) Geographical areas

Although the Target Group's divisions are managed on a site-by-site basis, they operate in two main geographical areas:

Australia

The country of the Target Group's Head Office and the area in which the Century, Golden Grove and Rosebery mines operate. It also includes the Avebury Mine, Dugald River Project, corporate head office and shared service operations.

Asia

Comprises the operations associated with the Sepon segment in Laos.

	Century Mine (US\$m)	Sepon Mines (US\$m)	Golden Grove Mines (US\$m)	Rosebery Mine (US\$m)	Other operations (US\$m)	Total (US\$m)
For the period ended 31 December 2009						
Sales revenue — external revenue Sales revenue — related parties	233.8	281.4	159.2	151.5 		825.9 26.9
Total revenue Other income	247.5 0.7	287.8	166.0	151.5	_	852.8 0.7
Costs of goods sold Depreciation and amortisation	(114.8)	(93.1)	(73.7)	(68.3)	_	(349.9)
expenses Freight expenses Other expenses	(97.9) (26.2) (17.7)	(22.2) (15.4) (15.9)	(20.7) (9.8) (6.1)	(16.0) (3.6) (3.5)	(0.1)	(158.3) (55.1) (99.9)
(Loss)/profit before net financing expenses and income tax	(8.4)	141.2	55.7	60.1	(58.3)	190.3
Financing income Financing expenses Net foreign exchange (loss)/gain	(9.0) (3.2)	(2.4) (2.1)	(5.9) (4.8)	(0.4) (1.8)		1.1 (23.2) 1.6
Net financing (expenses)/income	(12.2)	(4.5)	(10.7)	(2.2)	9.1	(20.5)
(Loss)/profit before income tax Income tax benefit	(20.6)	136.7	45.0	57.9	(49.2)	169.8 10.9
Profit for the period						180.7
Additions to property, plant & equipment	104.0	22.7	<u>16.0</u>	<u>14.4</u>	<u>29.8</u>	186.9
As at 31 December 2009 Total assets	640.6	654.4	<u>293.2</u>	<u>244.8</u>	290.8	2,123.8
Total liabilities	447.8	<u>259.0</u>	212.7	24.5	628.1	1,572.1
Net assets	192.8	395.4	80.5	220.3	(337.3)	551.7
Geographical areas			Austr (US		Asia (US\$m)	Total (US\$m)
Sales to external customers Property, plant and equipment				65.0 20.1	287.8 473.6	852.8 1,493.7

	Century Mine (US\$m)	Sepon Mines (US\$m)	Golden Grove Mines (US\$m)	Rosebery Mine (US\$m)	Other operations (US\$m)	Total $(US\$m)$
For the period ended 30 June 2009 (unaudited) Sales revenue — external revenue	26.4	35.9	13.4	29.5	_	105.2
Sales revenue – related parties						
Total revenue Other income	26.4	35.9	13.4	29.5	_	105.2
Costs of goods sold Depreciation and amortisation	(10.2)	(18.7)	(7.2)	(10.6)	_	(46.7)
expenses	(19.1)	(4.3)	(2.0)	(1.7)		(24.2)
Freight expenses Other expenses	(2.0) $(2.3)$	(2.2)	(0.8) $(2.1)$	(0.7) $(0.3)$		(5.7) (9.6)
(Loss)/profit before net financing expenses and income tax	(7.2)	10.7	1.3	16.2	(2.0)	19.0
Financing income	_	_	_	_	_	_
Financing expenses	(1.2)	0.2	(0.2)	(0.1)	, ,	(3.0)
Net foreign exchange gain/(loss)	0.2	(0.5)	(0.5)	(1.5)	(2.5)	(4.8)
Net financing expenses	(1.0)	(0.3)	(0.7)	(1.6)	(4.2)	(7.8)
(Loss)/profit before income tax Income tax expense	(8.2)	10.4	0.6	14.6	(6.2)	11.2 (2.0)
Profit for the period						9.2
Additions to property, plant & equipment	<u>13.8</u>	4.8	1.4	1.7	0.1	21.8
As at 30 June 2009 (unaudited) Total assets	626.3	510.6	234.0	223.1	492.0	2,086.0
Total liabilities	517.6	218.3	<u>198.7</u>	45.9	642.5	1,623.0
Net assets	108.7	292.3	35.3	<u>177.2</u>	(150.5)	463.0
Geographical areas			Austr (US		Asia (US\$m)	Total $(US\$m)$
Sales to external customers Property, plant and equipment				69.3 83.7	35.9 418.6	105.2 1,502.3

	Century Mine (US\$m)	Sepon Mines (US\$m)	Golden Grove Mines (US\$m)	Rosebery Mine (US\$m)	Other operations (US\$m)	Total $(US\$m)$
For the period ended 30 June 2010						
Sales revenue — external parties Sales revenue — related parties	235.0 22.1	274.1 34.6	175.2	96.9 —		781.2 63.5
Total revenue Other income	257.1 0.3	308.7	182.0	96.9	1.9	844.7 4.1
Costs of goods sold Depreciation and amortisation	(85.2)	(107.8)	(86.3)	(54.2)		(333.5)
expenses Freight expenses Other expenses	(80.5) (22.3) (23.5)	(9.5) (3.6) (5.2)	(20.1) (6.8) (7.1)	(12.6) (2.6) (4.3)	_	(124.0) (35.3) (76.1)
Profit/(loss) before net financing expenses and income tax	45.9	182.6	63.6	23.2	(35.4)	279.9
Financing income Financing expenses	— (7.2)	0.3 (1.5)	— (4.3)	(0.3)	` ′	1.8 (17.8)
Net foreign exchange gain/(loss)	2.9	(0.5)	1.9	3.5	(15.2)	(7.4)
Net financing (expenses)/income	(4.3)	(1.7)	(2.4)	3.2	(18.2)	(23.4)
Profit/(loss) before income tax Income tax expense	41.6	180.9	61.2	26.4	(53.6)	256.5 (22.5)
Profit for the period						234.0
Additions to property, plant & equipment	73.0	28.9	25.1	7.6	0.2	134.8
As at 30 June 2010 Total assets	780.7	588.2	364.4	<u>278.9</u>	319.1	2,331.3
Total liabilities	495.8	270.5	<u>298.7</u>	<u>85.0</u>	410.0	1,560.0
Net assets	<u>284.9</u>	317.7	65.7	<u>193.9</u>	(90.9)	<u>771.3</u>
Geographical areas			Austr (US		Asia (US\$m)	Total (US\$m)
Sales to external customers Property, plant and equipment				36.0 66.5	308.7 423.8	844.7 1,490.3

### 4 Acquisition of business

#### Minerals and Metals Group

The Minerals and Metals Group ("MMG") was formed on 16 June 2009, from the acquisition of certain companies from OZ Mineral Limited ("OZL") by a wholly-owned subsidiary of the Target Company, Album Investment Private Limited ("Album Investment"). The acquisition resulted in the formation of MMG creating a leading minerals and metals business with mining operations in Australia and Laos and exploration and development projects in Australia, South-East Asia, the PRC and North America. Consistent with the sale agreement on a 'cash free, debt free' basis and based on normal levels of working capital, the actual amount paid by the Target Group at completion of the transaction of US\$661.2 million was subject to certain adjustments related to the working capital, net debt and agreed tax liabilities of the assets acquired.

The assets acquired by the Target Group are listed below:

- Century mine
- Sepon Copper and Sepon Gold mines
- Golden Grove mines
- Rosebery mine
- Avebury mine (which was placed under care and maintenance in March 2009)
- The High Lake and Izok Lake projects
- The Dugald River project
- Certain other exploration and development assets

These assets were involved in mining of zinc, copper, lead, gold and silver and various exploration and development projects.

The values of assets, liabilities and contingent liabilities recognised on acquisition are their fair values at the date of acquisition. Where the initial accounting for a business combination is incomplete, accounting standards permit up to twelve months for the accounting to be finalised following the acquisition date if any subsequent information provides better evidence of the item's fair value at the date of acquisition. Please refer to Note 1(z) for the accounting policy for business combinations.

The Target Group undertook a detailed review to determine the fair value of assets, liabilities and contingent liabilities recognised on the date of acquisition. This review included engaging an external third party to determine the fair values of the property, plant and equipment acquired, resulting in the reallocation of mineral rights within CGUs at the date of acquisition.

The details of the fair values at the date of acquisition are set out below:

	Acquirees carrying amount (US\$m)	Fair value Adjustments (US\$m)	Fair value (US\$m)
Cost of acquisition			
Cash paid			661.2
Acquisition costs			16.0
Total cost of acquisition			677.2
Fair values of assets and liabilities			
Cash and cash equivalents	28.5	_	28.5
Trade and other receivables	0.2		0.2
Inventories	172.2	15.7	187.9
Other assets	20.6	_	20.6
Property, plant and equipment	1,775.2	(308.3)	1,466.9
Deferred tax assets	22.7	(5.6)	17.1
Trade and other payables	(28.3)	_	(28.3)
Current tax payable	(64.9)	_	(64.9)
Provisions	(205.3)		(205.3)
Deferred tax liabilities		(5.8)	(5.8)
Interest-bearing liabilities	(703.9)		(703.9)
Fair value of assets and liabilities before			
non-controlling interest	1,017.0	(304.0)	713.0
Less non-controlling interest			(35.8)
Fair value of assets and liabilities			677.2
Cash flow attributable to acquisition of MMG			
Cash paid			661.2
Acquisition costs			16.0
Net cash acquired			(28.5)
Net cash outflow			648.7

### Pro forma results

If the acquisition had occurred on 8 April 2009, consolidated revenue and consolidated profit for the period ended 31 December 2009 would have been US\$1,096.4m and US\$232.3m respectively. The pro forma financial information does not necessarily represent what would have occurred if the transaction had taken place on 8 April 2009, and should not be taken as representative of the Target Group's future consolidated results of operations or financial position. The pro-forma information does not include all costs relating to the integration of MMG and the Target Group.

#### 5 Revenue

	Period ended 31 December 2009 (US\$m)	Period ended 30 June 2009 (US\$m) (unaudited)	Period ended 30 June 2010 (US\$m)
Sales revenue — External parties Sales revenue — Related parties	825.9 26.9	105.2	781.2 63.5
Total revenue	<u>852.8</u>	105.2	844.7

### 6 Other income

	Period ended 31 December 2009 (US\$m)	Period ended 30 June 2009 (US\$m) (unaudited)	Period ended 30 June 2010 (US\$m)
Other income	0.7		4.1
Total other income	0.7		4.1

# 7 Expenses

Profit before income tax includes the following specific expenses:

	Period ended 31 December 2009	Period ended 30 June 2009	Period ended 30 June 2010
	(US\$m)	(US\$m)	(US\$m)
	, ,	(unaudited)	
Changes in inventories of finished goods			
and work in progress	31.1	3.8	38.5
Raw materials and other direct costs	(10.1)	(1.5)	(5.8)
Employee benefit expenses	(106.9)	(9.7)	(109.2)
Contracting and consulting expenses	(27.2)	(8.9)	(29.1)
Royalties expense	(37.0)	(5.7)	(35.1)
Energy costs	(74.3)	(10.0)	(73.5)
Stores and consumables costs	(115.4)	(14.0)	(108.3)
Exploration and evaluation expenditure	(10.1)	(0.7)	(11.0)
Total cost of goods sold	(349.9)	(46.7)	(333.5)
Depreciation and amortisation expenses	(158.3)	(24.2)	(124.0)
Freight expenses	(55.1)	(5.7)	(35.3)
Auditor's remuneration	(0.8)	_	(0.6)
Contributions to defined contribution plans	(5.9)	(0.7)	(5.2)
Operating lease expenses	(11.9)	(1.0)	(3.7)
Other expenses	(81.3)	(7.9)	(66.6)
Total other expenses	(99.9) 	(9.6)	(76.1)
Total expenses	(663.2)	(86.2)	(568.9)

# 8 Net financing expenses

	Period ended 31 December 2009 (US\$m)	Period ended 30 June 2009 (US\$m) (unaudited)	Period ended 30 June 2010 (US\$m)
Financing income			
Interest income from cash and			
cash equivalents	1.1		1.8
Total financing income	1.1		1.8
Financing expenses			
Interest and finance charges paid/payable —			
wholly repayable within 5 years	(11.7)	(1.7)	(8.2)
Interest and finance charges paid/payable —			
not wholly repayable within 5 years	(5.3)	(0.7)	(3.7)
Unwind of discount on long-term provisions	(6.2)	(0.6)	(5.9)
Total financing expenses	(23.2)	(3.0)	(17.8)
Net foreign exchange gain/(loss)	1.6	(4.8)	(7.4)
Net financing expenses	(20.5)	(7.8)	(23.4)

# 9 Individually significant items

There were no individually significant items for the Target Group during the periods ended 30 June 2009 and 2010. The individually significant items for the Target Group during the period ended 31 December 2009 were as follows:

	Pre-tax (US\$m)	Tax impact (US\$m)	Post-tax (US\$m)
Expenses incurred in relation to the Century pipeline failure	54.8	(16.5)	38.3
Total of individually significant items	54.8	(16.5)	38.3

On 5 October 2009, Century Mine detected a failure in the pipeline which transports concentrates in a slurry form from the mine operations at Lawn Hill to the dewatering and port facilities at Karumba on the Gulf of Carpentaria. Once the failure was detected, concentrate production was immediately shutdown at the mine. Following repairs and installation of a bypass, the pipeline was recommissioned and production resumed on 23 December 2009. During the period of the shutdown, the Target Group incurred post-tax expenses of US\$38.3 million in relation to contractor and consultants, stores and consumables, property, insurance and other costs of idle-capacity. The individually significant items are included in the income statement in the cost of goods sold, depreciation and amortisation expenses and other expenses accounts.

#### 10 Income tax

### (a) Income tax benefit/(expense) recognised in the income statement

	Period ended 31 December 2009 (US\$m)	Period ended 30 June 2009 (US\$m) (unaudited)	Period ended 30 June 2010 (US\$m)
Current income tax (expense)/benefit	(43.3)	3.6	(52.1)
Deferred income tax benefit/(expense)	54.2	(5.6)	29.6
Income tax benefit/(expense)	<u>10.9</u>	(2.0)	(22.5)
Deferred income tax benefit/(expense) included in income tax benefit/(expense) comprises:			
Increase/(decrease) in deferred tax assets	48.4	(5.6)	29.6
Decrease in deferred tax liabilities	5.8		
Total deferred income tax benefit/(expense)	54.2	(5.6)	29.6

# (b) Numerical reconciliation of income tax benefit/(expense) to pre-tax net profit

	Period ended 31 December 2009 (US\$m)	Period ended 30 June 2009 (US\$m) (unaudited)	Period ended 30 June 2010 (US\$m)
Total profit before income tax	169.8	11.2	256.5
Income tax expense at the prima facie tax rate of 17%  Tax effect of amounts which are not (deductible)/taxable in calculating taxable income:	(28.9)	(1.9)	(43.6)
Non-taxable amounts	11.2	0.8	(1.0)
Difference in overseas tax rates	(25.6)	(0.9)	(39.4)
Previously unrecognised deferred tax assets	54.2		61.5
Income tax benefit/(expense)	10.9	(2.0)	(22.5)

# (c) Deferred tax assets and liabilities

The deferred tax assets and liabilities for the Target Group are set out in the table below.

	Opening balance (US\$m)	Acquired through business combination (US\$m)	Recognised in profit or loss (US\$m)	Closing balance (US\$m)
For the period ended 31 December 2009				
Deferred tax assets Property, plant and equipment Tax losses		17.1 ——	34.6 13.8	51.7
Set-off of deferred tax liabilities		17.1 	48.4	65.5
Net recognised deferred tax assets		<u>17.1</u>	48.4	65.5
Deferred tax liabilities Inventories Set-off against deferred tax assets		(5.8)	5.8	
Net recognised deferred tax liabilities		(5.8)	5.8	
For the period ended 30 June 2010 Deferred tax assets				
Property, plant and equipment Provisions Tax losses	51.7 — 13.8	_ 	(5.6) 49.0 (13.8)	46.1 49.0
Set-off of deferred tax liabilities	65.5		29.6 	95.1
Net recognised deferred tax assets	65.5		<u>29.6</u>	95.1
Deferred tax liabilities Inventories Set-off against deferred tax assets				
Net recognised deferred tax liabilities				

### (d) Movement in current income tax liabilities

	Period ended	Period ended
	31 December	30 June
	2009	2010
	(US\$m)	(US\$m)
At the beginning of the period	_	59.6
Acquisition through business combination (Note 4)	64.9	_
Income tax paid	(48.6)	(57.5)
Income tax expense	43.3	52.1
At the end of the period	59.6	54.2

## (e) Unrecognised deferred tax assets

Deferred tax assets have not been recognised in respect of the following items:

	As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Deductible temporary differences	104.2	55.2
Total unrecognised deferred tax assets	<u>104.2</u>	55.2

The Target Group only recognises deferred tax assets for deductible temporary differences and unused tax losses if it is probable that future taxable amounts will be available to utilise those temporary differences and tax losses. Management will continue to assess the recognition of deferred tax assets in future reporting periods.

### 11 Dividends

During the Relevant Periods or subsequent to 30 June 2010 until the date of this report, the Target Company did not pay or declare any dividends.

# 12 Cash and cash equivalents

	As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Cash at bank and on hand	107.3	39.9
Deposits at call	144.0	94.6
Deposits held with intermediate parent		200.0
Total cash and cash equivalents	251.3	334.5

Please refer to Note 24 for details of cash and cash equivalents.

# 13 Trade and other receivables

	As at	As at	
	31 December	30 June	
	2009	2010	
	(US\$m)	(US\$m)	
Current			
Trade receivables	88.5	44.8	
Receivables from related parties	1.4	3.8	
Other receivables	0.1	2.2	
Total current trade and other receivables	90.0	50.8	

As at each reporting date, all trade and other receivables were aged less than six months.

## 14 Inventories

	As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Current		
Stores and consumables	58.8	67.7
Less impairment	(14.0)	(12.3)
	44.8	55.4
Finished goods	40.5	76.1
Work in progress	92.2	84.1
Total current inventories	177.5	215.6
Non-current		
Stores and consumables	25.8	16.3
Less impairment	(2.3)	(3.2)
	23.5	13.1
Work in progress		11.2
Total non-current inventories	23.5	24.3
Total inventories	201.0	239.9

Total finished goods and work in progress ('WIP') of the Target Group are valued at cost, there was no finished goods or WIP valued at net realisable value at 31 December 2009 or 30 June 2010.

During the period there was no inventory impairment recognised by the Target Group.

## 15 Financial and other assets

	Target (	Group
	As at 31 December 2009	As at 30 June 2010
	(US\$m)	(US\$m)
Current		
Prepayments	12.0	20.1
Available-for-sale financial assets (a)	0.8	94.2
Other assets	9.5	5.8
Other assets		
Total current financial and other assets	<u>22.3</u>	120.1
Non-current		
Other assets		0.6
Total non-current financial and other assets		0.6
	Target Co	ompany
	As at	As at
	31 December	30 June
	2009	2010
	(US\$m)	(US\$m)
Current		
Other receivables and prepayments	<u>2.1</u>	2.5
Non-current		
Receivables from subsidiaries (b)	710.5	709.9
Investment in subsidiaries (c)	337.0	337.0
(-)		
Total non-current financial and other assets	1,047.5	1,046.9

- (a) The available-for-sale financial assets represent equity securities listed outside Hong Kong and the balance represents its market value as at 30 June 2010.
- (b) Receivables from subsidiaries are unsecured, interest bearing and not repayable in the next twelve months. The weighted average interest rate as at 31 December 2009 and 30 June 2010 was 2.07%.

# (c) Unquoted investments of the Target Company in subsidiaries comprise the following:

	Country of		Class	Equity holding as at 31 December	Equity holding as at 30 June
	Country of incorporation	Principal activity	Class of share	2009 %	2010
		<b>.</b>			
Directly held:					
Album Investment Private Limited	Singapore	Investment holding	Ordinary	100	100
Indirectly held:					
Allegiance Exploration Pty Ltd	Australia	Non-operating entity	Ordinary	100	100
Allegiance Metals Pty Ltd	Australia	Mineral exploration and production	Ordinary	100	100
Allegiance Mining Operations Pty Ltd	Australia	Non-operating entity	Ordinary	100	100
Allegiance Mining Processing Pty Ltd	Australia	Non-operating entity	Ordinary	100	100
Allegiance Mining Pty Ltd	Australia	Investment holding	Ordinary	100	100
Aoning Minerals Company Limited	the PRC	Mineral exploration	Ordinary	80	80
Chalcocite Pty Ltd	Australia	Investment holding	Ordinary	100	100
Champa Mining Laos Pte Ltd	Singapore	Non-operating entity	Ordinary	100	100
Eastern Pty Ltd	Australia	Non-operating entity	Ordinary	100	100
Geothermal Energy Tasmania Holdings Pty Ltd	Australia	Non-operating entity	Ordinary	100	100
Geothermal Energy Tasmania Pty Ltd	Australia	Non-operating entity	Ordinary	100	100
Geothermal Energy Tasmania West Coast Pty Ltd	Australia	Non-operating entity	Ordinary	100	100
Investment Co Pty Ltd	Australia	Provision of infrastructure	Ordinary	100	100
Ionex Pty Ltd	Australia	Non-operating entity	Ordinary	100	100
Lane Xang Minerals Limited	Laos	Mineral exploration and production	Ordinary	90	90
Lupin Mines Inc.	Canada	Mineral exploration	Ordinary	100	100
MMG Australia Limited	Australia	Mineral exploration and production, management and employment service	Ordinary	100	100
MMG Canada Exploration Inc.	Canada	Mineral exploration	Ordinary	100	100
MMG Canada Management Inc.	Canada	Investment holding	Ordinary	100	100
MMG Canada Operations Inc.	Canada	Mineral exploration	Ordinary	100	100
MMG Century Limited	Australia	Mineral exploration	Ordinary	100	100
·		and production	·		
MMG Exploration Pty Ltd	Australia	Investment holding	Ordinary	100	100
MMG Exploration Singapore (Number One) Pte Ltd	Singapore	Investment holding	Ordinary	100	100

# FINANCIAL INFORMATION OF THE TARGET GROUP

				Equity	Equity
				holding	holding
				as at 31	as at 30
				December	June
	Country of		Class	2009	2010
	incorporation	Principal activity	of share	%	%
Indirectly held:	g.	T ( (1.11)	0 1:	100	100
MMG Exploration Singapore (Number Two) Pte Ltd	Singapore	Investment holding	Ordinary	100	100
MMG Golden Grove Pty Ltd	Australia	Mineral exploration and production	Ordinary	100	100
MMG Insurance Singapore Pte Ltd	Singapore	Insurance services	Ordinary	100	100
MMG International Enterprises Pty Ltd	Australia	Investment holding	Ordinary	100	100
MMG Laos Holdings Limited	Cavman Islands	Investment holding	Ordinary	100	100
MMG Management Pty Ltd	Australia	Treasury and management	Ordinary	100	100
		services			
MMG Netherlands Holdings Cooperative UA	Netherlands	Investment holding	Ordinary	100	100
MMG Resources Inc.	Canada	Mineral exploration	Ordinary	100	100
MMG Super Metals Pty Ltd	Australia	Investment holding	Ordinary	100	100
MMG Swedish Enterprises AB	Sweden	Non-operating entity	Ordinary	100	100
MMG USA Limited	USA	Management services and investment	Ordinary	100	100
		holding			
MMG USA Exploration LLC (USA)	USA	Mineral exploration	Ordinary	100	100
Navakun Mining Co. Ltd	Thailand	Mineral exploration	Ordinary	100	100
PCML SPC Pty Ltd	Australia	Investment holding	Ordinary	100	100
PPTV Pty Ltd	Australia	Non-operating entity	Ordinary	100	100
PT Bintang Sumberdaya (i)	Indonesia	Mineral exploration	Ordinary	_	_
PT Explorasi Indonusa Jaya (i)	Indonesia	Mineral exploration	Ordinary	_	_
PT Gunung Mulia Minerals (i)	Indonesia	Mineral exploration	Ordinary	_	_
PT Multi Mineral Explorasi (i)	Indonesia	Mineral exploration	Ordinary	_	_
PT Oxindo Exploration (i)	Indonesia	Mineral exploration	Ordinary		
PT Panah Emas (i)	Indonesia	Mineral exploration	Ordinary	_	_
Southern Laos Mining Pte Ltd	Singapore	Non-operating entity	Ordinary	100	100
SPC (Nominees) Pty Ltd	Australia	Non-operating entity	Ordinary	100	100
SPC 1 Pty Ltd	Australia	Investment holding	Ordinary	100	100
SPC 2 Pty Ltd	Australia	Investment holding	Ordinary	100	100
Wiluna Exploration Pty Ltd	Australia	Mineral exploration	Ordinary	_	100
Zeemain Pty Ltd	Australia	Investment holding	Ordinary	50	50

<sup>(</sup>i) These Indonesian entities are ultimately controlled by Album Resources Private Limited via a corporation agreement with the Directors and shareholders of the entities.

All subsidiaries are carried at cost.

PricewaterhouseCoopers network firms have been appointed as auditor of all subsidiaries for each of the relevant periods.

# 16 Property, plant and equipment

	Freehold land and buildings	Plant and equipment (US\$m)	Mine property and equipment (US\$m)	Exploration and evaluation (US\$m)	Construction in progress (US\$m)	Total property plant and equipment (US\$m)
For the period ended 31 December 2009						
Cost At the beginning of the period Acquisitions through business	_	_	_	_	_	_
combination	114.7	828.8	438.4	2.9	82.1	1,466.9
Additions	21.4	26.5	130.7	1.0	7.3	186.9
Disposals	_	(1.8)	_	_	_	(1.8)
Transfers	8.7	18.1	18.7		(45.5)	
At the end of the period	144.8	871.6	587.8	3.9	43.9	1,652.0
Accumulated depreciation						
At the beginning of the period	_	_	_	_	_	_
Depreciation and amortisation						
expense	11.1	90.9	56.3			158.3
At the end of the period	11.1	90.9	56.3			158.3
Net book value at end of the period	133.7	780.7	531.5	3.9	43.9	1,493.7
For the period ended 30 June 2010						
Cost						
At the beginning of the period	144.8	871.6	587.8	3.9	43.9	1,652.0
Additions	_	16.5	75.3	1.0	42.0	134.8
Disposals	_	_	_	_	_	_
Transfers	0.2	1.7	7.7		(9.6)	
At the end of the period	145.0	889.8	670.8	4.9	76.3	1,786.8
Accumulated depreciation						
At the beginning of the period	11.1	90.9	56.3	_	_	158.3
Depreciation and amortisation expense	8.5	61.5	68.2			138.2
At the end of the period	19.6	152.4	124.5			296.5
Net book value at end of the	125 /	727 t	546.5	4.0	7/2	1 400 2
period	125.4	737.4	546.3	4.9	76.3	1,490.3

Other than leased fleet (please refer to Note 18), no assets of the Target Group have been used as security for liabilities of the Target Group or for any other person.

The Target Company acquired all property, plant and equipment from OZL on 16 June 2009. All assets were recognised at fair value at this date by the Target Company. Please refer also to Note 4.

### 17 Trade and other payables

	Target Group		Target	Company
	As at	As at	As at	As at
	31 December	30 June	31 December	30 June
	2009	2010	2009	2010
	(US\$m)	(US\$m)	(US\$m)	(US\$m)
Trade payables and accruals (a)	140.2	129.4	_	_
Payables to subsidiaries (b)	_	_	2.4	2.4
Other payables	3.5	9.7	0.6	1.0
Total trade and other payables	143.7	139.1	3.0	3.4

- (a) As at each reporting date, all trade payables of the Target Group were aged less than six months.
- (b) Payables to subsidiaries are unsecured, interest free and have no fixed repayment terms.

# 18 Interest-bearing liabilities

	Target Group		Target C	Company
	As at 31 December 2009	As at 30 June 2010	As at 31 December 2009	As at 30 June 2010
	(US\$m)	(US\$m)	(US\$m)	(US\$m)
Current				
Lease liabilities — Secured	1.1	1.1		
Total current interest-bearing				
liabilities	1.1	1.1		
Non-current				
External bank loans	1,095.0	1,095.0	710.0	710.0
Lease liabilities — Secured	4.9	4.2	_	_
Other loans	0.9			
Total non-current interest-bearing				
liabilities	1,100.8	1,099.2	710.0	<u>710.0</u>
Aggregate of current and non-current interest-bearing liabilities				
External bank loans (a)	1,095.0	1,095.0	710.0	710.0
Lease liabilities (b)	6.0	5.3	_	_
Other loans	0.9			
Aggregated interest-bearing				
liabilities	1,101.9	1,100.3	710.0	710.0

#### (a) External bank loans

The bank loans of the Target Group and the Target Company are secured by guarantees from the intermediate holding company, China Minmetals Non-Ferrous Metals Company Limited. Please refer to Note 24 for details of the Target Group's financing arrangements.

Interest-bearing liabilities include an external borrowing of US\$200 million which is secured by a share charge to the lender of 100 per cent of the shares held in its wholly owned subsidiary, Album Investment, a mortgage on 70 per cent of the shares in certain subsidiaries of Album Investment and a mortgage on 70 per cent of shares in MMG Laos Holdings Limited.

## (b) Finance lease liabilities

	As at	As at 30 June	
	31 December		
	2009	2010	
	(US\$m)	(US\$m)	
Commitments in relation to finance leases			
are payable as follows:			
Within one year	2.0	1.2	
Later than one year but not later than five years	<u>7.1</u>	7.0	
	9.1	8.2	
Future finance charges	(3.1)	(2.9)	
Recognised as a liability	6.0	5.3	

The Target Group leases various plant and equipment with a carrying amount of US\$5.3 million under finance leases expiring within five years.

# 19 **Provisions**

	As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Current		
Employee benefits	23.4	25.9
Workers' compensation	1.4	2.4
Mine rehabilitation, restoration and dismantling (a)	_	1.0
Other provisions (b)	10.7	6.4
Total current provisions	<u>35.5</u>	<u>35.7</u>
Non-current		
Employee benefits	5.7	5.6
Workers' compensation	4.4	4.3
Mine rehabilitation, restoration and dismantling (a)	221.3	220.8
Total non-current provisions	<u>231.4</u>	230.7
Aggregate		
Employee benefits	29.1	31.5
Workers' compensation	5.8	6.7
Mine rehabilitation, restoration and dismantling (a)	221.3	221.8
Other provisions (b)	10.7	6.4
Total provisions	<u>266.9</u>	266.4

### (a) Mine rehabilitation, restoration and dismantling

	Period ended 31 December 2009 (US\$m)	Period ended  30 June  2010  (US\$m)
Opening carrying amount	_	221.3
Acquisition through business combination (Note 4)	169.6	_
Additional provisions recognised	48.3	_
Payments made	(5.0)	(2.5)
Unwind of discount	7.7	3.0
Exchange rate differences	0.7	
Closing carrying amount	221.3	221.8

The provision for mine rehabilitation, restoration and dismantling includes the anticipated costs of future rehabilitation, restoration and dismantling of mining areas from which natural resources have been extracted. These provisions include future cost estimates associated with reclamation, plant closures, waste site closures, monitoring, demolition, decontamination, water purification and permanent storage of historical residues. Please refer to Note 2 for further details regarding the uncertainties about the timing of the cash outflows and other assumptions.

## (b) Other provisions

	Period ended 31 December 2009	Period ended 30 June 2010
	(US\$m)	(US\$m)
Opening carrying amount	_	10.7
Acquisition through business combination (Note 4)	5.9	_
Additional provisions recognised	6.9	2.8
Payments made	(2.1)	(1.7)
Write back of onerous leases		(5.4)
Closing carrying amount	10.7	6.4

Other provisions relate predominantly to provisions for other taxes and onerous contracts where the expected benefit to be derived by the Target Group from a contract is lower than the unavoidable cost of meeting its obligation under the contract. The obligation for the discounted future payments has been provided for.

### 20 Issued capital

### (a) Issued and fully paid up ordinary shares:

	As at	As at	
	31 December	30 June	
	2009	2010	
	(US\$m)	(US\$m)	
488,211,901 ordinary shares	337.0	337.0	

The Target Company does not have authorised capital or par value in respect of its issued shares. Ordinary shares entitle the holder to participate in dividends as and when declared and the proceeds on winding up of the Target Company in proportion to the number of shares held. On a show of hands every holder of ordinary shares present at a meeting in person or by proxy, is entitled to one vote, and upon a poll each holder is entitled to one vote per share.

#### (b) Movements in ordinary share capital

One share issued to the sole subscriber on incorporation was transferred to and registered in the name of the immediate holding company, Album Enterprises Limited, on 9 April 2009.

Date	Details	Number of Shares	US\$m
For the period ended	d 31 December 2009		
8 April 2009	Opening balance	_	_
9 April 2009	Shares transferred to immediate holding company	1	_
30 December 2009	Shares issued and allotted to immediate holding company	488,211,900	337.0
31 December 2009	Closing balance	488,211,901	337.0
For the period ended	d 30 June 2010		
1 January 2010	Opening balance	488,211,901	337.0
30 June 2010	Closing balance	488,211,901	337.0

# (c) Capital risk management

The maintenance of the Target Group's capital base is important for its ability to continue as a going concern in the interests of the Target Group, its shareholders and other stakeholders. The Target Group's objectives when managing capital are to maintain a strong capital base capable of

withstanding significant cash flow variability, while providing the flexibility to pursue its growth aspirations. The capital structure of the Target Group consists of debt, which includes interest-bearing liabilities as disclosed in Note 18, cash and cash equivalents as disclosed in Note 12 and equity. Monitoring the capital base is performed using cash flow analysis, the budgeting process and performing sensitivity analysis. The Target Group will balance its overall capital structure through the issue of new shares, share buy-backs, capital returns and the payment of dividends, as well as the issue of new debt or redemption of existing debt.

The Target Group is not subject to any externally imposed capital requirements.

## 21 Reserves, retained earnings and non-controlling interest

	As at	As at
	31 December	30 June
	2009	2010
	(US\$m)	(US\$m)
Reserves (a)	0.2	0.2
Retained earnings (b)	172.5	395.1
Non-controlling interest (c)	42.0	39.0
Total reserves, retained earnings and non-controlling interest	214.7	434.3

#### (a) Reserves

	Period ended 31 December 2009 (US\$m)	Period ended 30 June 2010 (US\$m)
Movements in available-for-sale financial assets reserve:		
Available-for-sale financial assets reserve at beginning of		
the period	_	0.2
Change in fair value of available-for-sale financial assets,		
net of tax	0.2	
Available-for-sale financial assets reserve at end of	0.2	0.2
the period	0.2	

The available-for-sale asset reserve comprises the cumulative net change in the fair value of available-for-sale financial assets until the investment is derecognised or impaired.

# (b) Retained earnings

	Period ended 31 December 2009 (US\$m)	Period ended 30 June 2010 (US\$m)
Movements in retained earnings:		
Retained earnings at beginning of the period	_	172.5
Net profit after tax attributable to equity holders of		
the Target Company	172.5	222.6
Retained earnings at end of the period	<u>172.5</u>	395.1

# (c) Non-controlling interest

	Period ended 31 December 2009 (US\$m)	Period ended  30 June  2010  (US\$m)
Movements in non-controlling interest:		
Non-controlling interest at beginning of the period	_	42.0
Acquisition through business combination	35.8	_
Net profit after tax attributable to non-controlling interest	8.2	11.4
Dividend payments	(2.0)	(14.4)
Non-controlling interest at end of the period	42.0	39.0

The non-controlling interest includes a 10 per cent interest in Lang Xang Minerals Limited which includes the Sepon operating segment.

# 22 Accumulated losses of the Target Company

	Period ended 31 December	Period ended 30 June
	2009	2010
	(US\$m)	(US\$m)
Movements in accumulated losses:		
Accumulated losses at beginning of the period	_	(0.4)
Net loss for the period	(0.4)	(0.5)
Accumulated losses at end of the period	(0.4)	(0.9)

# 23 Reconciliation of profit for the period to net cash flows from operating activities

	Period ended 31 December 2009 (US\$m)	Period ended 30 June 2009 (US\$m) (unaudited)	Period ended 30 June 2010 (US\$m)
Profit for the period	180.7	9.2	234.0
Depreciation and amortisation	158.3	24.2	124.0
Financing expenses reported in			
financing activities	15.2	1.6	11.9
Financing income reported in			
investing activities	(1.1)	_	(1.8)
Non-cash borrowing costs	7.7	0.6	5.9
Other non-cash items	(4.8)	_	4.8
Loss on disposal of property, plant			
and equipment	1.8	_	_
Change in assets and liabilities:			
Trade and other receivables	(90.0)	8.3	39.2
Other assets	(3.6)	(32.6)	(5.0)
Inventories	(13.1)	6.6	(38.9)
Trade and other payables	118.7	14.6	(4.6)
Deferred tax assets	(48.4)	(17.0)	(29.6)
Current tax liabilities	(8.5)	(3.4)	(5.4)
Deferred tax liabilities	(5.8)	1.6	
Net cash inflows from operating activities	307.1	13.7	334.5

#### 24 Financial risk management

The Target Group's activities expose it to a variety of financial risks such as:

- Market risk consisting of commodity price risk, foreign currency exchange risk and interest rate risk (please refer to (a) below);
- Credit risk (please refer to (b) below); and
- Liquidity risk (please refer to (c) below).

This note presents information about the Target Group's exposure to each of the above financial instrument risks, its objectives, policies and processes for measuring and managing risk and quantitative disclosures.

Financial risk management is carried out by the Target Group's Group Treasury function under policies approved by the board of directors of the Target Company. Group Treasury identifies, evaluates and manages financial risks in close co-operation with the Consolidated entity's operating units. The board of directors of the Target Company approves written principles for overall risk management, as well as policies covering specific areas, such as those identified above.

The Target Group holds the following financial instruments at the reporting date:

	Notes	As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Financial assets			
Cash and cash equivalents Trade receivables	12 13	251.3 88.5	334.5 44.8
Related party receivables	13	1.4	3.8
Available for-sale financial assets	15	0.8	94.2
		342.0	477.3
Financial liabilities			
Trade payables	17	140.2	129.4
Interest-bearing liabilities	18	1,101.9	1,100.3
		1,242.1	1,229.7

## (a) Market risk management

The Target Group's activities expose the group primarily to financial risks of changes in commodity prices, foreign currency exchange rates and interest rates. The Target Group uses a combination of sensitivity analysis and cash flow forecasting to assess these risks which are regularly reported to the Executive Committee.

#### (i) Commodity price risk management

The Target Group is exposed to commodity price volatility on commodity sales made by the mines. This arises from sale of metal and metal in concentrate products such as zinc, copper, lead, gold and silver, which are priced on, or benchmarked to, open market exchanges. The Target Group generally believes commodity price hedging would not provide long-term benefit to its shareholders. There are no commodity hedges in place as at 31 December 2009 and 30 June 2010.

In accordance with the requirements of IFRS, the sensitivity analysis provided below discloses the Target Group's exposure to the risk on the outstanding balance of financial assets and liabilities at the reporting date.

#### Commodity price sensitivity analysis

The following table details the Target Group's sensitivity to movement in commodity prices. At reporting date, if the commodity prices increased/(decreased) by the market consensus twelve month forecast commodity price movement and all other variables were held constant, the Target Group's after tax profit would have increased/(decreased) as set out below. The impact for movements in commodity prices on the Target Group's equity would have been nil.

In accordance with IFRS, the sensitivity analysis includes the impact of the movement in commodity prices only on the outstanding trade receivables at 31 December 2009 and 30 June 2010, which were US\$88.5 million and US\$44.8 million respectively, and does not include the impact of the movement in commodity prices on the total revenue for the period. The outstanding trade receivables by commodity at the reporting date are set out in Note 24(b).

		2009	
	Forecast 12 month commodity price		
Commodity	movement	Increase in profit	Decrease in profit
		(US\$m)	(US\$m)
Zinc	6%	1.5	(1.5)
Copper	1%	0.4	(0.4)
Gold	9%	0.6	(0.6)
		2.5	(2.5)

#### FINANCIAL INFORMATION OF THE TARGET GROUP

	2010		
	Forecast 12 month commodity price		
Commodity	movement	Increase in profit	Decrease in profit
		(US\$m)	(US\$m)
Zinc	11%	0.5	(0.5)
Copper	28%	4.6	(4.6)
Gold	32%	3.4	(3.4)
		8.5	(8.5)

Revenue on provisionally priced sales is recognised at the estimated fair value of the total consideration received or receivable. Contract terms for many of the Target Group's zinc, copper, lead, gold, silver and metal in concentrate sales allow for a price adjustment based on a final assay of the goods by the customer to determine content. Recognition of the sales revenue for these commodities is based on the most recently determined estimate of product specifications with a subsequent adjustment made to revenue upon final determination.

### (ii) Foreign currency exchange risk management

The Target Group operates internationally and is exposed to foreign currency exchange risk. The Target Group's reporting currency and functional currency of the majority of subsidiaries with the Target Group is US dollars. The majority of revenues received by the Target Group are US dollars. The Target Group's foreign currency exchange risk arises predominantly from the currency in which the Target Group's mines are located. The Australian dollar is the most important currency (apart from the US dollars) influencing costs.

Under normal market conditions, the Target Group does not believe that active currency hedging of transactions would provide long-term benefit to shareholders. The Target Group tries to minimise these exposures through natural hedges wherever possible. For instance, the majority of external debt and surplus cash is denominated in US dollars. A portion of cash may be held in Australian dollars to meet operating costs.

The long-term relationship between commodity prices and the currencies of the countries where the Target Group operates provides a degree of natural protection. However, the Target Group may choose to hedge large foreign currency exposures such as capital expenditure, dividends or tax payments. Foreign currency spot deals are used to meet Australian dollar requirements and are reported monthly to the Executive Committee.

There were no foreign exchange derivatives outstanding as at 31 December 2009 and 30 June 2010.

The following table shows the foreign currency risk on the financial assets and liabilities of the Target Group's operations denominated in currencies other than the functional currency of the operations:

	Denominated in AUD (US\$m)	Denominated in CAD (US\$m)	Denominated in others (US\$m)
As at 31 December 2009			
Financial assets			
Cash and cash equivalents	124.9	_	2.0
Financial liabilities			
Trade payables	(118.2)		(0.4)
Total	6.7		1.6
As at 30 June 2010			
Financial assets			
Cash and cash equivalents	128.3	_	3.1
Trade receivables	1.1	_	_
Available-for-sale financial assets	21.5	72.7	_
Financial liabilities			
Trade payables	(81.7)		(3.7)
Total	69.2	<u>72.7</u>	(0.6)

The following US dollars exchange rates were applied during the year:

	Perio	Period ended		Period ended		
	31 Dece	31 December 2009		ne 2010		
		Period-end		Period-end		
	Average rate	spot rate	Average rate	spot rate		
AUD: USD	0.8609	0.8937	0.8934	0.8481		

Foreign currency sensitivity analysis

The sensitivity analysis includes only outstanding foreign currency denominated monetary items at the reporting date and adjusts their translation for a 5 per cent change in the AUD/USD and a 10 per cent change in the CAD/USD foreign exchange rate. This percentage change reflects the market consensus twelve month forecast foreign exchange rate movement.

If the foreign currency exchange rates strengthened/(weakened) against the functional currency by the above foreign exchange rate changes, and all other variables were held constant, the Target Group's after tax profit and equity for the periods ended 31 December 2009 and 30 June 2010 would have increased/(decreased) by US\$1 million and US\$8 million respectively.

#### (iii) Interest rate risk management

The Consolidated entity is exposed to interest rate volatility on deposits and borrowings. Deposits and borrowings at variable rates expose the Target Group to cash flow interest rate risk. Deposits and borrowings at fixed rates expose the Target Group to fair value interest rate risk. Any decision to hedge interest rate risk is assessed at the inception of each floating rate debt facility in light of the overall Target Group's exposure, the prevailing interest rate market and any funding counterparty requirements.

It is the Target Group's preference to borrow and invest at floating rates of interest. This approach is based on historical correlation between interest rates and commodity prices. As at 31 December 2009 and 30 June 2010, all of the Target Group's debt was floating rate debt. The interest charged on floating rate debt is based on the relevant national inter-bank rates and repriced at least semi-annually.

Monthly reporting is provided to the Executive Committee, which summarises the Target Group's debt and interest rates.

The table below analyses the Target Group's financial assets and liabilities into relevant maturity categories based on the remaining period from the balance sheet date to the contractual maturity date.

	Notes	6 months or less (US\$m)	6 to 12 months (US\$m)	1 to 2 years (US\$m)	2 to 5 years (US\$m)	More than 5 years (US\$m)	Total (US\$m)
As at 31 December 2009							
Financial assets							
Cash at bank		107.3	_	_	_	_	107.3
Short-term deposits		144.0					144.0
	12	251.3					251.3
Financial liabilities							
Bank loans		_	_	_	(751.0)	(344.0)	(1,095.0)
Other loans		(0.4)	(0.5)				(0.9)
	18	(0.4)	(0.5)		(751.0)	(344.0)	(1,095.9)
Net interest-bearing financial assets and liabilities		<u>250.9</u>	(0.5)		(751.0)	(344.0)	(844.6)
As at 30 June 2010 Financial assets Cash at bank Deposits held with intermediate holding		39.9	_	_	_	_	39.9
company		200.0	_	_	_	_	200.0
Short-term deposits		94.6					94.6
	12	334.5	_	_	_	_	334.5
Financial liabilities Bank loans	18	_	_	_	(751.0)	(344.0)	(1,095.0)
Net interest-bearing financial assets and liabilities		334.5			(751.0)	(344.0)	(760.5)

Interest rate sensitivity analysis

The following table details the Target Group's sensitivity to movement in the interest rates. The sensitivity analysis has been determined based on the exposure to interest rates at the reporting date and the stipulated change taking place at the beginning of the financial period and held constant throughout the reporting period.

At reporting date, if the interest rate increased/(decreased) by 100 basis points, and all other variables were held constant, the Target Group's after tax profit and equity would have increased/(decreased) as follows:

	As at 31 December 2009			As at 30 June 2010				
	+100 bps		— 100 bps		+100 bps		— 100 bps	
	Profit	<b>Equity</b>	Profit	<b>Equity</b>	Profit	Equity	Profit	<b>Equity</b>
	(US\$m)	(US\$m)	(US\$m)	(US\$m)	(US\$m)	(US\$m)	(US\$m)	(US\$m)
Financial assets  Cash and cash  equivalents	1.8	_	(1.8)	_	2.3	(2.3)	(2.3)	2.3
Financial liabilities Bank loans	(7.7)		7.7		(7.7)	7.7		(7.7)
Total	(5.9)		5.9		(5.4)	5.4	5.4	(5.4)

#### (b) Credit risk management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Target Group. The Target Group is exposed to counterparty credit risk through sales of metal products on normal terms of trade, through deposits of cash and settlement risk on foreign exchange transactions.

At the reporting date, the carrying amount of the Target Group's financial assets represents the maximum credit exposure which was as follows:

	Notes	As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Cash and cash equivalents	12	251.3	334.5
Trade receivables	13	88.5	44.8
		339.8	379.3

The credit risk on investments in cash, short-term deposits and similar assets are with approved counterparty banks and the intermediate holding company. Counterparties are assessed prior to, during and after the conclusion of transactions to ensure exposure to credit risk is limited to acceptable levels. The limits are set to minimise the concentration of risks and therefore mitigate the potential for financial loss through counterparty failure.

The Target Group had US\$0.4 million and US\$4.9 million cash and cash equivalents not available for use as at 31 December 2009 and 30 June 2010 respectively.

The Target Group's most significant customer is Nyrstar. The revenue earned from Nyrstar by the Target Group was approximately 22 per cent and 58 per cent of consolidated revenue for the periods ended 31 December 2009 and 30 June 2010 respectively. Due to the timing of payments only US\$19.6 million and US\$0.3 million of the trade receivables related to Nyrstar at 31 December 2009 and 30 June 2010 respectively. The largest receivable at 30 June 2010 was a gold sale of US\$14.9 million to AGR Mathey. The remaining balance relates to several low value sales to other customers.

Credit risk arising from sales to Nyrstar and other large concentrate customers are managed by contracts that stipulate a provisional payment of at least 90 per cent of the estimated value of each sale. This is payable either promptly after vessel loading or upon vessel arriving at the discharge port. Title to the concentrate does not pass to the buyer until this provisional payment is made. For most sales a second provisional payment is received within 60 days of the vessel arriving at the port of discharge. Final payment is recorded after completion of the quotation period and assaying.

The maximum exposure to credit risk for trade receivables at the reporting date by geographic region was:

	As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Australia	27.9	15.2
Europe	25.7	21.4
Asia	28.6	8.2
USA	6.3	
	88.5	44.8

The maximum exposure to credit risk for trade receivables at the reporting date by type of customer was:

	As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Zinc	37.1	6.0
Copper	39.9	23.9
Lead	1.5	_
Gold	10.0	14.9
	<u>88.5</u>	44.8

The Target Group does not have any significant receivables which are past due at the reporting date. Total impairment losses for the Target Group for the reporting period were nil.

## (c) Liquidity risk management

Liquidity risk is the risk that the Target Group will encounter difficulty in meeting obligations associated with financial liabilities.

Management utilise both short and long-term cash flow forecasts and other consolidated information to ensure appropriate liquidity buffers are maintained to support the Target Group's activities.

The information provided below summarises the Target Group's positions at 31 December 2009 and 30 June 2010. The following are the contractual maturities of the Target Group's financial liabilities as at 31 December 2009 and 30 June 2010. The contractual cash flows reflect the undiscounted amounts and include both interest and principal cash flows based on the terms of the financing arrangements that existed at 31 December 2009 and 30 June 2010.

Rolonco

Contractual principal and interest cash flows

		sheet carrying (		6 to 12	1 to 2	2 to 5	More than 5	
	Notes	amount	or less	months	years	years	years	Total
As at 31 December 2009								
Bank loans	18	1,095.0	10.6	10.6	21.1	780.5	355.4	1,178.2
Lease liabilities	18	6.0	_	2.0	2.0	5.1	_	9.1
Other loans	18	0.9	0.4	0.5	_	_	_	0.9
Trade payables	17	140.2	140.2					140.2
		1,242.1	151.2	13.1	23.1	<u>785.6</u>	355.4	1,328.4
As at 30 June 2010								
Bank loans	18	1,095.0	12.0	12.0	24.1	800.4	359.1	1,207.6
Trade payables	17	129.4	129.4					129.4
		1,224.4	141.4	12.0	24.1	800.4	359.1	1,337.0

The Target Group's liquidity risk has the following financing arrangements in place at reporting date:

	Notes	As at 31 December 2009	As at 30 June 2010	
	Trotes	(US\$m)	(US\$m)	
Bank loan facilities — available Bank loan facilities — unused		1,238.0 (143.0)	1,238.0 (143.0)	
Bank loan facilities - used	18	1,095.0	1,095.0	
Lease facilities — available Lease facilities — unused		6.0	5.3	
Lease facilities – used	18	6.0	5.3	

#### (d) Fair values

The carrying amount of all financial assets and liabilities recognised on the balance sheet approximates their fair value. The fair value of financial instruments traded in active markets is based on quoted market prices at 31 December 2009 and 30 June 2010. The quoted market price used for financial assets held by the group is the current bid price. These instruments are included in level 1.

## 25 Commitments for expenditure

### (a) Capital and non-capital commitments

Commitments for acquisition of capital and non-capital commitments contracted for at the reporting date but not recognised as liabilities, payable are set out in the table below.

	As at	As at	
	31 December	30 June	
	2009	2010	
	(US\$m)	(US\$m)	
Within one year	43.3	48.1	
Later than one year but not later than five years	13.0	21.2	
Later than five years	0.9	0.9	
Total capital and non-capital commitments	57.2	70.2	

# (b) Operating lease commitments

Commitments in relation to operating leases contracted for at the reporting date but not recognised as liabilities, payable:

	As at	As at
	31 December	30 June
	2009	2010
	(US\$m)	(US\$m)
Within one year	2.5	3.6
Later than one year but not later than five years	10.2	14.5
Later than five years	5.5	5.6
Total operating lease commitments	<u> 18.2</u>	23.7

## 26 Contingent liabilities

The Target Company and its subsidiaries are defendants from time to time in legal proceedings arising from the conduct of their businesses. The Target Group does not consider that the outcome of any of these proceedings ongoing at reporting date, either individually or in aggregate, is likely to have a material effect on its financial position. Where appropriate, provisions have been made.

Certain bank guarantees have been provided in connection with the operations of certain of the subsidiaries of the Target Company, primarily associated with the terms of mining leases or exploration licences. At the end of the period, no claims have been made under these guarantees. The amount of these guarantees may vary from time to time depending upon the requirements of the relevant regulatory authority. These guarantees amount to US\$95.4 million and US\$89.8 million as at 31 December 2009 and 30 June 2010 respectively. Provision is made in the financial information for the anticipated costs of the mine rehabilitation obligations under the mining leases and exploration licences (please refer to Note 19).

#### 27 Related parties

### (a) Holding companies

The immediate holding company of the Target Company is Album Enterprises Limited, a company incorporated in Hong Kong. The intermediate holding company of the Company is China Minmetals Non-Ferrous Metals Company Limited, a company incorporated in the PRC and the ultimate holding company is China Minmetals Corporation, a company incorporated in the PRC. China Minmetals Corporation is a state-owned enterprise and is controlled by the PRC Government.

### (b) Subsidiaries

The Company's interest in subsidiaries is set out in Note 15.

# (c) Key management personnel remuneration

The key management personnel remuneration for the Target Group were as follows:

	Period ended 31 December 2009	Period ended 30 June 2009	Period ended 30 June 2010
	US\$	US\$	US\$
		(unaudited)	
Short-term employee benefits	3,678,196	315,360	3,914,123
Other long-term benefits (ii)	358,465	51,207	69,956
Post-employment benefits	28,844	2,753	63,656
Total	4,065,505	369,320	4,047,735

- (i) During the periods, no Director has entered into a material contract with the Target Group and there were no material contracts involving directors' interests existing at 31 December 2009 and 30 June 2010.
- (ii) Other long-term benefits does not include the Long Term Incentive Plan ("LTIP") payable to key management personnel for the periods ended 31 December 2009 and 30 June 2010 as the amount payable could not be reliably estimated at the reporting date. The performance conditions relevant to the 2010 financial period are expected to be assessed in 2010 and if the conditions are met an amount will be paid to key management personnel after the performance period ends on 30 June 2011. Amounts payable to key management personnel for the 2010 financial period will be included in key management personnel remuneration in future periods.

# (d) Transactions with related parties

A number of key management persons, or their related parties, hold positions in other entities that result in them having control or significant influence over the financial or operating policies of those entities. A number of these entities transacted with the Target Group during the reporting period. The terms and conditions of the transactions with key management personnel and their related parties were no more favourable than those available, or which might reasonably be expected to be available, on similar transactions to non-key management personnel related entities on an arm's length basis, excluding the loan from related parties.

# APPENDIX I FINANCIAL INFORMATION OF THE TARGET GROUP

Transactions between the Target Group and other entities within China Minmetals Corporation group during the period consisted of:

		As at 31 December 2009 (US\$m)	As at 30 June 2010 (US\$m)
Receivables from related parties (i)	13	1.4	3.8
Deposits held with intermediate parent	12		<u>200.0</u>
		Period ended 31 December	Period ended 30 June
		Period ended 31 December 2009	Period ended 30 June 2010
		31 December	30 June
Sales of goods to related parties		31 December 2009	30 June 2010

- (i) Receivables from other related parties relates to amounts payable by the intermediate holding company, China Minmetals Non-Ferrous Metals Company Limited, in relation to sales of concentrates as summarised in (ii) below.
- (ii) Sales of goods to fellow subsidiaries relates to the sales of concentrates between the Target Group and the ultimate holding company, China Minmetals Non-Ferrous Metals Company Limited.

# 28 Events occurring after reporting date

There have been no other events that have occurred subsequent to the reporting date which have significantly affected or may significantly affect the Target Group's operations, results or state of affairs in future years.

# 29 Earnings per share

No earnings per share information is presented as its inclusion, for the purpose of this accountant's report, is not considered meaningful.

# 30 Loss attributable to equity holders of the Target Company

The loss attributable to equity holders of the Target Company is dealt with in the financial statements of the Target Company are as follows:

	Period ended	Period ended	Period ended
	31 December	30 June	30 June
	2009	2009	2010
	(US\$m)	(US\$m) $(unaudited)$	(US\$m)
Loss attributable to equity holders	0.4		0.5

# 31 Directors' and senior management emoluments

# (a) Directors' Emoluments

The remuneration of every director is set out below:

Name of Director	Fees US\$'000	Salaries US\$'000	Other benefits (v) US\$'000	Discretionary Bonuses US\$'000	Total US\$'000
For the period ended					
31 December 2009					
ZHOU Zhongshu (i)		_	_	_	_
CASSIDY Peter (i)	81.7	_	_	_	81.7
WANG Lixin (i)		_	_	_	_
MICHELMORE					
Andrew (ii)	_	954.8	63.3	469.0	1,487.1
XU Jiqing (i)	_	_	_	_	_
JIAN Jiao (i)	_	_	_	_	_
LI Fuli (iii)	_	_	_	_	_
LIU Mark (ii)	_	280.0	10.1	109.8	399.9
TIONG Eric Hin Won (iv)		_	_	_	_
GEOK Patricia					
Neo Seet (ii)					
	81.7	1,234.8	73.4	578.8	1,968.7

# APPENDIX I FINANCIAL INFORMATION OF THE TARGET GROUP

Name of Director	Fees US\$'000	Salaries US\$'000	Other benefits (v) US\$'000	Discretionary Bonuses US\$'000	Total US\$'000
For the period ended 30 June 2009 (unaudited)					
ZHOU Zhongshu (i)	_	_	_	_	_
CASSIDY Peter (i)	11.7	_	_	_	11.7
WANG Lixin (i)		_	_	_	_
MICHELMORE					
Andrew (ii)		136.4	18.5	_	154.9
XU Jiqing (i)	_	_	_	_	_
JIAN Jiao (i)	_	_	_	_	_
LI Fuli (iii)	_	_	_	_	_
LIU Mark (ii)	_	_	_	_	_
TIONG Eric Hin Won (iv)	_	_	_	_	_
GEOK Patricia					
Neo Seet (ii)					
	11.7	136.4	18.5		166.6
For the period ended					
30 June 2010					
ZHOU Zhongshu (i)	_	_	_	_	_
CASSIDY Peter (i)	78.2	_	_	_	78.2
WANG Lixin (i)	109.0	_	_	_	109.0
MICHELMORE					
Andrew (ii)	_	993.6	28.4	_	1,022.0
XU Jiqing (i)	109.0	_	_	_	109.0
JIAN Jiao (i)	102.2	_	_	_	102.2
LI Fuli (iii)	28.3	_	_	_	28.3
LIU Mark (ii)		286.8	16.2		303.0
	426.7	1,280.4	44.6		1,751.7

- (i) Appointed as director on 9 April 2009.
- (ii) Appointed as director on 1 December 2009.
- (iii) Appointed as director on 18 March 2010.
- (iv) Appointed as director on 9 April 2009 and resigned on 1 December 2009.
- (v) Other benefits include long service leave and other allowances.

# (b) Five highest-paid individuals

The five individuals whose emoluments were the highest in the Target Group for the Relevant Periods include two directors, for the periods ended 31 December 2009 and 30 June 2010 and one director for the period ended 30 June 2009, whose emoluments are reflected in the analysis above. The emoluments payable to the remaining three individuals for the periods ended 31 December 2009 and 30 June 2010 and four individuals for the period ended 30 June 2009, are as follows:

	Period ended 31 December 2009 (US\$m)	Period ended 30 June 2009 (US\$m) (unaudited)	Period ended 30 June 2010 (US\$m)
Basic salaries and other benefits Housing allowances Bonuses	1,434.8 — 414.1	192.2 ———	1,180.9
	1,848.9	192.2	1,180.9

The emoluments fell within the following bands:

	ľ	Number of indiv	iduals
	Period ended 31 December	Period ended 30 June	Period ended 30 June
	2009	2009	2010
Nil to HK\$1,000,000	_	4	_
HK\$1,000,001 — HK\$1,500,000	_	_	_
HK\$1,500,001 — HK\$2,000,000	_	_	_
HK\$2,000,001 — HK\$2,500,000	1	_	_
HK\$2,500,001 — HK\$3,000,000	_	_	2
HK\$3,000,001 — HK\$3,500,000	_	_	_
HK\$3,500,001 — HK\$4,000,000	_	_	1
HK\$4,000,001 — HK\$4,500,000	_	_	_
HK\$4,500,001 — HK\$5,000,000	_	_	_
HK\$5,000,001 — HK\$5,500,000	1	_	_
HK\$5,500,001 — HK\$6,000,000	_	_	_
HK\$6,000,001 — HK\$6,500,000	1		
	3	4	3

During the year, no director waived any emoluments and no emoluments were paid or payable by the Target Group to the directors or any of the five highest-paid individuals as an inducement to join or upon joining the Target Group or as compensation for loss of office.

# APPENDIX I FINANCIAL INFORMATION OF THE TARGET GROUP

# (c) Employees and Remuneration Policy

As at 30 June 2010 MMG employed 3,141 direct employees and 3,011 external contractors across all operations.

MMG remuneration philosophy is to provide appropriately competitive remuneration to attract and retain high quality executive talent to achieve its business objectives. MMG remuneration policy is reviewed periodically and has been developed to enhance the alignment of business strategy with shareholder value creation over the short, medium, and long term.

# III. SUBSEQUENT FINANCIAL STATEMENTS

No audited financial statements have been prepared for the Target Company or any of its subsidiaries in respect of any period subsequent to 30 June 2010. In addition, no dividend of distribution has been declared, made or paid by the Target Company or any of its subsidiaries in respect of any period subsequent to 30 June 2010.

Yours faithfully,
PricewaterhouseCoopers
Certified Public Accountants
Hong Kong

# 2. MANAGEMENT DISCUSSION AND ANALYSIS OF THE TARGET GROUP

The Target Group was formed on 16 June 2009, from Album Investment's acquisition of certain companies from OZL. The acquisition resulted in the formation of the Target Group creating a leading minerals and metals business with mining operations in Australia and Laos and exploration and development projects in Australia, South-East Asia, the PRC and North America. Consistent with the sale agreement on a "cash free, debt free" basis and based on normal levels of working capital, the actual amount paid by the Target Group at completion of the transaction of US\$661.2 million was subject to certain adjustments related to the working capital, net debt and agreed tax liabilities of the assets acquired. There were no material acquisitions and disposals of subsidiaries and associated companies in the period from 8 April 2009 (date of incorporation) to 31 December 2009 and 1 January 2010 to 30 June 2010, except for the above mentioned transaction.

The Target Group is a significant producer of zinc, copper, lead, gold and silver. The Target Group currently operates four mines: (i) the Sepon copper and gold operations located in Laos; (ii) Century, one of the world's largest zinc mines, located in Queensland, Australia, also producing lead and silver; (iii) Golden Grove, a zinc, copper, lead and precious metals mine located in Western Australia; and (iv) Rosebery, a zinc, lead, copper and precious metals mine located in Tasmania, Australia.

# PERIOD TO PERIOD COMPARISON OF RESULTS OF OPERATIONS

The Target Company was incorporated on 8 April 2009. Since the date of incorporation, the Target Company has prepared financial statements for each of the periods from 8 April 2009 (date of incorporation) to 31 December 2009 and 1 January 2010 to 30 June 2010 audited by the Reporting Accountants. In addition, the Target Company has prepared unaudited financial information for the period from 8 April 2009 (date of incorporation) to 30 June 2009.

As there are no comparable financial periods for the Target Company's consolidated audited financial statements, for the purpose of the management discussions and analysis, comparative analysis has been performed for the six months ended 30 June 2010 compared to the six months ended 31 December 2009.

The unaudited financial information for the six months ended 31 December 2009 have been derived based on the financial statements for period from 8 April 2009 (date of incorporation) to 31 December 2009 and unaudited financial information for the period from 8 April 2009 (date of incorporation) to 30 June 2009.

The Target Group's management has determined the operating segments based on reports reviewed by the executive committee. The Target Group's operations are managed on a site-by-site basis. The Target Group's has built a portfolio of exploration and development projects in Australia, Canada, Tunisia, Sweden, Mexico, Laos, Thailand, Cambodia, Indonesia and the PRC. These exploration and development projects, including the Dugald River Project and the High Lake and Izok Lake projects, are not required to be disclosed as a separate segment at this stage, and accordingly these amounts are included within 'other operations'. Other operations also include the Avebury mine, which remains on care and maintenance and other head office entities.

The following table shows a breakdown of the Target Group's revenue and profit/(loss) before net financing income/(expenses) by segment for the six months ended 30 June 2010 and 31 December 2009.

	Century mine (US\$m)	Sepon mines (US\$m)	Golden Grove mines (US\$m)	Rosebery mine ( (US\$m)	Other operations (US\$m)	Total (US\$m)
For the six months ended 30 June 2010						
Sales revenue Profit/(loss) before net financing	257.1	308.7	182.0	96.9	_	844.7
(expenses)/income	45.9	182.6	63.6	23.2	(35.4)	279.9
For the six months ended 31 December 2009						
Sales revenue (Loss)/profit before net financing	221.1	251.9	152.6	122.0	_	747.6
(expenses)/income	(1.2)	130.5	54.4	43.9	(56.3)	171.3

The following discussion and analysis of the financial information and results of operation of the Target Group should be read in conjunction with the financial statements and information set forth in this appendix.

# SIX MONTHS ENDED 30 JUNE 2010 COMPARED TO SIX MONTHS ENDED 31 DECEMBER 2009

# Revenue

The Target Group generated revenue of US\$844.7 million in the six months ended 30 June 2010 compared to US\$747.6 million in the six months ended 31 December 2009, an increase of 13.0%.

The increase is primarily due to increase in zinc, lead and gold production offset by slight decrease in copper production. The Target Group produced 318kt of zinc in concentrate, 15kt of copper in concentrate, 34kt of copper cathode, 26kt of lead in concentrate and 92koz of gold in the six months ended 30 June 2010 compared to 219kt of zinc in concentrate, 17kt of copper in concentrate, 34kt of copper cathode, 21kt of lead in concentrate and 84koz of gold in the six months ended 31 December 2009.

During 2009, a failure in the pipeline between the Century mine located at Lawn Hill and the port facilities located at Karumba necessitated an 11 weeks production shutdown, with zinc production impacted as a result. During this shutdown, mining operations continued to successfully stockpile

nearly 1,080,000 tonnes of ore. As a result, when production recommenced on 23 December 2009, the concentrator was able to ramp back up to full capacity in a number of days. Expenses of US\$54.8 million (US\$38.3 million after tax) were incurred during 2009 in relation to the Century pipeline failure.

# Cost of goods sold

The Target Group cost of goods sold in the six months ended 30 June 2010 amounted to US\$333.5 million, an increase of 10.0% from US\$303.2 million in the six months ended 31 December 2009. The increase was primarily due to growth in the production levels which resulted in an increase in employee expenses by US\$12.0 million, contracting and consulting expenses by US\$10.8 million, energy costs by US\$9.2 million and stores and consumable costs by US\$6.9 million, offset by increase in inventories by US\$11.2 million.

# Depreciation and amortisation expenses

Depreciation expenses decreased by 7.5% from US\$134.1 million in the six months ended 31 December 2009 to US\$124.0 million in the six months ended 30 June 2010. This movement is based on a shift in the life of the mines.

# Freight expenses

Freight expenses decreased by 28.5% from US\$49.4 million in the six months ended 31 December 2009 to US\$35.3 million in the six months ended 30 June 2010. The decrease is due to decrease in freight rate, offset by higher quantity shipped.

# Other expenses

Other expenses decreased by 15.7% from US\$90.3 million in the six months ended 31 December 2009 to US\$76.1 million in the six months ended 30 June 2010. The decrease is due to decrease in operating lease expenses by US\$7.2 million and decrease in other expenses by US\$7.0 million.

# Financing expenses

Financing expenses increased from US\$12.7 million in the six months ended 31 December 2009 to US\$23.4 million in the six months ended 30 June 2010. The increase is primarily due to a foreign exchange loss of US\$7.4 million in the six months ended 30 June 2010 compared to a foreign exchange gain of US\$6.4 million in the six months ended 31 December 2009, offset by a lower interest expenses on borrowings due to lower effective interest rate in the six months ended 30 June 2010.

# Profit before income tax

As a result of the changes in the items described above, The Target Group's profit before income tax increased by 61.7% from US\$158.6 million in the six months ended 31 December 2009 to US\$256.5 million in the six months ended 30 June 2010.

# Income tax expenses/benefits

The Target Group had a US\$22.5 million income tax expense in the six months ended 30 June 2010, which included a credit of US\$61.5 million for previously unrecognised deferred tax assets. This compares to a US\$12.9 million income tax benefit in the six months ended 31 December 2009, which included a credit of US\$54.2 million for previously unrecognised deferred tax assets.

#### Profit after tax

The Target Group profit after tax increased 36.4% from US\$171.5 million in the six months ended 31 December 2009 to US\$234.0 million in the six months ended 30 June 2010.

# SEGMENTAL ANALYSIS

# Century mine

For the six months ended 30 June 2010, Century mine accounted for approximately 30.4% of the Target Group's revenue compared to approximately 29.6% for the six months ended 31 December 2009.

Century mine recorded profit before net financing (expenses)/income of US\$45.9 million in the six months ended 30 June 2010 compared to a loss before net financing (expenses)/income of US\$1.2 million in the six months ended 31 December 2009.

Century mine produced 238kt of zinc in concentrate and 11kt of lead in concentrate in the six months ended 30 June 2010 compared 137kt of zinc in concentrate and 5kt of lead in concentrate produced in the six months ended 31 December 2009.

# Sepon mines

For the six months ended 30 June 2010, Sepon mines accounted for approximately 36.6% of the Target Group's revenue compared to approximately 33.7% for the six months ended 31 December 2009.

Sepon mines recorded profit before net financing (expenses)/income of US\$182.6 million in the six months ended 30 June 2010, an increase of approximately 40% compared to profit before net financing (expenses)/income of US\$130.5 million in the six months ended 31 December 2009.

Sepon mines produced 34kt of copper cathode and 55koz of gold in the six months ended 30 June 2010 compared 34kt of copper cathode and 49koz of gold in the six months ended 31 December 2009.

# Golden Grove mines

For the six months ended 30 June 2010, Golden Grove mines accounted for approximately 21.5% of the Target Group's revenue compared to approximately 20.4% for the six months ended 31 December 2009.

# APPENDIX I FINANCIAL INFORMATION OF THE TARGET GROUP

Golden Grove mines recorded profit before net financing (expenses)/income of US\$63.6 million in the six months ended 30 June 2010, an increase of approximately 17% compared to profit before net financing (expenses)/income of US\$54.4 million in the six months ended 31 December 2009.

Golden Grove mines produced 44kt of zinc in concentrate, 14kt of copper in concentrate and 22koz of gold in the six months ended 30 June 2010 compared 36kt of zinc in concentrate, 16kt of copper in concentrate and 16koz of gold produced in the six months ended 31 December 2009.

# Rosebery mine

For the six months ended 30 June 2010, Rosebery mine accounted for approximately 11.5% of the Target Group's revenue compared to approximately 16.3% for the six months ended 31 December 2009.

Rosebery mine recorded profit before net financing (expenses)/income of US\$23.2 million in the six months ended 30 June 2010, a decrease of approximately 47% compared to profit before net financing (expenses)/income of US\$43.9 million in the six months ended 31 December 2009.

Rosebery mine produced 36kt of zinc in concentrate, 10kt of lead in concentrate and 15koz gold in the six months ended 30 June 2010 compared 46kt of zinc in concentrate, 14kt of lead in concentrate and 19koz of gold produced in the six months ended 31 December 2009.

# LIQUIDITY AND CAPITAL RESOURCES

In the six months ended 30 June 2010 and the six months ended 31 December 2009, the Target Group's principal source of liquidity was cash generated from operating activities. The Target Group may use funding from future debt financing, equity financing and cash generated from operating activities for the provision of working capital, general exploration and development activities.

The Target Group had cash and cash equivalents of US\$334.5 million as at 30 June 2010 and US\$251.3 million as at 31 December 2009.

The following table presents selected cash flow data from The Target Group's cash flow statements for the six months ended 30 June 2010 and the six months ended 31 December 2009.

	Six moi	nths ended
	30 June	31 December
Cash flows	2010	2009
	(US\$m)	(US\$m)
		(unaudited)
Cash generated from operating activities	334.5	293.4
Cash used in investing activities	(218.2)	(113.9)
Cash used in financing activities	(28.0)	(18.2)

# Operating activities

The net cash flows generated from operating activities in the six months ended 30 June 2010 amounted to US\$334.5 million, attributable to receipts from customers of US\$908.9 million, offset by payment to suppliers and employees of US\$516.9 million and tax payment amounted to US\$57.5 million.

The net cash flows generated from operating activities in the six months ended 31 December 2009 amounted to US\$293.4 million, attributable to receipts from customers of US\$671.2 million, offset by payment to suppliers and employees of US\$377.8 million.

# Investing activities

The net cash flows used in investing activities in the six months ended 30 June 2010 amounted to US\$218.2 million, primarily attributable to payment for plant and equipment of US\$120.6 million and payment for available-for-sale financial assets of US\$100.2 million. The available-for-sale financial assets represent equity securities listed outside Hong Kong and had a market value of US\$94.2 million as at 30 June 2010. There was no material change in the fair value of the available-for-sale financial assets in the six months ended 30 June 2010. Other than the available-for-sale financial assets, the Target Group had no other significant investment as at 30 June 2010.

The net cash flows used in investing activities in the six months ended 31 December 2009 amounted to US\$113.9 million, primarily attributable to payment for plant and equipment of US\$117.0 million. The Target Group had no significant available-for-sale financial assets or investments as at 31 December 2009.

# Financing activities

The net cash flows used in financing activities in the six months ended 30 June 2010 amounted to US\$28.0 million, primarily attributable to dividend paid to non-controlling interest of US\$14.4 million and financing costs and interest paid of US\$11.9 million.

The net cash flows used in financing activities in the six months ended 31 December 2009 amounted to US\$18.2 million, primarily attributable to financing costs and interest paid of US\$13.6 million.

As at 30 June 2010, the Target Group was in a net debt position of approximately US\$765.8 million, representing total interest bearing liabilities of approximately US\$1,100.3 million and cash and cash equivalents of US\$334.5 million. This compares to a net debt position of approximately US\$850.6 million as at 31 December 2009, representing interest bearing liabilities of approximately US\$1,101.9 million and cash and cash equivalents of US\$251.3 million. The Target Group's gearing ratio, which is the ratio of total interest-bearing liabilities to the total assets was approximately 47.2%. and 51.9% as at 30 June 2010 and 31 December 2009, respectively.

# APPENDIX I FINANCIAL INFORMATION OF THE TARGET GROUP

The Target Group's cash and cash equivalents, amounting to US\$334.5 million as at 30 June 2010, were mainly denominated in US dollars (60.7%) and Australian dollars (38.4%). The Target Group's cash and cash equivalents, amounting to US\$251.3 million as at 31 December 2009, were mainly denominated in US dollars (49.5%) and Australian dollars (49.7%).

As at 30 June 2010, the Target Group had net current assets of US\$490.9 million, consisting of US\$721.0 million of current assets and US\$230.1 million of current liabilities, which represented an increase of US\$189.7 million from 31 December 2009. This increase was mainly due to increase in current assets from cash flow generated during the six months ended 30 June 2010. Current ratio increased from 2.3 as at 31 December 2009 to 3.1 as at 30 June 2010.

# **INDEBTEDNESS**

As at 30 June 2010, The Target Group's total outstanding interest-bearing liabilities amounted to US\$1,100.3 million, consisting of US\$1,095.0 million of external loans and US\$5.3 million of lease liabilities. As at 31 December 2009, the Target Group's total outstanding interest-bearing liabilities amounted to US\$1,101.9 million, consisting of US\$1,095.0 million of external loans and US\$6.0 million of lease liabilities and US\$0.9 million of other loans. All of the Target Group's outstanding interest-bearing liabilities are denominated in US dollars.

The bank loans of the Target Group and Album Enterprises are secured by guarantees from the intermediate holding company of the Target Group, CMN.

Interest bearing liabilities include an external borrowing of US\$200.0 million which is secured by a share charge to the lender of 100 per cent of the shares held in the Target Group's wholly owned subsidiary, Album Investment, a mortgage over 70 per cent of the shares in certain subsidiaries of Album Investment and a mortgage over 70 per cent of shares in MMG Laos Holdings Limited.

As at 30 June 2010 and 31 December 2009, all of the Target Group's external bank loans were in floating rates and approximately 68.6% were repayable between two and five years and approximately 31.4% were repayable after five years.

The Target Group leases various plant and equipment under finance leases with a carrying amount of US\$5.3 million and US\$6.0 million as at 30 June 2010 and 31 December 2009, respectively, expiring within five years.

# COMMITMENTS FOR EXPENDITURE

# (a) Capital and non-capital commitments

Commitments for acquisition of capital and non-capital commitments contracted for as at 30 June 2010 and 31 December 2009 but not recognised as liabilities, payable are set out in the table below.

		As at 31
	As at 30 June	December
	2010	2009
	(US\$m)	(US\$m)
Within one year	48.1	43.3
Later than one year but not later than five years	21.2	13.0
Later than five years	0.9	0.9
Total capital and non-capital commitments	70.2	57.2

# (b) Operating lease commitments

Commitments in relation to operating leases contracted for as at 30 June 2010 and 31 December 2009 but not recognised as liabilities, payable:

		As at 31
	As at 30 June	December
	2010	2009
	(US\$m)	(US\$m)
Within one year	3.6	2.5
Later than one year but not later than five years	14.5	10.2
Later than five years	5.6	5.5
Total operating lease commitments	<u>23.7</u>	18.2

As at 31 December 2009 and 30 June 2010, in addition to the capital and non-capital commitments and operating lease commitments described above, the Target Group has future funding requirements for the exploration and development initiatives of the Target Group's projects, including, but not limited to, the development of the Dugald River zinc project located in Queensland, Australia (which is in the final stages of a feasibility study and has an estimated pre-production capital cost of approximately US\$790 million) and the other exploration initiatives of the Target Group. The Target Group may use debt financing, equity financing and cash generated from operating activities for funding the exploration and development initiatives of the Target Group's projects.

# **CONTINGENT LIABILITIES**

The Target Group and its subsidiaries are defendants from time to time in legal proceedings arising from the conduct of their businesses. The Target Group does not consider that the outcome of any of these proceedings ongoing as at 30 June 2010 and 31 December 2009, either individually or in aggregate, is likely to have a material effect on its financial position. Where appropriate, provisions have been made.

# CHARGE ON ASSETS

Certain bank guarantees primarily associated with the terms of mining leases or exploration licences have been provided in connection with the operations of the Target Group. As at 30 June 2010 and 31 December 2009, no claims have been made under these guarantees. The amount of these guarantees may vary from time to time depending upon the requirements of the relevant regulatory authority. These guarantees amount to US\$89.8 million and US\$95.4 million as at 30 June 2010 and 31 December 2009, respectively.

Interest bearing liabilities include an external borrowing of US\$200.0 million which is secured by a share charge to the lender of 100 per cent of the shares of Album Investment, a mortgage over 70 per cent of the shares in certain subsidiaries of Album Investment and a mortgage over 70 per cent of shares in MMG Laos Holdings Limited.

# FINANCIAL RISKS MANAGEMENT

The Target Group's activities expose it to a variety of financial risks such as:

- Market risk consisting of commodity price risk, foreign currency exchange risk and interest rate risk:
- Credit risk; and
- Liquidity risk.

Financial risk management is carried out by the Target Group's treasury function under policies approved by the board of directors. The Target Group's treasury identifies, evaluates and manages financial risks in close co-operation with the Target Group's operating units. The board approves written principles for overall risk management, as well as policies covering specific areas, such as those identified above.

# (a) Market risk

The Target Group's activities expose the group primarily to financial risks of changes in commodity prices, foreign currency exchange rates and interest rates. The Target Group uses a combination of sensitivity analysis and cash flow forecasting to assess these risks which are regularly reported to the executive committee of the Target Group.

# (i) Commodity price risk

The Target Group is exposed to commodity price volatility on commodity sales made by the mines. This arises from sale of metal and metal in concentrate products such as zinc, copper, lead, gold and silver, which are priced on, or benchmarked to, open market exchanges. The Target Group generally believes commodity price hedging would not provide long-term benefit to its shareholders. There are no commodity hedges in place as at 30 June 2010 and 31 December 2009.

# (ii) Foreign currency exchange risk

The Target Group operates internationally and is exposed to foreign currency exchange risk. The Target Group's reporting currency and functional currency of the majority of subsidiaries with the Target Group is US dollars. The majority of revenues received by the Target Group are US dollars. The Target Group's foreign currency exchange risk arises predominantly from the currency in which the Target Group's mines are located. The Australian dollar is the most important currency (apart from the US dollar) influencing costs.

Under normal market conditions, the Target Group does not believe that active currency hedging of transactions would provide long-term benefit to shareholders. The Target Group tries to minimise these exposures through natural hedges wherever possible. For instance, the majority of external debt and surplus cash is denominated in US dollars. A portion of cash may be held in Australian dollars to meet operating costs.

The long-term relationship between commodity prices and the currencies of the countries where the Target Group operates provides a degree of natural protection. However, the Target Group may choose to hedge large foreign currency exposures such as capital expenditure, dividends or tax payments. Foreign currency spot deals are used to meet Australian dollar requirements and are reported monthly to the executive committee of the Target Group.

There were no foreign exchange derivatives outstanding as at 30 June 2010 and 31 December 2009.

# (iii) Interest rate risk

The Target Group is exposed to interest rate volatility on deposits and borrowings. Deposits and borrowings at variable rates expose the Target Group to cash flow interest rate risk. Deposits and borrowings at fixed rates expose the Target Group to fair value interest rate risk. Any decision to hedge interest rate risk is assessed at the inception of each floating rate debt facility in light of the overall Target Group's exposure, the prevailing interest rate market and any funding counterparty requirements.

It is the Target Group's preference to borrow and invest at floating rates of interest. This approach is based on historical correlation between interest rates and commodity prices. As at 30 June 2010 and 31 December 2009, all of the Target Group's debt was floating rate debt. The interest charged on floating rate debt is based on the relevant national inter-bank rates and repriced at least semi-annually. Monthly reporting is provided to the executive committee of the Target Group, which summarises the Target Group's debt and interest rates.

# (b) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Target Group. The Target Group is exposed to counterparty credit risk through sales of metal products on normal terms of trade, through deposits of cash and settlement risk on foreign exchange transactions.

The credit risk on investments in cash, short-term deposits and similar assets are with approved counterparty banks and the intermediate holding company. Counterparties are assessed prior to, during and after the conclusion of transactions to ensure exposure to credit risk is limited to acceptable levels. The limits are set to minimise the concentration of risks and therefore mitigate the potential for financial loss through counterparty failure.

Credit risk arising from sales to large concentrate customers are managed by contracts that stipulate a provisional payment of at least 90 per cent of the estimated value of each sale. This is payable either promptly after vessel loading or upon vessel arriving at the discharge port. Title to the concentrate does not pass to the buyer until this provisional payment is made. For most sales a second provisional payment is received within 60 days of the vessel arriving at the port of discharge. Final payment is recorded after completion of the quotation period and assaying.

# (c) Liquidity risk

Liquidity risk is the risk that the Target Group will encounter difficulty in meeting obligations associated with financial liabilities.

Management utilise both short and long-term cash flow forecasts and other consolidated information to ensure appropriate liquidity buffers are maintained to support the Target Group's activities.

# **HUMAN RESOURCES**

As at 30 June 2010, the Target Group employed 3,141 direct employees and 3,011 external contractors across all operations as compared to 2,843 direct employees and 1,829 external contractors as at 31 December 2009.

The Target Group's remuneration philosophy is to provide appropriately competitive remuneration to attract and retain high quality executive talent to achieve its business objectives. The Target Group's remuneration policy is reviewed periodically and has been developed to enhance the alignment of business strategy with shareholder value creation over the short, medium, and long term.

The Target Group recorded total employee benefit expenses and contracting and consulting expenses of US\$138.3 million in the six months ended 30 June 2010 compared to US\$115.5 million in the six months ended 31 December 2009.

# 1. INTRODUCTION

The following financial information is extracted from the unaudited consolidated financial information of the Group for the six months ended 30 June 2010 and the audited consolidated financial statements of the Group for each of the three years ended 31 December 2007, 2008 and 2009 together with the relevant notes to the financial statements, which are incorporated by reference in this circular. They could be found in the interim report and the annual reports of the Company published with the title "Interim Report 2010" dated 6 September 2010 from pages 24 to 50, "Annual Report 2007" dated 11 April 2008 from pages 49 to 132, "Annual Report 2008" dated 20 April 2009 from pages 47 to 134 and "Annual Report 2009" dated 20 April 2010 from pages 50 to 140, all of which have been published on the website of the Stock Exchange (www.hkexnews.hk) and the website of the Company (www.minmetalsresources.com/html/ir\_reports.php).

# 2. SUMMARY OF FINANCIAL INFORMATION

The following is a summary of the financial position and results of the Group as at and for each of the three years ended 31 December 2007, 2008 and 2009 and for the six months ended 30 June 2010.

# CONSOLIDATED INCOME STATEMENTS

	Year en	Year ended 31 December 2007	er 2007	Year end	Year ended 31 December 2008	er 2008	Year end	Year ended 31 December 2009 Impact of			Unaudited
	Before	change in accounting	9	Before	change in accounting	4	Before	change in accounting		Six months ended 30 June 2009 2010	ad 30 June 2010
	(HK\$'000)	poney (HK\$'000)	(HK\$'000)	(HK\$'000)	poncy (HK\$'000)	(HK\$'000)	(HK\$'000)	poncy (HK\$'000)	(HK\$'000)	(HK\$'000)	(HK\$'000)
Revenue Cost of sales	7,337,175 (6,477,364)	64,969	7,337,175 (6,412,395)	8,450,300 (8,114,099)	85,325	8,450,300 (8,028,774)	6,215,828 (5,976,230)	56,165	6,215,828 (5,920,065)	2,139,951 (1,995,589)	5,403,696 (5,104,413)
Gross Profit	859,811		924,780	336,201		421,526	239,598		295,763	144,362	299,283
Selling expenses Administrative expenses Other income Other gains/(losses), net	(79,963) (162,852) 90,534 158,936		(79,963) (162,852) 90,534 158,936	(107,260) (190,690) 25,759 62,775		(107,260) (190,690) 25,759 62,775	(75,500) (162,242) 21,534 (10,736)		(75,500) (162,242) 21,534 (10,736)	(37,594) (73,396) 5,708 28,120	(44,539) (74,639) 4,812 67,780
Reversal of provision/(provision for) impairment of alumina purchasing rights Gain on disposal of available-for-sale financial assets Fair value losses on convertible bonds	257,622	(257,622)	(182,032)	(46,215)	46,215		214,722	110,837	325,559	325,559	
Operating profit	942,056		749,403	80,570		212,110	227,376		394,378	392,759	252,697
Finance income Finance costs	83,252 (111,874)		83,252 (111,874)	37,258 (61,905)		37,258 (61,905)	24,400 (56,871)		24,400 (56,871)	7,637 (29,806)	13,548 (21,025)
Share of post-tax profits less losses of jointly controlled companies Provision for losses in a jointly controlled company Share of post tax profits less losses of associates	14,311 (817) 34,259		14,311 (817) 34,259	(55,543) (6,071) 22,474		(55,543) (6,071) 22,474	18,872	1	18,872	(27,294)	207,515
Profit before income tax Income tax expense	961,187	(51,764)	768,534 (151,137)	16,783	(6,401)	148,323 (2,778)	227,786 (40,427)	(9,556)	394,788 (49,983)	348,536 (34,631)	461,824 (34,904)
Profit for the year	861,814	II	617,397	20,406		145,545	187,359	II	344,805	313,905	426,920
Attributable to: Equity holders of the Company Non-controlling interests	845,658	I	601,241	12,543		137,682	181,089 6,270	I	338,535	310,634	423,980 2,940
	861,814	II	617,397	20,406		145,545	187,359	II	344,805	313,905	426,920
Earnings per share for profit attributable to equity holders of the Company - Basic	HK45.3 cents	⊞∥	HK32.22 cents	HK0.61 cent		HK6.70 cents	HK8.94 cents	# <b>!</b> !	HK16.71 cents HK15.33 cents HK20.92 cents	K15.33 cents HI	(20.92 cents
- Diluted	HK45.1 cents	≖	HK32.09cents	HK0.61 cent		HK6.70 cents	HK8.94 cents	<b>Ξ</b>	HK16.71 cents HK15.33 cents HK20.92 cents	K15.33 cents HI	x20.92 cents

# CONSOLIDATED BALANCE SHEETS

	As at	As at 31 December 2007	2007	As at	As at 31 December 2008	2008	As at	As at 31 December 2009	2009	Unandited
	Before restatement (HK\$'000)	change in accounting policy (HK\$''000)	Restated (HK\$'000)	Before restatement (HK\$'000)	change in accounting policy (HK\$'000)	Restated (HK\$'000)	Before restatement (HK\$'000)	change in accounting policy (HK\$'000)	Restated (HK\$'000)	As at 30 June 2010 (HK\$'000)
ASSETS										
Non-current assets Property plant and equipment	483 566		483 566	520 703		520 703	503 526		503 526	475 922
Construction in progress	13.878		13.878	103,639		103,639	322,821		322,821	383,326
Investment properties	9,820		9,820	13,110		13,110	13,150		13,150	13,150
Land use rights	10,425		10,425	9,303		9,303	8,947		8,947	20,210
Alumina purchasing rights	2,745,755	(1,529,178)	1,216,577	2,558,400	(1,404,251)	1,154,149	2,420,108	(1,328,390)	1,091,718	1,060,503
Goodwill				6,849		6,849	6,849		6,849	6,849
Interests in jointly controlled companies	117,136		117,136	1,125,868		1,125,868	1,219,628		1,219,628	1,513,146
Interests in associates	87,242		87,242	89,247		89,247	118,493		118,493	121,383
Long term prepayments	32,100		32,100	177,840		177,840				1
Available-for-sale financial assets	476,084		476,084	309,790		309,790			1	1
Deferred income tax assets	15,401		15,401	60,027		60,027	39,826		39,826	46,953
	3,991,407	'	2,462,229	4,974,776		3,570,525	4,653,348		3,324,958	3,641,442
Current assets										
Inventories	744,747	(6,613)	738,134	693,907		693,907	979,355	(19,696)	959,659	712,823
Trade and bills receivables	625,235		625,235	776,029		776,029	813,985		813,985	1,395,927
Prepayments, deposits and other receivables	598,910		598,910	538,385		538,385	522,314		522,314	602,249
Amount due from a fellow subsidiary	249		249			l			l	I
Derivative financial instruments	13,913		13,913	3,925		3,925	4,253		4,253	38,544
Current income tax assets				17,039		17,039	6,957		6,957	5,550
Time deposits							218,770		218,770	827,253
Pledged bank deposits	40,591		40,591	38,176		38,176	35,361		35,361	51,159
Cash and cash equivalents	2,695,939	,	2,695,939	1,867,712		1,867,712	1,714,093		1,714,093	1,072,460
	4,719,584		4,712,971	3,935,173		3,935,173	4,295,088		4,275,392	4,705,965
Total assets	8,710,991		7,175,200	8,909,949		7,505,698	8,948,436		7,600,350	8,347,407

# FINANCIAL INFORMATION OF THE GROUP

	As at	As at 31 December 2007	2007	As at	As at 31 December 2008	. 2008	As at	As at 31 December 2009	. 2009	Unanditad
	Before restatement (HK\$'000)	change in accounting policy (HK\$'000)	Restated (HK\$'000)	Before restatement (HK\$'000)	change in accounting policy (HK\$'000)	Restated (HK\$'000)	Before restatement (HK\$'000)	change in accounting policy (HK\$'000)	Restated (HK\$'000)	As at 30 June 2010 (HK\$'000)
EQUITY Capital and reserves attributable to equity holders of the Company Share capital Reserves	(102,936) (6,205,156)	1,403,772	(102,936) (4,801,384)	(101,455) (5,990,624)	1,278,633	(101,455)	(101,311) (6,081,588)	1,232,024	(101,311) (4,849,564)	(101,311) (5,274,208)
Non-controlling interests  Total equity	$\frac{(6,308,092)}{(251,828)}$ $\frac{(6,559,920)}{(6,559,920)}$		$\begin{array}{c} (4,904,320) \\ (251,828) \\ \hline (5,156,148) \end{array}$	$\frac{(6,092,079)}{(193,134)}$ $\underline{(6,285,213)}$		$\frac{(4,813,446)}{(193,134)}$ $\frac{(5,006,580)}{(15,006,580)}$	$\frac{(6,182,899)}{(200,363)}$ $\underline{(6,383,262)}$		$   \begin{array}{c}     (4,950,875) \\     (200,363) \\     \underline{(5,151,238)}   \end{array} $	$\frac{(5,375,519)}{(203,211)}$ $\frac{(5,578,730)}{(5,578,730)}$
LIABILITIES  Non-current liabilities  Deferred income Derivative financial instruments Deferred income tax liabilities Bank borrowings	(25,064) (11,563) (132,227) (475,799)	132,019	$ \begin{array}{c} (25,064) \\ (11,563) \\ (208) \\ (475,799) \\ \phantom{00000000000000000000000000000000000$	$ \begin{array}{c} (23,967) \\ (7,426) \\ (128,987) \\ (541,860) \\ \phantom{00000000000000000000000000000000000$	125,618	$ \begin{array}{c} (23,967) \\ (7,426) \\ (3,369) \\ (541,860) \\ \phantom{00000000000000000000000000000000000$	$ \begin{array}{c} (40,155) \\ - \\ (122,619) \\ \hline (641,573) \\ - (804,347) \end{array} $	116,062	(40,155) $-$ $(6,557)$ $(641,573)$ $-$ $(688,285)$	(40,383)  (9,940) (564,000)
Current liabilities  Trade and bills payables  Accruals, receipt in advance and other payables  Advances from banks for discounted bills  Amounts due to intermediate and ultimate holding companies, fellow subsidiaries and a jointly-controlled company  Derivative financial instruments  Current income tax liabilities  Bank borrowings	(766,053) (429,067) (49,514) (8,148) (5,612) (26,172) (221,852)		(766,053) (429,067) (49,514) (8,148) (5,612) (26,172) (221,852) (1,506,418)	(802,336) (476,786) (87,297) (200,285) (47,330) (1,742) (306,720)		(802,336) (476,786) (87,297) (200,285) (47,330) (1,742) (306,720)	(516,691) (587,853) (195,403) (5,193) (78,562) (8,754) (368,371)		(516,691) (587,853) (195,403) (5,193) (78,562) (8,754) (368,371)	(977,013) (710,649) — — (5,804) (1,791) (3,949) (455,148)
Total liabilities	(2,151,071)		(2,019,052)	(2,624,736)		(2,499,118)	(2,565,174)		(2,449,112)	(2,768,677)
Total equity and liabilities	(8,710,991)		(7,175,200)	(8,909,949)		(7,505,698)	(8,948,436)		(7,600,350)	(8,347,407)
Net current assets	3,213,166		3,206,553	2,012,677		2,012,677	2,534,261		2,514,565	2,551,611
Total assets less current liabilities	7,204,573		5,668,782	6,987,453		5,583,202	7,187,609		5,839,523	6,193,053

The amounts before restatement for each of the three years ended 31 December 2007, 2008 and 2009 above are extracted from the respective published annual reports of the Company while the amounts for the six months ended 30 June 2010 above are extracted from the published interim report of the Company.

As explained in Note 3 to the Interim Financial Information of the Company as extracted from the published interim report of the Company for the six months ended 30 June 2010, the Group changed its accounting policy for business combinations involving entities under common control on 1 January 2010 from purchase method of accounting to merger accounting in accordance with the requirements set out in Accounting Guideline 5 "Merger Accounting for Common Control Combinations", which has been applied retrospectively to the summary of financial information of the Group as at and for each of the three years ended 31 December 2007, 2008 and 2009 presented above.

# 3. MANAGEMENT DISCUSSION AND ANALYSIS OF THE GROUP

The Group is principally engaged in the trading of non-ferrous base metals and investment in the downstream non-ferrous business including the production of alumina, aluminum and copper products.

In the last few years, there have been weakened demand and price slump in the alumina and aluminium industry in which the Group principally operates in. To cope with the challenge, the Group has stepped up its efforts in market exploitation and analysis, consolidated its operations in the value chain and strengthened its management, operational and cost controls. The following is a summary of the aluminium business chain that the Group operates:

The Group's upstream businesses are operated through (i) a 33%-owned Guangxi Huayin Aluminium Company Limited ("Guangxi Huayin") and (ii) a 51%-owned Mincenco Limited ("Mincenco"). Guangxi Huayin is one of the largest and the most advanced alumina plants in the PRC. It is also one of a few integrated alumina plants with its own bauxite mine and is among the lowest-cost alumina refinery plants in the PRC. The shareholders of Guangxi Huayin subscribed for new shares in proportion to their respective shareholdings in 2009 and early 2010. Total additional share capital amounted to approximately RMB319.2 million. The additional funding would be used to finance construction of infrastructure and a technology enhancement project driving improvements in energy-saving, wastage reduction and production efficiency. It is expected, with the success of these enhancements, the efficiency and production capabilities of Guangxi Huayin will be further strengthened. Micenco is the Group's project for exploration of bauxite and establishment of an alumina refinery facility in Jamaica. Further works undertaken as part of the feasibility study to optimise project value are underway, with an aim to determine the plan for the advancement of the project.

The Group's midstream businesses comprises (i) trading of alumina and aluminium ingot by Minmetals Aluminium Company Limited ("Minmetals Aluminium"), a wholly owned subsidiary of the Company, which is one of the largest alumina importers / suppliers in the PRC; and (ii) supply of 400Ktpa of alumina until 2027 at prices which correlate to Alcoa's production pursuant to the Alcoa contract.

The Group's downstream businesses consists of (i) aluminium fabrication by North China Aluminium Company Limited ("NCA"), the Group's 72.8%-owned subsidiary, and (ii) copper fabrication by Changzhou Jinyuan Copper Company Limited ("Changzhou Jinyuan"), the Group's 36.3%-owned jointly-controlled company.

Trading of alumina and aluminium ingot is the major contributor to the Group for the three years ended 31 December 2009, accounting for more than 70% of the total external revenue for the three years ended 31 December 2009.

The following table shows a breakdown of the Group's revenue by segment for the three years ended 31 December 2009.

# Revenue

		Year e	ended 31	Decemb	er		Six mo	nths end	led 30 Ju	ıne
		2009		2008		2007		2010		2009
	(HK\$		(HK\$		(HK\$		(HK\$		(HK\$	
	million)	(%)	million)	(%)	million)	(%)	million)	(%)	million)	(%)
Trading	4,524.5	72.8%	6,310.4	74.7%	5,373.0	73.2%	4,354.2	80.6%	1,332.4	62.3%
Aluminium fabrication	1,429.2	23.0%	1,862.4	22.0%	1,814.0	24.7%	892.4	16.5%	646.1	30.2%
Other operations	262.1	4.2%	277.5	3.3%	150.2	2.1%	157.1	2.9%	161.5	7.5%
Total external										
revenue	6,215.8	100.0%	8,450.3	100.0%	7,337.2	100.0%	5,403.7	100.0%	2,140.0	100.0%

# Segmental analysis

The following tables show the details of the Group's segmental revenue for trading and aluminum fabrication for the three years ended 31 December 2009.

# (a) Trading

		Y	ear ended	1 31 Decei	mber		Si	x months	ended 30	June
	200	9	200	8	200	7	201	0	200	9
External revenue (HK\$ million)		(%)		(%)		(%)		(%)		(%)
Alumina Aluminium	2,885.2	63.8%	4,641.4	73.6%	3,954.5	73.6%	2,652.8	60.9%	1,200.1	90.1%
ingot	1,638.8	36.2%	1,666.3	26.4%	1,412.9	26.3%	1,701.4	39.1%	131.9	9.9%
Others	0.5	0.0%	2.7	0.0%	5.6	0.1%	_	0.0%	0.4	0.0%
Total	4,524.5	100.0%	6,310.4	100.0%	5,373.0	100.0%	4,354.2	100.0%	1,332.4	100.0%

		Y	ear ended	31 Decemb	oer	Si	x months e	nded 30 June
	200	9	200	8	2007	201	0	2009
Sales								
volume	ي	Increase/		Increase/			Increase/	
('000	(L	Decrease)	(L	(Pecrease		(I	Decrease)	
tonnes)		(%)		(%)			(%)	
Alumina Aluminium	1,339.6	(6.3%)	1,429.0	26.7%	1,128.0	988.3	59.4%	620
ingot	113.6	11.9%	101.5	21.7%	83.4	110.6	963.5%	10.4
Average selling price (HK\$ per tonne)								
Alumina Aluminium	2,154	(33.7%)	3,248	(7.4%)	3,506	2,684	38.6%	1,936
ingot	14,430	(12.1%)	16,420	(3.1%)	16,950	15,384	21.6%	12,647
Operating profit (HK\$ million)	38.8	(80.1%)	194.8	(77.7%)	873.3	246.4	416.6%	47.7

# (b) Aluminium fabrication

						S	ix months	ended
		Year e	nded 31	Decemb	er		30 Jun	e
	2	2009		2008	2007	2	2010	2009
	In	ncrease/	I	ncrease/		$I_{i}$	ncrease/	
	(De	ecrease)	(D	ecrease)		$(D_{i})$	ecrease)	
		(%)		(%)			(%)	
External revenue								
(HK\$ million)	1,429.2	(23.3%)	1,862.4	2.7%	1,814.0	892.4	38.1%	646.1
Sales volume								
('000 tonnes)	74.1	(5.5%)	78.4	2.3%	76.6	41.5	12.5%	36.9
Operating profit								
(HK\$ million)	43.7	51.7%	28.8	(44.8%)	52.2	15.7	(43.7%)	27.9

# Share of post-tax profits less losses of jointly-controlled companies

The Group's share of the results of its jointly-controlled companies for the three years ended 31 December 2009 is as follows:

					Six r	nonths
		Year e	ended 31 De	ecember	ended	30 June
		2009	2008	2007	2010	2009
	Interest	(HK\$	(HK\$	(HK\$	(HK\$	(HK\$
Jointly-controlled companies	held	million)	million)	million)	million)	million)
Changzhou Jinyuan Copper Company						
Limited ("Changzhou Jinyuan")	36.3%	39.1	(4.4)	18.2	8.4	40.9
Guangxi Huayin Aluminium Company						
Limited ("Guangxi Huayin")	33%	(18.9)	(33.6)	_	199.1	(67.2)
Mincenco Limited ("Mincenco")	51%	(1.3)	(17.5)	(3.9)		(1.0)
The Group's share of post-tax profits						
less losses		18.9	(55.5)	14.3	207.5	(27.3)

# Share of post-tax profits less losses of associates

The Group's share of the results of its associates for the three years ended 31 December 2009 is as follows:

				Six r	nonths
	Year o	ended 31 D	ecember	ended	30 June
	2009	2008	2007	2010	2009
Interest	(HK\$	(HK\$	(HK\$	(HK\$	(HK\$
held	million)	million)	million)	million)	million)
40%	8.5	13.7	30.8	7.3	2.6
20%	4.8	7.9	3.4	1.8	2.3
	0.7	0.9	0.1		0.3
	14.0	22.5	34.3	9.1	5.2
	held 40%	2009   Interest	Interest held         2009 (HK\$) (HK\$)           40%         8.5         13.7           20%         4.8 7.9 0.7 0.9	Interest held         (HK\$ (HK\$ (HK\$ held million) million)         (HK\$ million) million)           40%         8.5         13.7         30.8           20%         4.8         7.9         3.4           0.7         0.9         0.1	Year ended 31 December 2009 2008 2007 2010           Interest held         (HK\$ (HK\$ (HK\$ (HK\$ held million) million) million) million)         million) million           40%         8.5         13.7         30.8         7.3           20%         4.8         7.9         3.4         1.8           0.7         0.9         0.1         —

The following discussion and analysis of the financial information and results of the operations of the Group should be read in conjunction with the financial statements and information set forth in this appendix.

# (a) Six months ended 30 June 2010 compared to six months ended 30 June 2009

For the six months ended 30 June 2010, the Group posted consolidated revenue of approximately HK\$5,403.7 million, an increase of approximately 152.5% over the corresponding period in 2009. Profit attributable to shareholders also increased, by approximately 36.5%, to approximately HK\$424.0 million. Basic earnings per share were approximately HK20.92 cents for the first half of 2010, as compared to approximately HK15.33 cents for the same period in 2009.

# Revenue

Market sentiment regarding non-ferrous metals improved since the second half of 2009 as the world gradually recovered from recession. Despite some fluctuations as noted in the second quarter, aluminium consumption growth for the first half of 2010 strengthened a lot in the PRC and overseas markets when compared to the last corresponding period.

For the six months ended 30 June 2010, the Group reported consolidated revenue of approximately HK\$5,403.7 million, representing an increase of approximately 152.5% when compared to the same period last year. The growth was mainly due to sales volume increase. Compared to the last corresponding period, trading volume of alumina increased from approximately 620,000 tonnes to 988,300 tonnes and aluminium ingots increased from approximately 10,400 tonnes to 110,600 tonnes. Sales of aluminium fabrication products also recorded an increase of approximately 12.5% from approximately 36,900 tonnes to 41,500 tonnes. In addition, alumina and aluminium prices — although not yet caught up with the pre-financial tsunami levels — moved upwards a lot when compared to a year before. This also helped fueling up the Group's revenue growth.

# Gross profit

Driven by the growth in sales volume, gross profit of the Group increased significantly by approximately 107.3% to approximately HK\$299.3 million (2009: approximately HK\$144.4 million) in the first six months of 2010. However, overall gross profit margin dropped to approximately 5.5% (2009: approximately 6.7%). The decline was mainly due to: (i) profit contribution from aluminium fabrication business reduced, mainly because of the lower processing charges than the first-half of last year, particularly for the domestic sales in the PRC market; (ii) in the first half of 2010, trading business accounted for a greater portion of the Group's revenue than before; however, its profit margin — although improved when compared to the last corresponding period — was lower than that of aluminum fabrication business; and (iii) improvement in profit margin of trading business slowed down in the second quarter of 2010 as commodities market sentiment turned more prudent than before amid the European sovereign debt crisis and the various measures implemented by the PRC Government to prevent overheating of the PRC property market.

# Selling expenses

Selling expenses increased by approximately 18.5% to approximately HK\$44.5 million (2009: approximately HK\$37.6 million) for the six months ended 30 June 2010. The increase was mainly due to the higher transportation costs as a result of increase in sales volume. Because of the significant revenue growth, selling expenses to revenue ratio decreased from approximately 1.8% to 0.8%.

# Administrative expenses

During the period, the Group continued its efforts in keeping operating costs down. Overall administrative costs remained stable, amounting to approximately HK\$74.6 million (2009: approximately HK\$73.4 million). Administrative expenses to revenue ratio reduced from approximately 3.4% to 1.4% as a result of the significant increase in sales revenue.

# Other gains — net

Other gains — net increased by approximately HK\$39.7 million to approximately HK\$67.8 million (2009: approximately HK\$28.1 million) in the first half of 2010. The major changes include: (i) net gains on aluminium futures contracts, including both realised gains/losses and mark-to-market fair value adjustments at period-end, increased from approximately HK\$24.7 million in the first half of 2009 to approximately HK\$102.4 million in the first half of 2010; (ii) exchange losses of approximately HK\$17.8 million — mainly arising from the currency translation differences of the Australian dollars bank deposits held by the Group — were recorded in the first half of 2010 compared to exchange gains of approximately HK\$4.6 million reported in the same period last year; (iii) a fully-provided trade receivable of approximately HK\$28.7 million was recovered from a former associate of the Group; and (iv) having considered the recoverability of a receivable — amounting to approximately HK\$94.6 million and approximately HK\$98.0 million as at 30 June 2010 and 31 December 2009 respectively — due from an aluminium smelter, a provision of approximately HK\$45.6 million — in addition to the provision of approximately HK\$49.0 million made in 2009 — was provided in the first half of 2010.

# Finance income and finance costs

During the period, the Group's finance income increased by approximately HK\$5.9 million to approximately HK\$13.5 million (2009: approximately HK\$7.6 million), mainly due to the increase in average bank deposits held by the Group and the higher interest rate on Australian dollars bank deposits.

Compared to the last interim period, the Group's finance costs in the first half of 2010 decreased by approximately HK\$8.8 million to approximately HK\$21.0 million (2009: approximately HK\$29.8 million) because of the reduction in interest rate and reduced use of discounted bills as a source of short-term financing.

# Share of post-tax profits less losses of jointly-controlled companies

Changzhou Jinyuan — Sales volume of copper rods and wires increased by approximately 9.9%; however, lower profit was recorded in the first half of 2010 than the same period last year, mainly due to the factors stated below: (i) The PRC copper prices increased from about RMB28,100 to RMB39,900 per tonne in the first half of 2009 and decreased from about RMB60,200 to RMB52,600 per tonne in the first half of 2010. These volatile price changes caused substantial differences on the mark-to-market fair value adjustments on Changzhou Jinyuan's copper futures contracts, which increased the first-half profit of Changzhou Jinyuan in 2009 by approximately HK\$136.3 million but HK\$6.0 million only in 2010; and (ii) Surging copper price increased the working capital requirement of Changzhou Jinyuan, thus increased its finance costs and reduced its profit.

Guangxi Huayin — Turnaround from loss in the last interim period into profit in current interim period; — Sales volume of alumina increased substantially from 452,300 tonnes in the first half of 2009 to 960,700 tonnes in the first half of 2010; — Increase in sales volume and alumina price as well as higher production capacity utilisation rate contributed to the significantly improved profit performance for the current period; and — In the first half of 2010, a capital injection of approximately RMB216.1 million (equivalent to approximately HK\$246.4 million) was made by Guangxi Huayin's shareholders in proportion to their respective shareholdings to provide additional financial support to Guangxi Huayin for a technology enhancement project, which can improve energy-saving, wastage reduction and production efficiency. When completed, production capabilities of Guangxi Huayin will be further strengthened. For more details, please refer to the Company's announcement dated 28 January 2010.

Mincenco — The bauxite exploration and alumina refinery project in Jamaica is still in the feasibility study phase. No significant changes in current interim period.

# Share of post-tax profits of associates

Sino Nickel — Trading performance of nickel concentrate improved significantly as average selling price of nickel concentrate increased by approximately 59% when compared to the same period last year.

Qingdao M.C. — Profit lowered when compared to the last interim period; and — Sales volume of aluminium cans grew by approximately 14.5% but could not offset the negative impact of margin decrease caused by intense market competition.

# **SEGMENTAL ANALYSIS**

# **Trading**

For the six months ended 30 June 2010, trading business accounted for approximately 80.6% (2009: approximately 62.3%) of the Group's external revenue and contributed approximately HK\$246.4 million (2009: approximately HK\$47.7 million) to the Group's operating profit. Alumina and aluminium ingots remained the Group's major trading products during the period, representing approximately 60.9% (2009: approximately 90.1%) and approximately 39.1% (2009: approximately 9.9%) respectively of the external revenue of this segment.

Alumina prices in the PRC market moved from about RMB2,900 per tonne (tax included, similarly hereinafter) at the start of 2010 to about RMB2,500 per tonne towards the end of June, a drop of approximately 14%. Prices weakened but remained much higher — at all times throughout the entire period — than the corresponding ones in last year. Aluminium also followed similar price trend. Spot prices in Shanghai Futures Exchange and London Metal Exchange slumped approximately 11% and 13% respectively during the same period.

With the continued upturn of economy since the second half of last year, the Group made good progress in expanding its trading business in the first quarter of 2010. However, the development was not free of concerns as trading of alumina and aluminium ingot experienced setback afterwards. European sovereign debt crisis squeezed the demand for the metals. Besides, the PRC's curbs on lending and property speculation also cooled the demand. Large inventory build-up and oversupply led to the price slump in the second quarter and slowed down the growth momentum. Nevertheless, the average prices of alumina and aluminium ingot sold by the Group in the first half of 2010 could still be maintained at levels higher than the last interim period. This, together with the substantial increase in sales volume — particularly the domestic trade in the PRC market, helped this segment delivering encouraging first-half results in 2010.

# Aluminium fabrication

Aluminium fabrication accounted for approximately 16.5% (2009: approximately 30.2%) of the Group's external revenue and contributed approximately HK\$15.7 million (2009: approximately HK\$27.9 million) to the Group's operating profit for the six months ended 30 June 2010. The Group operated its aluminium fabrication business through a 72.8%-owned subsidiary, North China Aluminium Company Limited ("NCA").

Increased demand for aluminium fabrication products from both the PRC and overseas markets added impetus to the revenue growth of NCA during the period. Because of improvement in production efficiency and recovery in export sales, sales volume increased by 12.5% to 41,500 tonnes in the first half of 2010. Nevertheless, this segment reported lower profit in current interim period than a year

before. This was mainly due to: (i) more and more competitors entered the market in recent years and posed increasing pressure on the processing charges of certain product categories, particularly the low-end products; and (ii) cost of inventories increased as a result of rising aluminium price — in average when compared to the last corresponding period.

In view of the above, NCA has adopted several measures to strengthen its profit earning power and competitive edge, which include: (i) realignment of its product mix by placing more emphasis on high value-added products in its market development strategies; (ii) implementation of quality enhancement and technology development programmes to improve its product competitiveness; and (iii) more comprehensive controls over commodity price risk exposures so as to minimise the adverse impact on operating profit caused by aluminium price fluctuation.

# Other operations

Other operations of the Group include production and sale of aluminium processing equipment, production and sale of plica tubes (flexible metals conduits) and port logistics services, which in aggregate accounted for approximately 2.9% (2009: approximately 7.5%) of the Group's external revenue and contributed approximately HK\$4.7 million (2009: approximately HK\$4.3 million) to the Group's operating profit for the six months ended 30 June 2010.

# Resources and liquidity

The Group remained in a strong liquidity and financial position throughout the six-month period ended 30 June 2010. During the period, total assets increased by approximately 9.8% to approximately HK\$8,347.4 million and shareholders' equity increased by approximately 8.6% to approximately HK\$5,375.5 million. Current ratio dropped slightly from approximately 2.4 at 31 December 2009 to approximately 2.2 at 30 June 2010.

As at 30 June 2010, the Group was in a net cash position of approximately HK\$931.8 million, representing cash and bank deposits of approximately HK\$1,950.9 million less bank borrowings of approximately HK\$1,019.1 million. Hence, gearing ratio (defined as total borrowings less cash and bank deposits divided by shareholders' equity) is not applicable.

The Group's cash and bank deposits, amounting to HK\$1,950.9 million at 30 June 2010, were mainly denominated in US dollars (57%), Renminbi (21%) and Australian dollars (21%). As at 30 June 2010, the profile of the Group's bank borrowings was as follows: (1) 60% were in Renminbi and 40% were in US dollars; (2) 29% were in fixed rates and 71% were in floating rates; and (3) 45% were repayable within 1 year, 14% were repayable between 1 and 2 years, 29% were repayable between 2 and 5 years and 12% were repayable after 5 years.

# Material acquisitions and disposals

In January 2010, the Group provided cash contribution of approximately RMB71.3 million (equivalent to approximately HK\$81.3 million) to Guangxi Huayin to support its technology enhancement project, which can enhance energy-saving, wastage reduction and production efficiency of its manufacturing process. The above contribution was made in proportion to the Group's equity interest in Guangxi Huayin, that is, 33%.

In April 2010, an agreement was entered into by the Group to conditionally dispose 42% equity interest in Yantai Penghui Copper Industry Company Limited — a non-current asset held for sale by the Group — to an independent third party at a consideration of approximately RMB85.6 million (equivalent to approximately HK\$97.6 million). As full provision had already been made in respect of this investment in prior years, it was expected that an estimated disposal gain of approximately RMB85.6 million (equivalent to approximately HK\$97.6 million) would be recognised in accordance with the fulfillment of conditions as stipulated in the agreement and the transfer of significant risks and rewards of the ownership concerned. For the six months ended 30 June 2010, a deposit of RMB8.6 million (equivalent to approximately HK\$9.8 million) was received by the Group in accordance with the agreement and no disposal gain has been recognised in this half year period.

# Capital expenditure and commitments

The Group incurred capital expenditure of approximately HK\$79.2 million for six months ended 30 June 2010, which was mainly related to the construction of a new aluminium foil production line and the upgrade of other production facilities.

The Group's capital commitments as at 30 June 2010 amounted to approximately HK\$86.0 million, which were mainly related to the expansion and upgrade of its aluminium fabrication production facilities.

# Significant investments held

The Group did not hold any significant investments as at 30 June 2010.

# Contingent liabilities

The Group had no material contingent liability as at 30 June 2010.

# Charge on assets

As at 30 June 2010, the following assets of the Group were pledged to certain banks for the banking facilities granted to the Group:

- (1) All the equity interests of a wholly owned subsidiary, Sino Mining Alumina Limited ("Sino Mining") and all the assets of Sino Mining;
- (2) Certain property, plant and equipment, land use rights as well as inventories of the Group with a total carrying amount of approximately HK\$422.2 million; and
- (3) Bank deposits of approximately HK\$51.2 million.

# Risk management

Set out below are the major risk areas that the Group may enter into derivative contracts from time to time to hedge against the risks.

# (a) Commodity price risk

Same as last year, the Group has used aluminium futures contracts to mitigate the fluctuation of commodity prices that may cause to its trading and aluminium fabrication businesses. As at 30 June 2010, the Group's long and short positions in aluminium futures contracts amounted to approximately 29,915 tonnes and 35,660 tonnes respectively.

# (b) Interest rate risk

Interest rate swaps of the Group with a notional principal amount of approximately HK\$429.0 million as at 31 December 2009 expired in the current interim period and after that no interest rate swap remained outstanding as at 30 June 2010. The Group will continue to closely monitor the impact of interest rate movements on its results and financial positions and adjust its fixed-rate and floating-rate loan balances accordingly; and if necessary, consider the use of derivative financial instruments to hedge against this risk.

# (c) Foreign exchange risk

Same as last year, the Group's foreign exchange risk exposure primarily related to its operations in Hong Kong, the PRC and Australia. The Group's revenue is principally denominated in United States dollars and Renminbi, while cost of sales and other expenses are mainly denominated in United States dollars, Renminbi, Australian dollars and Hong Kong dollars. Given the exchange rate peg between Hong Kong dollars and United States dollars, it is not foreseen that the Group will be exposed to significant exchange risk for transactions conducted in these two currencies. However, exchange rate fluctuations of Renminbi or Australian dollars against United States dollars or Hong Kong dollars may affect the Group's performance and asset value. In 2010, the Group has used foreign exchange forward contracts to reduce its Australian dollars exchange exposures in relation to the sourcing cost of alumina. The total notional principal amount of the Group's outstanding foreign exchange forward contracts as at 30 June 2010 was approximately Australian dollars 3.7 million (equivalent to approximately HK\$24.8 million) (2009: Nil).

# **Human resources**

As at 30 June 2010, the Group employed a total of 2,532 full-time employees (not including the employees of jointly-controlled companies and associates), of which 16 were based in Hong Kong, 13 were in Australia and the remaining ones were in the PRC. The total staff costs, including the directors' emoluments, for the six months ended 30 June 2010 amounted to approximately HK\$78.0 million.

The Group has adopted salary policies in line with market practice and remunerated its employees based on their performance and experience. Other employee benefits include performance-related bonuses, insurance and medical coverage and share option scheme. Various forms of training are provided to staff as and when necessary. For the six months ended 30 June 2010, a total of 15,400,000 share options were granted to certain directors of the Company and employees of the Group to recognise and acknowledge the contributions that they had made or may from time to time make to the Group whether in the past or in the future.

# (b) Year ended 31 December 2009 compared to year ended 31 December 2008

The Group's revenue for the year of 2009 amounted to approximately HK\$6,215.8 million, representing a decrease of approximately 26.4% from 2008. However, with improved returns from the aluminium fabrication business and jointly-controlled companies as well as the disposal gain of non-core business, the Group recorded significant improvement in net profit during the year. The profit attributable to the equity holders of the Company increased from approximately HK\$137.7 million in 2008 to approximately HK\$338.5 million in 2009, representing an increase by approximately 145.9%.

# Revenue

The Group recorded consolidated revenue of approximately HK\$6,215.8 million in 2009, representing a decrease of approximately 26.4% from 2008. Overall sales volume of the Group saw no significant changes. For the trading business, the decline in alumina sales (approximately 89,400 tonnes or 6.3%) was largely offset by the increase in aluminium ingot sales (approximately 12,100 tonnes or 11.9%). For the aluminium fabrication, sales volume decreased by 5.5%. As such, the drop in revenue was mainly attributable to the plunge in alumina and aluminium prices. Although remarkable rebounds already occurred in 2009 — especially in the second half of the year, alumina and aluminium prices still fell far behind the pre-financial tsunami level. The average alumina sales price of the Group dropped by approximately 33.7% from HK\$3,248 per tonne in 2008 to approximately HK\$2,154 per tonne in 2009.

# **Gross profit**

Overall gross profit margin reduced slightly from approximately 5.0% in 2008 to 4.8% in 2009. The Group recorded gross profit of approximately HK\$295.8 million in 2009, a decrease of approximately HK\$125.8 million or 29.8% when compared to 2008. The decline was mainly due to the drop in average selling price.

During 2009, trading business, the Group's most important revenue and profit contributor, faced significant pressures on both sales and cost sides. On the sales side, although recovery in alumina price occurred in the second half of 2009, intensified competition and growing surplus limited the growth momentum. On the cost side, as the cost of alumina sourced under a long-term supply contract from a supplier was in some way correlated to the production cost of that supplier and therefore its fluctuation might not fully match with the alumina price fluctuation in the spot market. Comparing the situation in 2009 to 2008, the fall in the procurement cost of alumina under this contract could not catch up with the corresponding fall in the market price of alumina.

# Selling expenses

Sales volume of the Group for the year showed no significant changes but selling expenses decreased by approximately 29.6% to approximately HK\$75.5 million (2008: approximately HK\$107.3 million). This was mainly due to the decrease in transportation and port charges. However, because of the drop in the Group's revenue — mainly due to the substantial decrease in selling price, selling expenses to revenue ratio only decreased slightly from approximately 1.3% to 1.2%.

# Administrative expenses

To cope with the difficult economic situation, the Group further tightened its cost controls in 2009. The Group's administrative expenses for the year decreased by approximately 14.9% to approximately HK\$162.2 million (2008: approximately HK\$190.7 million). The decrease was mainly due to the reduction in staff costs and professional fees. However, because of the drop in the Group's revenue — mainly due to the substantial decrease in selling price, administrative expenses to revenue ratio increased from approximately 2.3% to 2.6%.

# Other (losses)/gains — net

The Group reported other losses — net of approximately HK\$10.7 million in 2009, compared to other gains — net of approximately HK\$62.8 million in 2008. The major changes in 2009 include: (i) the increase in provision for impairment of other receivables of approximately HK\$46.6 million; and (ii) as Renminbi showed little appreciation during the year, exchange gain recorded in 2009 decreased by approximately HK\$23.7 million when compared to 2008, albeit remarkable exchange gains were derived from the Group's Australian dollars bank deposits in 2009.

The increase in provision for impairment of other receivables in 2009 was mainly related to the Group's trading business segment. During the year, the financial position of an aluminium smelter, who entered into tolling arrangement with the Group, was severely affected because of the global financial tsunami and the sudden reduction in its operating scale. This caused it failed to execute the tolling contracts and repay other receivables owed to the Group, amounting to approximately HK\$98.0 million at 31 December 2009, on schedule. In view of the uncertainty of the recoverability of these receivables, specific provision for impairment of approximately HK\$49.0 million was provided. As a protective measure, a power generation unit of this aluminium smelter is pledged as collateral for these receivables. Currently, this aluminium smelter is still in normal production. The Group will continue to make every endeavour to recover these receivables so as to satisfactorily resolve the issue. Although the results for 2009 have been affected to a certain extent, the Group remains in strong liquidity and financial position. All business sections — trading as well as others — have been operating normally.

# Gain on disposal of available-for-sale financial assets

In the first half of 2009, the Group disposed its entire interest of approximately 11.5 million shares in Sino Gold Mining Limited and recorded a net gain of approximately HK\$325.6 million.

# Finance costs — net

Finance costs — net increased by approximately HK\$7.9 million from approximately HK\$24.6 million in 2008 to approximately HK\$32.5 million in 2009, mainly due to the decrease in interest income. Under a low interest rate environment, the Group's interest income decreased by approximately HK\$12.9 million during the year.

# Share of post-tax profits less losses of jointly-controlled companies

Changzhou Jinyuan — For the year ended 31 December 2009, Changzhou Jinyuan has a profit of approximately HK\$39.1 million, as compared to the loss of approximately HK\$4.4 million in 2008. The increase in profit in 2009 of Changzhou Jinyuan was mainly due to: i) Changzhou Jinyuan's sales volume of copper rods and wires increased by approximately 6.4% — the subsidy scheme for residents buying household appliances boosted the demand for magnet wires; ii) Proactive inventory management helped Changzhou Jinyuan seized the opportunities in the commodity market and lowered its raw materials procurement costs in 2009; iii) Enhanced production efficiency and cost control; iv) Substantial rebound of copper prices caused the actual losses incurred on certain copper futures contracts upon the execution of their corresponding physical contracts in 2009 were much smaller than the unrealised mark-to-market losses as previously recorded 2008, and thus boosted the profit in current year; and v) Provision for certain manufacturing equipments made in the second half of 2009 — in light of the migration to the new production line in next year — partly offset the above positive effect on profit.

Guangxi Huayin — In 2009, alumina sales and production volume was about 1.3 million tonnes and loss of HK\$18.9 million for the year (2008: loss of HK\$33.6 million) was mainly due to: i) Operating loss incurred in the first half of the year primarily as a result of the weak alumina price and under-utilisation of production capacity; and ii) Situation improved in the second half of the year as economy gradually recovered. Guangxi Huayin resumed to operate at full production capacity in the third quarter and earned positive monthly results in the following months. However, this could not fully recoup the lost ground previously made during the year.

Mincenco — The bauxite exploration and alumina refinery project in Jamaica is still in the feasibility study phase, so no profit contribution was recorded in 2009.

# Share of post-tax profits of associates

Sino Nickel — Sales volume grew by approximately 5.4% but with average selling price of nickel concentrate slumped by about 40%, profit reduced significantly when compared to last year.

Qingdao M.C. — Sales volume of aluminium cans remained stable. Profit contribution reduced mainly due to decline in and downward pressure on selling price as a result of intense market competition.

# Segmental analysis

# Trading

In 2009, trading business accounted for approximately 72.8% (2008: approximately 74.7%) of the Group's external revenue and reported operating profit of approximately HK\$38.8 million (2008: operating profit of approximately HK\$194.8 million). Alumina and aluminium ingots remained the major trading products during the year, representing approximately 63.8% (2008: approximately 73.6%) and approximately 36.2% (2008: approximately 26.4%) respectively of the external revenue of this segment.

Notwithstanding the concerns about growing surplus and the sustainability of economic recovery, the market prices of alumina and aluminium showed remarkable rebounds since early 2009.

As for the PRC alumina market, spot prices continued to slump at the beginning of 2009 and dropped to about RMB1,800 per tonne (tax included, similarly hereinafter) in February. Then, some signs of stabilisation and support were found in the latter months. In early April, prices jumped by more than 20% to about RMB2,200 to RMB2,300 per tonne in response to the restart of idle capacity by some aluminium smelters and the upsurge of aluminium prices after the buying of aluminium reserve by the State Reserve Bureau. Attracted by the price jumps, certain alumina producers restarted idle capacity but less-than-expected restart of capacity by local aluminium smelters lowered the demand for alumina again. Prices thus eased back in June and traded around RMB2,000 per tonne. Wider economic recovery fuelled up the price rises in the second half of the year. Alumina spot prices moved steadily upward from July to September. After reaching RMB2,500 per tonne in September, prices remained relatively flat in the following months. And near the year end, alumina prices rose again and surged to about RMB2,900 per tonne as smelters started to stock materials before the Lunar New Year holiday.

Because of the linkage between alumina and aluminium — alumina is the main raw material used to produce aluminium, aluminium prices also showed similar rebounds during the year, increasing from about RMB12,000 per tonne (tax included, similarly hereinafter) at the beginning of the year to about RMB17,000 per tonne towards the year end.

Although alumina and aluminium prices showed notable rebounds in 2009 when compared to the lowest level last year, the large inventory build-up and uncertainty on the sustainability of economic recovery still raised concerns over the price outlook. Volatile price fluctuations and increasing domestic alumina production posed significant challenges to alumina importers.

To meet with the market changes, the Group has flexibly adjusted the business focus in order to optimise its value chain. During the year, it had strengthened its inventory controls, increased sourcing of commodities from the domestic market and self-owned resources, and expanded the tolling operation. Through these measures and by capitalising on the positive flow-on effects of the stimulus package on alumina and aluminium consumption, the Group only posted slight decline in the trading volume of alumina by approximately 6.3% and recorded approximately 11.9% increase in the trading volume of aluminium ingot.

Nevertheless, the Group has experienced a plunge in its alumina selling price — dropped approximately 33.7% on average when compared to 2008, trading revenue of the Group declined sharply by approximately 28.3%. This, coupled with the provision for impairment of receivables of approximately HK\$49.0 million and the depressed trading margin, resulted in the Group's trading segment recording a relatively small operating profit of approximately HK\$ 38.8 million in 2009.

# Aluminium fabrication

Aluminium fabrication accounted for approximately 23.0% (2008: approximately 22.0%) of the Group's external revenue and contributed approximately HK\$43.7 million (2008: approximately HK\$28.8 million) to the Group's operating profit in 2009. The Group operated its aluminium fabrication business through a 72.8%-owned subsidiary, NCA.

Demand for downstream aluminium products has shrunk substantially after the international financial crisis, particularly in the overseas markets. Situation showed some improvements in the second half of 2009 but export slowdown still triggered fierce competition among the PRC manufacturers in the domestic market.

In 2009, sales volume and revenue of NCA decreased by approximately 5.5% and 23.3% respectively when compared to last year. Sales volume declined mildly as the drop in aluminium foil stock (which can be further processed into light gauge aluminium foil) and aluminium fin stock was negated by the increase in other products, like hydrophilic fin stock and PS substrate. As exaggerated by the drop in aluminium price, NCA recorded a higher percentage decline in revenue. As such, the improvement in NCA's operating profit was mainly derived from the cost side, including: (i) reduced staff costs and various administrative expenses; and (ii) decrease in exchange losses.

#### Other operations

This segment mainly includes production and sale of aluminium processing equipment, production and sale of plica tubes (flexible metals conduits) and port logistics services, which in aggregate accounted for approximately 4.2% (2008: approximately 3.3%) of the Group's external revenue and contributed approximately HK\$4.9 million (2008: approximately HK\$11.7 million) to the Group's operating profit in 2009.

#### Resources and liquidity

The Group remained in a strong liquidity and financial position for the year ended 31 December 2009. During the year, total assets and shareholders' equity increased by approximately 1.3% and 2.9% respectively to approximately HK\$7,600.4 million and HK\$4,950.9 million respectively. Current ratio improved from approximately 2.0 to 2.4.

As at 31 December 2009, the Group was in a net cash position of approximately HK\$762.9 million, representing cash and bank deposits of approximately HK\$1,968.2 million less total borrowings of approximately HK\$1,205.3 million (comprising bank borrowings of approximately HK\$1,009.9 million and advances from banks for discounted bills of approximately HK\$195.4 million). Hence, gearing ratio (defined as total borrowings less cash and bank deposits divided by shareholders' equity) is not applicable.

The Group's cash and bank deposits, amounting to approximately HK\$1,968.2 million at 31 December 2009, were mainly denominated in US dollars (48%), Renminbi (30%) and Australian dollars (21%).

As at 31 December 2009, the profile of the Group's bank borrowings was approximately as follows:

- (1) 58% were in Renminbi and 42% were in US dollars;
- (2) 24% were in fixed rates and 76% were in floating rates;

(3) 37% were repayable within 1 year, 15% were repayable between 1 and 2 years, 24% were repayable between 2 and 5 years and 24% were repayable after 5 years.

#### Material acquisitions and disposals

In March 2009, the Group increased its investments in its jointly-controlled company, Changzhou Jinyuan, by a cash injection of approximately HK\$42.4 million. The cash contribution from the Group, together with those provided by other shareholders, was used by Changzhou Jinyuan to finance the construction of a new copper rod production line with an annual capacity of 300,000 tonnes. After this cash injection, the Group's interest in Changzhou Jinyuan increased slightly from 36% to approximately 36.3%.

In June 2009, the Group disposed its entire interest of 11,492,912 shares in Sino Gold Mining Limited to certain independent third parties and recorded a net gain of approximately HK\$214.7 million. The disposal represents a good opportunity to realise a gain from the investment and the net proceeds of approximately HK\$386.7 million would be used by the Group as general working capital and to fund any potential investments available to the Group in the future.

During the year ended 31 December 2009, the Group provided the following cash contributions to its jointly-controlled companies:

- (1) Approximately HK\$38.8 million was provided to Guangxi Huayin to support its construction of transport system and other infrastructures; and
- (2) Approximately HK\$8.1 million was provided to Mincenco to support its daily operations in the feasibility study stage.

After the completion of the capital injection of approximately HK\$1.8 million in November 2009, the Group increased its equity interest in Yin Fa Transportation Company Limited ("Yin Fa"), an associate owned as to 48.5% previously by the Group, to 65%. Yin Fa has been consolidated into the Group's consolidated financial statements since then. Prior to the capital injection, Yin Fa was equity accounted for as an interest in an associate. The principal business of Yin Fa is provision of transportation services.

#### Significant investments held

The Group did not hold any significant investments as at 31 December 2009.

#### Contingent liabilities

The Group had no material contingent liability as at 31 December 2009.

#### Capital expenditure and commitments

The Group incurred capital expenditure of approximately HK\$266.5 million for year ended 31 December 2009, which was mainly related to the construction of a new aluminium foil production line and the upgrade of other production facilities.

The Group's capital commitments as at 31 December 2009 amounted to approximately HK\$54.8 million, which were mainly related to the upgrade and expansion of production facilities in the Group's aluminium fabrication business.

#### Charge on assets

As at 31 December 2009, the following assets of the Group were pledged to certain banks for the banking facilities granted to the Group:

- (1) All the equity interests of a wholly-owned subsidiary, Sino Mining and all the assets of Sino Mining;
- (2) Certain property, plant and equipment, land use rights as well as inventories of the Group with a total carrying amount of approximately HK\$366.5 million; and
- (3) Bank deposits of approximately HK\$35.4 million.

#### Risk management

The Group does not and is prohibited to enter into derivative contracts for speculative purpose. Set out below are the risk areas that the Group may enter into derivative contracts or implement other measures from time to time to hedge against the risks.

#### (a) Commodity price risk

In order to mitigate the price fluctuations of alumina and aluminium that may cause to its trading and aluminium fabrication businesses, the Group has entered into certain aluminium futures contracts in 2009. As at 31 December 2009, the Group's long and short positions in aluminium futures contracts amounted to approximately 5,625 tonnes and 37,595 tonnes respectively.

#### (b) Interest rate risk

The Group has used interest rate swaps to reduce the impact of interest rate fluctuation on its operation. There was no new interest rate swap entered during the year and the outstanding principal amount of the Group's interest rate swaps amounted to approximately HK\$429.0 million at 31 December 2009.

#### (c) Foreign exchange risk

The Group's foreign exchange risk exposure primarily related to its operations in Hong Kong, the PRC and Australia. The Group's revenue is principally denominated in Renminbi and United States dollars, while cost of sales and other expenses are mainly denominated in United States dollars, Renminbi, Australian dollars and Hong Kong dollars. Given the exchange rate peg between Hong Kong dollars and United States dollars, it is not foreseen that the Group will be exposed to significant

exchange risk for transactions conducted in these two currencies. However, exchange rate fluctuations of Renminbi or Australian dollars against United States dollars or Hong Kong dollars may affect the Group's performance and asset value. The Group had not entered into any derivative contracts to hedge against this risk for the year ended 31 December 2009.

#### **Human Resources**

As at 31 December 2009, the Group employed a total of 2,551 full-time employees (not including the employees of jointly-controlled companies and associates), of which 15 were based in Hong Kong, 13 were in Australia and the remaining ones were in the PRC. The total staff costs, including the directors' emoluments, for the year ended 31 December 2009 amounted to HK\$136.6 million.

The Group has adopted salary policies in line with market practice and remunerated its employees based on their performance and experience. Other employee benefits include performance-related bonuses, insurance and medical coverage and share option scheme. Whilst pursuing a range of cost-saving measures to improve efficiency amid the difficult operating environment during the year, the Group remains to see committed and competent workforce as a key to corporate success. Various forms of training are provided to staff as and when necessary.

#### (c) Year ended 31 December 2008 compared to year ended 31 December 2007

The Group recorded consolidated revenue of approximately HK\$8,450.3 million for the year ended 31 December 2008, representing an approximately 15.2% year-on-year increase from the consolidated revenue of HK\$7,337.2 million for the year ended 31 December 2007. However, because of margin erosion, write-down of inventories as well as the non-cash impairment provision for alumina purchasing rights, the profit attributable to equity holders of the Company declined from approximately HK\$601.2 million in 2007 to HK\$137.7 million in 2008.

#### Revenue

Despite the sustained decline in aluminium and alumina prices, the Group recorded approximately 15.2% year-on-year revenue growth in 2008. Revenue from the Group's core operations, including trading and aluminium fabrication, increased by approximately 17.4% and 2.7% respectively. The improvement was mainly driven by sales volume growth. This reflects the Group's success in widening its procurement sources of alumina supply in both international and the PRC markets, and expanding further into different segments along the aluminium business chain.

#### Gross profit

Due to the decrease in gross profit margin and a write-down of inventories of approximately HK\$118.5 million at the year-end of 2008, the Group's gross profit decreased from approximately HK\$924.8 million for the year ended 31 December 2007 to HK\$421.5 million for the year ended 31 December 2008. Overall gross profit margin reduced from approximately 12.6% in 2007 to 5.0% in 2008, which was mainly due to the reduction in gross profit margin of the core businesses — trading of alumina and aluminium ingots as well as the write-down of inventories as mentioned above.

In 2008, the Group suffered pressure on both the sales and cost sides of its trading operation. The adverse factors include: (i) the disruption in production of certain PRC aluminium smelters — because of the snow storms in Southern China in early 2008 — has driven down the demand for alumina; (ii) market sentiment turned even more negative with the hit of the financial tsunami — oversupply continues to grow; and (iii) imported cost alumina remained high in most of the time throughout the year because of rising fuel costs. The downturn of energy prices, though substantial in the last few months of 2008, provided little immediate relief on the procurement cost for 2008.

#### Selling expenses

During the year, the Group's selling expenses increased by approximately 34.1% to approximately HK\$107.3 million (2007: approximately HK\$80.0 million). This was partly due to the growth in turnover and partly due to the escalating transportation charge and other logistics costs. Selling expenses to revenue ratio rose from approximately 1.1% to 1.3%.

#### Administrative expenses

During the year, the Group's administrative expenses rose by approximately 17.1% to approximately HK\$190.7 million (2007: approximately HK\$162.9 million). The increase was mainly due to: (i) legal and other professional fees incurred for the investment projects undertaken during the year; (ii) increased business expenses as a result of higher sales and production volume; and (iii) inflated labour and other running costs. Administrative expenses to revenue ratio increased from approximately 2.2% to 2.3%.

#### Other income

The Group recorded other income of approximately HK\$25.8 million in 2008, as compared to HK\$90.5 million in 2007. The difference was mainly attributable to a tax refund granted to the Group in 2007 as a result of its reinvestment in a PRC subsidiary.

#### Other gains - net

Other gains — net decreased from approximately HK\$158.9 million in 2007 to approximately HK\$62.8 million in 2008. The decrease in other gains — net was mainly attributable to: (i) a decrease in the net exchange gains from approximately HK\$120.3 million in 2007 to approximately HK\$67.2 million in 2008 as a result of the depreciation of Australian dollars and the slowing down of appreciation of Renminbi against other currencies; and (ii) net losses of approximately HK\$12.9 million were reported in respect of the realised gains/losses and mark-to-market fair value adjustments on aluminium forward/futures contracts in 2008, compared to the net gains of approximately HK\$31.01 million in 2007.

#### Finance costs — net

Finance costs — net decreased by approximately HK\$4.0 million to HK\$24.6 million (2007: HK\$28.6 million) in 2008. The decrease was mainly attributable to: (i) no interest on convertible bonds was recorded in 2008 (2007: approximately HK\$47.0 million) as the conversion of outstanding bonds had been completed in 2007; and (ii) decrease in interest income because of the reduction in interest rates as well as cash surplus in 2008.

#### Share of post-tax profits less losses of jointly-controlled companies

The Group's share of the results of its jointly-controlled companies is as follows:

Changzhou Jinyuan — Sales volume and revenues of copper rods and copper wires decreased by approximately 3.7% and 7.9% respectively because of weakened demand and severe market competition. However, the most critical factor that caused the loss for 2008 was the significant decline in copper price near the year end, bringing a mark-to-market loss in respect of outstanding copper futures contracts, as opposite to a gain in 2007, to Changzhou Jinyuan.

Guangxi Huayin — Reported loss in 2008 because of write-down of inventories at the year end in response to the substantial decline in alumina price at that time.

Mincenco — No revenue was derived in 2008 since the Jamaican bauxite exploration and alumina refinery project was still in the exploration and feasibility study stage.

#### Share of post-tax profits less losses of associates

The Group's share of the results of its associates is as follows:

Sino Nickel — Average selling price of nickel concentrate spiralled down by more than 30% compared to 2007 and trading profit margin also lowered than before.

Qingdao M.C. — Profit from aluminum cans production improved due to reduced raw material costs and sales growth.

#### SEGMENTAL ANALYSIS

#### **Trading**

In 2008, trading business accounted for approximately 74.7% (2007: approximately 73.2%) of the Group's external revenue and contributed approximately HK\$194.8 million (2007: approximately HK\$873.3 million) to the Group's operating profit. Alumina and aluminium ingots remained the major trading products for the year, representing approximately 73.6% (2007: approximately 73.6%) and approximately 26.4% (2007: approximately 26.3%) respectively of the external revenue of this segment.

Weakening demand and negative market sentiment posed significant challenge to the Group's trading business. Compared to 2007, the market price of alumina in the PRC experienced much volatile changes in 2008.

In 2007, alumina price rebounded to approximately RMB3,600 per tonne in the first quarter after hitting a low level of approximately RMB2,500 per tonne by end of 2006. Price then showed some ease back in the middle of the year. But in the last two months, price started to rise again and reached the level of approximately RMB4,200 to RMB4,500 per tonne.

In 2008, except in the first few months, alumina price showed a continuous slide throughout the year. Price began to lose its strength in the second quarter and dropped to approximately RMB3,900 per tonne at the quarter end. And in the next few months, price continued to decline and fall to approximately RMB2,900 per tonne in October. The situation went from bad to worse by the end of the year. Price plummeted even further to approximately RMB2,000 per tonne or lower amid the global financial crisis.

Despite the sustained decline in alumina price, the Group still managed to achieve revenue growth of approximately 17.4% in its trading business. During the year, the Group leveraged on its competitive strengths in the imported alumina market and expanded into upstream operation. Through the acquisition of 33% interest in Guangxi Huayin, it has secured a stable and long-term supply of the PRC domestically produced alumina and strengthened its market position. Therefore, the trade volume of alumina could still grow by approximately 26.7% under the difficult market situation in 2008.

To further diversify risk and expand its customer network, the Group also engaged in tolling, sourcing and trading of aluminium ingots. Through the cooperation with aluminium smelters, the Group could be more flexible in meeting the customers' demand for alumina and aluminium ingots and thus enhanced its marketing capabilities. Trading volume of aluminium ingots increased approximately 21.7% in 2008 when compared to 2007.

However, climbing global energy prices increased the cost of imported alumina as well as transportation cost. The downturn of these costs, which occurred in the last few months of the year, offered no great help to the overall result for 2008. At the year end of 2008, due to the drastic decline in the market prices of aluminium and alumina, the Group wrote down the aluminium and alumina stocks of this segment by approximately HK\$106.1 million. Significant decline in sales price, rising procurement cost, massive write-down of inventories and provision for impairment of alumina purchasing rights caused the contribution from the Group's trading segment decreased sharply by approximately HK\$678.5 million to approximately HK\$194.8 million in 2008.

#### Aluminium fabrication

Aluminium fabrication accounted for approximately 22.0% (2007: 24.7%) of the Group's external revenue and contributed approximately HK\$28.8 million (2007: approximately HK\$52.2 million) to the Group's operating profit in 2008. The Group operated its aluminium fabrication business through NCA, a subsidiary owned as to 72.8% by the Group as at 31 December 2008.

As compared to 2007, sales volume and external sales revenue in this segment recorded a slight growth of approximately 2.3% and 2.7% respectively. However, significant decline in aluminium price in the third quarter of 2008 severely undermined the growth momentum carried forward from the first-half of 2008.

In 2008, NCA strived to expand its market share in the aluminium foil stock and PS plate market. Improvement in product quality and reliability has gained widespread acceptance among different customers. Besides, NCA also spared no effort in optimising its product mix so as to maintain and improve its profit margin. However, surging operating costs, such as labour, repair and maintenance as well as research and development expenses, caused a drop in the contribution from this segment from approximately HK\$52.2 million in 2007 to approximately HK\$28.8 million in 2008.

The construction of a new aluminium foil production line is underway. It is anticipated that this new production line, which can enhance NCA's annual production capacity by 25,000 tonnes, can commence production in the last quarter of 2009.

#### Other operations

This segment, which mainly included the production and sale of aluminium processing equipment, production and sale of plica tubes (flexible metals conduits) and port logistics services, accounted for approximately 3.3% (2007: approximately 2.1%) of the Group's external revenue and contributed approximately HK\$12.2 million (2007: approximately HK\$12.7 million) to the Group's operating profit in 2008.

#### Resources and liquidity

Notwithstanding the rapid downturn of the global economy and the volatile changes in the commodity market, the Group has maintained a healthy financial and liquidity position in 2008. During the year, total assets and shareholders' equity increased by approximately 4.6% to approximately HK\$7,505.7 million and decreased by approximately 1.9% to approximately HK\$4,813.4 million respectively. The Group's financial and liquidity position has been strong for 2007. Total assets and equity attributable to the Company's equity holders increased to HK\$7,175.2 million and HK\$4,904.3 million respectively as at end of year 2007. As at 31 December 2008, the Group's current ratio was approximately 2.0 (2007: approximately 3.1).

As at 31 December 2008, the Group was in a net cash position of approximately HK\$970.0 million, representing cash and bank deposits of approximately HK\$1,905.9 million less total borrowings of approximately HK\$935.9 million (comprising bank borrowings of approximately HK\$848.6 million and advances from banks for discounted bills of approximately HK\$87.3 million). Hence, gearing ratio (defined as total borrowings less cash and bank deposits divided by shareholders' equity) is not applicable. The Group's cash and bank deposits, amounting to approximately HK\$1,905.9 million at 31 December 2008, were mainly denominated in Hong Kong dollars (14%), Renminbi (30%) and US dollars (55%).

As at 31 December 2008, the profile of the Group's bank borrowings was approximately as follows:

- (1) 44% were in Renminbi and 56% in US dollars;
- (2) 28% were in fixed rates and 72% were in floating rates;
- (3) 36% were repayable within 1 year, 12% were repayable between 1 and 2 years, 23% were repayable between 2 and 5 years and 29% were repayable after 5 years.

As at 31 December 2007, the Group was in a net cash position of HK\$1,248.6 million, representing cash and bank deposits of HK\$2,736.5 million less total borrowings of HK\$747.2 million (comprising bank borrowings of HK\$697.7 million and advances from banks for discounted bills of HK\$49.5 million). Hence, gearing ratio (defined as total borrowings less cash and bank deposits divided by shareholders' equity) is not applicable.

The Group's cash and bank deposits, amounting to HK\$2,736.5 million as at 31 December 2007, were mainly denominated in Hong Kong dollars (22%), Renminbi (55%), US dollars (22%) and others.

During the year, the Group's total borrowings increased to HK\$747.2 million, mainly due to the increase in advances from banks for discounted bills. There is no particular seasonality of the Group's bank borrowings. As at 31 December 2007, the profile of the Group's bank borrowings was as follows:

- (1) 25% were in Renminbi and 75% were in US dollars;
- (2) 25% were in fixed rate and 75% were in floating rate;
- (3) 32% were repayable within 1 year, 7% were repayable between 1 and 2 years, 20% were between 2 and 5 years and 41% were repayable after 5 years.

#### Material acquisitions and disposals

In June 2007, Riseup Dragon Limited, a wholly-owned subsidiary of the Company, entered into an agreement to acquire 16.31% equity interest in NCA, a subsidiary engaged in aluminium fabrication and owned as to 51% by the Group before this acquisition. The consideration was approximately RMB72.9 million (equivalent to approximately HK\$75.1 million). After this acquisition, the Group will also provide a capital injection in cash of RMB98.8 million (equivalent to approximately HK\$101.8 million) to NCA to support the construction of a new production plant.

In mid-January 2008, the Group completed the acquisition of 16.31% interest in NCA, a non-wholly owned subsidiary of the Group engaging in the production of aluminium foils and extrusions, and increased its equity interest in NCA to 67.31%. Through a capital injection in September 2008, for which the Group contributed approximately RMB98.8 million (equivalent to approximately HK\$112.6 million) of cash, the Group's stake in NCA further increased to 72.8%.

In November 2007, the Company announced that the Group had entered into agreements in relation to the acquisition of 33% equity interest in Guangxi Huayin for a consideration of approximately RMB856.0 million (equivalent to approximately HK\$890.2 million). This acquisition has been approved by the Company's independent shareholders in the extraordinary general meeting held on 18 December 2007.

By the end of April 2008, the Group completed the acquisition of 33% interest in Guangxi Huayin, a jointly-controlled company engaging in the production and sale of alumina and related products. The total cost for this acquisition was approximately RMB920.4 million (equivalent to approximately HK\$1,012.5 million).

In October 2007, the Company announced that the Group had entered into agreements in relation to the investment of 20% stake in Qinghai Province Investment Group Limited ("Qinghai Investment"). The total equity contribution to be made by the Group is approximately RMB680.3 million (equivalent to approximately HK\$700.7 million) and deposits of approximately US\$28.7 million (equivalent to approximately HK\$223.6 million) was made before the end of 2007.

In light of the adverse and sustained volatile market conditions, the Company announced on 2 December 2008 the exit from the proposed investment in Qinghai Investment. Deposit of approximately US\$28.7 million (equivalent to approximately HK\$223.6 million) previously made by the Group to Qinghai Investment was refunded in December 2008.

In March 2007, the Group disposed certain investment properties located in Macau with a carrying value of HK\$2.2 million and realised a gain of HK\$0.1 million.

In April 2007, the Group disposed its 30% equity interest in an associate, Huludao Orienmet Copper Company Limited, and recognised a gain of HK\$1.4 million. Since full provision had already been made by the Group in previous years, the disposal of this investment did not have any adverse impact on the Group's result and financial position.

Except for the above, there was no material acquisition or disposal of investments by the Group for the years ended 31 December 2007 and 2008, respectively.

#### Significant investments held

In 2007, the Group made no addition or disposal for the equity securities it held in Sino Gold Limited ("Sino Gold") (a gold mining company with primary listing in Australia and secondary listing in Hong Kong). At 31 December 2007, the Group held approximately 10 million shares in Sino Gold, with a market value of approximately HK\$476.1 million, representing an appreciation of approximately HK\$25.2 million or 6% over previous year. These securities were classified as available-for-sale financial assets in the Group's consolidated balance sheet and their fair value changes were recognised in equity.

Taking into account the additional shares acquired through the rights issue of shares made by Sino Gold in 2008, the Group held approximately 11.5 million shares in Sino Gold, with a carrying value of approximately HK\$309.8 million as at 31 December 2008. Sino Gold is a gold mining company with a primary listing in Australia and a secondary listing in Hong Kong.

#### Contingent liabilities

The Group had no material contingent liability as at 31 December 2007 and 2008.

#### Capital expenditure and commitments

The Group incurred capital expenditure of approximately HK\$158.5 million for year ended 31 December 2008, mainly related to the construction of a new aluminium foil production line and the upgrade of other production facilities. The total capital expenditure of the Group amounted to approximately HK\$24.3 million for 2007, which was mainly used in the expansion and upgrade of production facilities in the Group's fabrication businesses.

The Group's capital commitments as at 31 December 2008 amounted to approximately HK\$283.0 million, which were mainly related to the construction of a new aluminium foils production line as well as the expansion of other production facilities in the Group's aluminium fabrication business.

#### Charge on assets

The following assets of the Group were pledged to certain banks for the banking facilities granted to the Group:

- (1) All the equity interests of a wholly owned subsidiary, Sino Mining and all the assets of Sino Mining as at 31 December 2007 and 2008;
- (2) Certain property, plant and equipment, land use rights as well as inventories of the Group with a total carrying amount of approximately HK\$476.2 million as at 31 December 2008 (2007: approximately HK\$400.0 million); and
- (3) Bank deposits of approximately HK\$38.2 million as at 31 December 2008 (2007: approximately HK\$41.1 million).

#### Risk management

Set out below are the major risk areas that the Group may enter into derivative contracts from time to time to hedge against the risks.

#### (a) Commodity price risk

For the year ended 31 December 2008, to mitigate the price risk of the commodity cycle that may cause to its trading and aluminium fabrication operations, the Group has entered into certain aluminium forward/futures contracts in 2008. As at 31 December 2008, the Group's long and short positions in aluminium forward/futures contracts amounted to approximately 10,040 tonnes and 7,625 tonnes respectively.

The Group has used aluminium forward contracts from time to time to hedge against the commodity price risk exposure on its alumina trading. At 31 December 2007, the Group had a short position in aluminium forward contracts, with an amount of 13,000 tonnes of aluminium.

#### (b) Interest rate risk

To reduce the impact of interest rate fluctuations on its operation, the Group has arranged interest rate swaps to manage the interest rate risk of its floating-rate bank borrowings. The outstanding principal amount of the Group's interest rate swaps as at 31 December 2008 amounted to approximately HK\$475.8 million (2007: approximately HK\$534.0 million).

#### (c) Foreign exchange risk

The Group's foreign exchange risk exposure primarily lies on its operations in Hong Kong, the PRC and Australia. Given the exchange rate peg between Hong Kong dollars and United States dollars, it is not foreseen that the Group will be exposed to significant risk for transactions conducted in these two currencies. However, exchange rate fluctuations between Renminbi or Australian dollars and Hong Kong dollars or US dollars may affect the Group's performance and asset value. The Group had not entered into any derivative contracts to hedge against this risk for the year ended 31 December 2007 and 2008.

#### **Human resources**

As at 31 December 2008, the Group's total headcount stood at approximately 2,414 (2007: 2,400) (not including the employees of jointly-controlled companies and associates), of which 18 (2007: 15) were based in Hong Kong, 12 (2007: 12) were in Australia and the remaining ones were in the PRC. The total staff costs, including the directors' emoluments, for the year ended 31 December 2008 amounted to HK\$148.5 million (2007: HK\$105.5 million).

The Group adopts salary policies in line with market practice and motivates its staff with performance-based remuneration package. Award such as discretionary bonuses and share options are granted to eligible staff in accordance with individual and group performance. Training and development programmes will be offered to staff at different levels as and when appropriate.

#### 4. INDEBTEDNESS

As at the close of business on 30 September 2010, being the latest practicable date for this indebtedness statement prior to the printing of this circular, the Enlarged Group had outstanding borrowings of approximately HK\$9,939 million, which comprised bank loans of approximately HK\$9,613 million, lease liabilities of approximately HK\$39 million and advances from banks for discounted bills of approximately HK\$287 million.

As at 30 September 2010, bank loans of (i) approximately HK\$394 million were secured by a charge on the entire equity interest in a wholly-owned subsidiary, Sino Mining Alumina Limited, the assets of Sino Mining Alumina Limited and pledged bank deposits; (ii) approximately HK\$1,560 million were secured by a charge on entire share capital of a wholly-owned subsidiary, Album Investments, a mortgage on 70% of the issued shares in certain wholly-owned subsidiaries of Album Investments and a mortgage on 70% of issued shares in MMG Laos Holdings Limited, a 90%-owned subsidiary of Album Investments; and (iii) approximately HK\$228 million were secured by certain property, plant and equipment, land use rights and inventories. Bank loans of approximately HK\$8,541 million and HK\$450 million were also secured by corporate guarantees given by the intermediate holding company, CMN and ultimate holding company, CMC. As at 30 September 2010, all of the Enlarged Group's bank loans were secured and/or guaranteed.

As at the close of business on 30 September 2010, the Company provided a corporate guarantee of approximately HK\$41 million to a bank for a loan granted to a jointly-controlled company.

Save as disclosed aforesaid, and apart from the intra-group liabilities and normal trade debts payable, the Enlarged Group did not have any outstanding mortgages, charges, debentures, loan capital or overdraft, or other similar indebtedness, finance lease or hire-purchase commitments, liabilities under acceptances or acceptance credits or any guarantees or other material contingent liabilities as at 30 September 2010.

#### 5. WORKING CAPITAL STATEMENT

The Directors are of the opinion that, in the absence of unforeseeable circumstances and after taking into account the Enlarged Group's present internal resources and available banking facilities, the Enlarged Group has sufficient working capital for its present requirement for at least the next twelve months from the date of this circular.

#### 6. NO MATERIAL ADVERSE CHANGE

As at the Latest Practicable Date, the Directors were not aware of any material adverse change in the financial or trading position of the Group since 31 December 2009, the date to which the latest published audited financial statements of the Group were made up.

#### 7. FINANCIAL AND TRADING PROSPECTS

The business environment of the non-ferrous metals industry improved in the first half of 2010 on the back of economic recovery. During the first half of 2010, the Company sustained an encouraging growth year on year. This reflected the Group's ability to timely capture business opportunities upon market recovery through its focus on consolidating its businesses, with an aim to expand them.

The policy promulgated by the Chinese government to strictly regulate the irrational capacity expansion of aluminium smelters will be beneficial for a balanced development of industrial production and market supply and demand in the long run. Such will also increase the advantages of enterprises with strong fundamentals. The Group will continue to seize opportunities as and when it arises.

The major tasks of the Group in the second half of 2010 include: actively implement technology enhancement, enlarge production capacity, raise product quality, expand market coverage to increase sales. All these tasks should help to strengthen the integrated competitiveness of the Group. The Group will fully leverage on its competitive edges in alumina and aluminium ingot business operations to maintain and consolidate its market position; the Group will continue with aluminium operation integration to enhance its overall competitiveness.

However, other than the Acquisition, the Company currently has no present plans for material investments or capital assets.

Regarding the prospects of the Target Group, there are two main factors which will influence the outlook: the supply/demand balance for the metals produced and growth through continued progress on the Development Projects. The overall outlook for the future demand for the main base metals

produced by the Target Group is reasonable, as more fully discussed in the section headed "Industry overview" in this circular. In general terms, the continued economic growth of the PRC and other rapidly developing economies is expected to lead to ongoing demand for the metals produced while these metals are tending to become more difficult and more expensive to discover and produce. The focus of the Target Group in the near term will be to continue to operate its assets safely and efficiently while also looking for growth. The major tasks in terms of growth for the Target Group for the rest of 2010 and into 2011 include continuing the feasibility and permitting work on the Development Projects. In particular, it is probable that the Dugald River project may be advanced to the point of a decision to develop such project during the first half of 2011.

#### INTRODUCTION

The following is an illustrative and unaudited pro forma financial information of the Enlarged Group ("Unaudited Pro Forma Financial Information"), including the unaudited pro forma consolidated balance sheet, the unaudited pro forma consolidated income statement, the unaudited pro forma consolidated statement of cash flows and the unaudited pro forma consolidated statement of adjusted net tangible assets of the Enlarged Group, which have been prepared on the basis of the notes set out below for the purpose of illustrating the effect of the Acquisition, as if it had taken place on 30 June 2010 for the unaudited pro forma consolidated balance sheet and the unaudited pro forma consolidated statement of adjusted net tangible assets and on 1 January 2010 for the unaudited pro forma consolidated income statement and the unaudited pro forma consolidated statement of cash flows.

The Unaudited Pro Forma Financial Information has been prepared for illustrative purposes only and because of its hypothetical nature, it may not give a true picture of the financial position, results of operations and cash flows of the Group had the Acquisition been completed as at 30 June 2010 or 1 January 2010, where applicable, or at any future dates.

The Unaudited Pro Forma Financial Information should be read in conjunction with other financial information included elsewhere in this circular.

#### A. UNAUDITED PRO FORMA CONSOLIDATED BALANCE SHEET

	_	Pro forma adjustments					
		Target					
	The Group	Group					
	as at	as at					Pro forma
	30 June	30 June					Enlarged
	2010	2010		ther pro form			Group
	(HK\$'000) Note 1	(HK\$'000) Note 2	(HK\$'000) Note 3	(HK\$'000) Note 4	(HK\$'000) Note 5	(HK\$'000) Note 6	(HK\$'000)
	Note 1	Note 2	Note 5	Note 4	Note 3	Note 0	
ASSETS							
Non-current assets							
Property, plant and equipment	475,922	11,029,200					11,505,122
Construction in progress	383,326	595,140					978,466
Investment properties	13,150	_					13,150
Land use rights	20,210	_					20,210
Alumina purchasing rights	1,060,503	_					1,060,503
Goodwill	6,849	_					6,849
Interests in jointly controlled							
companies	1,513,146	_					1,513,146
Interests in associates	121,383	_					121,383
Investments in subsidiaries	_	_	14,398,800			(14,398,800)	_
Other assets	_	4,680					4,680
Inventories	_	189,540					189,540
Deferred income tax assets	46,953	741,780					788,733
	3,641,442	12,560,340					16,201,782
Current assets							
Inventories	712,823	1,681,680					2,394,503
Trade and bills receivables	1,395,927	349,440					1,745,367
Prepayments, deposits and other							
receivables	602,249	203,580					805,829
Available-for-sale financial							
assets	_	734,760					734,760
Derivative financial instruments	38,544	_					38,544
Current income tax assets	5,550	_					5,550
Other assets	_	45,240					45,240
Time deposits	827,253	_					827,253
Pledged bank deposits	51,159	_					51,159
Cash and cash equivalents	1,072,460	2,609,100	(780,000)	(2,652,000)			249,560
	4,705,965	5,623,800					6,897,765
Total assets	8,347,407	18,184,140					23,099,547

	_	Pro forma adjustments					
	The Group as at 30 June 2010 (HK\$'000) Note 1	Target Group as at 30 June 2010 (HK\$'000) Note 2	O (HK\$'000) Note 3	Other pro for (HK\$'000) Note 4	ma adjustme (HK\$'000) Note 5	e <b>nts</b> (HK\$'000) Note 6	Pro forma Enlarged Group (HK\$'000)
FOULTV							
EQUITY Capital and reserves attributable to the equity holders of the Company							
Share capital	101,311	2,628,600	47,039			(2,628,600)	148,350
Reserves	5,274,208	3,083,340	8,157,298	(2,652,000)	(651,300)	(11,770,200)	1,441,346
	5,375,519	5,711,940					1,589,696
Non-controlling interests	203,211	304,200					507,411
Total equity	5,578,730	6,016,140					2,097,107
LIABILITIES							
Non-current liabilities  Deferred income	40,383						40,383
Deferred income tax liabilities	9,940						9,940
Lease liabilities	9,940	32,760					32,760
Provisions	_	1,799,460					1,799,460
Long-term loan notes	_		5,414,463				5,414,463
Bank borrowings	564,000	8,541,000					9,105,000
•	614,323	10,373,220					16,402,006
Current liabilities  Trade and hills payables	077 013	1,009,320					1,986,333
Trade and bills payables Accruals, receipt in advance and	977,013	1,009,320					1,960,333
other payables	710,649	354,120			651,300		1,716,069
Amounts due to related							
companies	5,804	_					5,804
Derivative financial instruments	1,791	_					1,791
Current income tax liabilities	3,949	422,760					426,709
Lease liabilities	_	8,580					8,580
Bank borrowings	455,148						455,148
	2,154,354	1,794,780					4,600,434
Total liabilities	2,768,677	12,168,000					21,002,440
Total equity and liabilities	8,347,407	<u>18,184,140</u>					23,099,547

#### B. UNAUDITED PRO FORMA CONSOLIDATED INCOME STATEMENT

	Pro forma adjustments						
	the six months period ended 30 June 2010	Target Group for the six months period ended 30 June 2010	Other pro forma		Pro forma Enlarged Group		
	(HK\$'000) Note 1	(HK\$'000) Note 2	(HK\$'000) Note 5	(HK\$'000) Note 7	(HK\$'000)		
	Note 1	Note 2	Note 3	Note /			
Revenue	5,403,696	6,588,660			11,992,356		
Cost of sales	(5,104,413)	(3,568,500)			(8,672,913)		
Gross Profits	299,283	3,020,160			3,319,443		
Selling expenses	(44,539)	(275,340)			(319,879)		
Administrative expenses	(74,639)	(593,580)			(668,219)		
Other income	4,812	31,980			36,792		
Other expenses	_	_	(651,300)		(651,300)		
Other gain, net	67,780	(57,720)			10,060		
Operating profit	252,697	2,125,500			1,726,897		
Finance income	13,548	14,040			27,588		
Finance costs	(21,025)	(138,840)		(85,294)	(245,159)		
Share of post tax profits less losses of jointly-controlled companies	207,515	_			207,515		
Share of post tax profits less	207,615				207,515		
losses of associates	9,089	_			9,089		
Profit before income tax	461,824	2,000,700			1,725,930		
Income tax expense	(34,904)	(175,500)			(210,404)		
Profit for the period	426,920	1,825,200			1,515,526		
Attributable to:							
Equity holders of the Company	423,980	1,736,280			1,423,666		
Non-controlling interests	2,940	88,920			91,860		
	426,920	1,825,200			1,515,526		

#### C. UNAUDITED PRO FORMA CONSOLIDATED STATEMENT OF CASH FLOWS

	_						
	The Group for the six months period ended 30 June 2010 (HK\$'000) Note 1	Target Group for the six months period ended 30 June 2010 (HK\$'000) Note 2	Otl (HK\$'000) Note 3	ner pro form (HK\$'000) Note 4	a adjustmen (HK\$`000) Note 5	ts (HK\$'000) Note 7	Pro Forma Enlarged Group (HK\$'000)
Cash flows from operating activities							
Net cash generated from							
operations	185,650	3,057,600			(651,300)		2,591,950
Interest paid	(15,565)	_					(15,565)
Income tax paid	(42,046)	(448,500)					(490,546)
Net cash generated from operating activities	128,039	2,609,100					2,085,839
Cash flows from investing activities							
Purchase of property, plant and equipment and land use rights	(15,341)	(940,680)					(956,021)
Additions to construction in		(* 1,111,					
progress	(63,864)	_					(63,864)
Payments for available-for-sale financial assets	_	(781,560)					(781,560)
Investments in jointly controlled companies	(81,443)	_					(81,443)
Increase in pledged bank deposits and time deposits	(624,281)	_					(624,281)
Proceeds from disposal of property, plant and	368	6 240					6.609
equipment  Dividend received from a  jointly controlled company	308	6,240					6,608
and an associate	1,368	_					1,368
Interest received	6,461	14,040					20,501
Net cash used in investing activities	(776,732)	(1,701,960)					(2,478,692)

	_						
	The Group for the six months period ended 30 June 2010 (HK\$'000) Note 1	Target Group for the six months period ended 30 June 2010 (HK\$'000) Note 2	Oth (HK\$'000) Note 3	ner pro form: (HK\$^000) Note 4	a adjustmen (HK\$'000) Note 5	is (HK\$'000) Note 7	Pro Forma Enlarged Group (HK\$'000)
Cash flows from financing activities							
Net proceeds from new bank							
borrowings	9,204	(7,020)					2,184
Financing costs and interest paid	_	(92,820)				(54,145)	(146,965)
Dividend paid to non-controlling interests	(92)	(112,320)					(112,412)
Distribution to controlling shareholder	_	_	(780,000)				(780,000)
Dividend paid	_	_		(2,652,000)			(2,652,000)
Repayment of finance lease liabilities		(6,240)					(6,240)
Net cash generated from/(used in) financing activities	9,112	(218,400)					(3,695,433)
Net (decrease)/increase in cash and cash							
equivalents	(639,581)	688,740					(4,088,286)
Cash and cash equivalents at I January	1,714,093	1,960,140					3,674,233
Exchange losses on cash and bank balances	(2,052)	(39,780)					(41,832)
Cash and cash equivalents							
at 30 June	1,072,460	2,609,100					(455,885)

#### D. UNAUDITED PRO FORMA STATEMENT OF ADJUSTED NET TANGIBLE ASSETS

	Unaudited net tangible assets of the Group as at 30 June 2010 (HK\$'000) Note 8	Unaudited net tangible assets of the Group per Share as at 30 June 2010 (HK\$) Note 9	Unaudited pro forma adjusted net tangible assets of the Enlarged Group as at 30 June 2010 (HK\$'000) Note 10	Unaudited pro forma adjusted net tangible assets of the Enlarged Group per Share as at 30 June 2010 (HK\$) Note 11
Net tangible assets attributable to equity				
holders of the Company	4,308,167	2.1262	522,344	0.1761

Notes to the Unaudited Pro Forma Financial Information of the Enlarged Group:

- The amounts are extracted from the unaudited consolidated balance sheet of the Group as at 30 June 2010 and the unaudited consolidated income statement and the unaudited consolidated statement of cash flows of the Group for the six months ended 30 June 2010 as set out in Appendix II to this circular.
- 2. The amounts are derived from the accountant's report of the Target Company as set out in Appendix I to this circular, and converted into Hong Kong dollars using an exchange rate of US\$1 to HK\$7.80.
- 3. The adjustment represents the total consideration of US\$1,846.0 million (equivalent to approximately HK\$14,398.8 million) for the acquisition of the entire issued share capital of the Target Company, to be satisfied by:
  - (i) the issuance of 940,779,090 new Shares at HK\$3.00 per Share for a consideration of US\$361.8 million (equivalent to approximately HK\$2,822.0 million);
  - (ii) the issuance of PSCS, with 1% distribution rate and a conversion price of HK\$3.45 per Share (a premium of 15% over the issuance price of the Consideration Shares set out in note (i) above), for a consideration of US\$690.0 million (equivalent to approximately HK\$5,382.0 million). According to Hong Kong Accounting Standards 32 "Financial Instruments: Presentation", the PSCS does not meet the definition of financial liabilities and the entire amount will be accounted for as equity;
  - (iii) net proceeds of US\$694.2 million (equivalent to approximately HK\$5,414.8 million) from raising of 5-year term loan note. The 5-year term loan note is interest bearing at 2%, 2%,

3%, 4% and 5% per annum in the first, second, third, fourth and fifth year respectively. For the purpose of the preparation of the unaudited pro forma consolidated balance sheet, the carrying value of the 5-year term loan note is assumed to approximate its fair value, as the impact of discounting is considered not significant with reference to the Company's historical borrowing rate as at 30 June 2010; and

(iv) cash of US\$100.0 million (equivalent to approximately HK\$780.0 million) from the Company's internal resources.

This adjustment is not expected to have continuing effect on the Enlarged Group's unaudited pro forma consolidated income statement and unaudited pro forma consolidated statement of cash flows.

4. Repatriation of US\$340.0 million (equivalent to approximately HK\$2,652.0 million) from the Target Group to Album Enterprises by way of dividend which will be completed prior to Completion.

This adjustment is not expected to have continuing effect on the Enlarged Group's unaudited pro forma consolidated income statement and unaudited pro forma consolidated statement of cash flows

5. The adjustment represents the estimated transaction costs of approximately US\$83.5 million (equivalent to approximately HK\$651.3 million) payable by the Company in connection with the Acquisition.

This adjustment is not expected to have continuing effect on the Enlarged Group's unaudited pro forma consolidated income statement and unaudited pro forma consolidated statement of cash flows.

6. Upon Completion, the assets and liabilities of the Target Group will be accounted for in the consolidated financial statements of the Enlarged Group using the merger accounting in accordance with Accounting Guideline 5 "Merger Accounting for Common Control Combinations" issued by the Hong Kong Institute of Certified Public Accountants. The adjustment represents consolidation entries for the elimination of investment cost of the Company in the Target Company against its share capital, and the excess amount is recognised as merger reserve.

Since the fair values of the Consideration Shares and PSCS to be issued at the Completion Date may be substantially different from their fair values used in preparing this Unaudited Pro Forma Financial Information, the amounts of the consideration and, accordingly, the amount of merger reserve at the completion date may be different from the amounts presented above and the difference may be significant.

7. The adjustment represents the interest expense on the 5-year term loan note of approximately HK\$85.3 million for the six months period ended 30 June 2010 using the effective interest rate of 3.15% and the interest payment on the 5-year loan note of approximately HK\$54.1 million for the six months period ended 30 June 2010 pursuant to the loan agreement.

This adjustment is expected to have continuing effect on the Enlarged Group's unaudited pro forma consolidated income statement and unaudited pro forma consolidated statement of cash flows.

- 8. The unaudited net tangible assets of the Group as at 30 June 2010 is calculated based on the amount of the unaudited net assets attributable to the equity holders of the Group as at 30 June 2010 of approximately HK\$5,375.5 million, less the amount of intangible assets of approximately HK\$1,067.4 million, as set out in the unaudited consolidated balance sheet of the Group in Section A above.
- 9. The number of Shares used for the calculation of the unaudited net tangible assets of the Group per Share is 2,026,216,799 Shares, being the number of Shares in issue as at 30 June 2010.
- 10. The unaudited pro forma adjusted net tangible assets of the Enlarged Group as at 30 June 2010 is calculated based on the amount of the unaudited pro forma adjusted net assets attributable to the equity holders of the Enlarged Group as at 30 June 2010 of approximately HK\$1,589.7 million, less the amount of intangible assets of HK\$1,067.4 million, as set out in the unaudited pro forma consolidated balance sheet of the Enlarged Group in Section A above.
- 11. The number of Shares used for the calculation of the unaudited pro forma adjusted net tangible assets of the Enlarged Group per Share is 2,966,995,889 Shares, comprising 2,026,216,799 Shares in issue as at 30 June 2010 and 940,779,090 new Shares to be issued as described in note 3(i) above but have not taken into account of any Conversion Shares to be issued upon exercise of the conversion of PSCS or any new Shares to be issued pursuant to the Specific Mandate.
- 12. Apart from the above, no adjustments have been made to the Unaudited Pro Forma Financial Information to reflect any trading results or other transactions of the Enlarged Group entered into subsequent to 30 June 2010.

#### D. REPORT ON UNAUDITED PRO FORMA FINANCIAL INFORMATION

The following is the text of a report received from PricewaterhouseCoopers, Certified Public Accountants, Hong Kong, for the sole purpose of incorporation in this circular.



羅兵咸永道會計師事務所

**PricewaterhouseCoopers** 22/F, Prince's Building Central, Hong Kong

## ACCOUNTANT'S REPORT ON UNAUDITED PRO FORMA FINANCIAL INFORMATION TO THE DIRECTORS OF MINMETALS RESOURCES LIMITED

We report on the unaudited pro forma financial information set out on pages III-1 to III-9 under the heading of "Unaudited Pro Forma Financial Information" (the "Unaudited Pro Forma Financial Information") in Appendix III to the circular dated 22 November 2010 (the "Circular") of Minmetals Resources Limited (the "Company"), in connection with the proposed acquisition of the entire issued share capital of Album Resources Private Limited (the "Acquisition") by the Company. The Unaudited Pro Forma Financial Information has been prepared by the directors of the Company, for illustrative purposes only, to provide information about how the Acquisition might have affected the relevant financial information of the Company and its subsidiaries (hereinafter collectively referred to as the "Group"). The basis of preparation of the Unaudited Pro Forma Financial Information is set out on pages III-1 to III-9 of the Circular.

#### Respective responsibilities of directors of the Company and the Reporting Accountant

It is the responsibility solely of the directors of the Company to prepare the Unaudited Pro Forma Financial Information in accordance with Rule 4.29 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") and Accounting Guideline 7 "Preparation of Pro Forma Financial Information for Inclusion in Investment Circulars" issued by the Hong Kong Institute of Certified Public Accountants (the "HKICPA").

It is our responsibility to form an opinion, as required by Rule 4.29(7) of the Listing Rules, on the Unaudited Pro Forma Financial Information and to report our opinion to you. We do not accept any responsibility for any reports previously given by us on any financial information used in the compilation of the Unaudited Pro Forma Financial Information beyond that owed to those to whom those reports were addressed by us at the dates of their issue.

#### Basis of opinion

We conducted our engagement in accordance with Hong Kong Standard on Investment Circular Reporting Engagements 300 "Accountants' Reports on Pro Forma Financial Information in Investment Circulars" issued by the HKICPA. Our work, which involved no independent examination of any of the underlying financial information, consisted primarily of comparing the unaudited consolidated net assets and the unaudited consolidated balance sheet of the Group as at 30 June 2010, the unaudited consolidated income statement and the unaudited consolidated statement of cash flows of the Group for the six months ended 30 June 2010 as set out in the "Unaudited Pro Forma Financial Information" section of the Circular with the published interim report of the Company for the six months ended 30 June 2010, considering the evidence supporting the adjustments and discussing the Unaudited Pro Forma Financial Information with the directors of the Company.

We planned and performed our work so as to obtain the information and explanations we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the Unaudited Pro Forma Financial Information has been properly compiled by the directors of the Company on the basis stated, that such basis is consistent with the accounting policies of the Group and that the adjustments are appropriate for the purposes of the Unaudited Pro Forma Financial Information as disclosed pursuant to Rule 4.29(1) of the Listing Rules.

The Unaudited Pro Forma Financial Information is for illustrative purposes only, based on the judgements and assumptions of the directors of the Company, and, because of its hypothetical nature, does not provide any assurance or indication that any event will take place in the future and may not be indicative of:

- the financial position of the Group as at 30 June 2010 or any future date, or
- the results and cash flows of the Group for the six months ended 30 June 2010 or any future periods.

#### **Opinion**

In our opinion:

- (a) the Unaudited Pro Forma Financial Information has been properly compiled by the directors of the Company on the basis stated;
- (b) such basis is consistent with the accounting policies of the Group; and
- (c) the adjustments are appropriate for the purposes of the Unaudited Pro Forma Financial Information as disclosed pursuant to Rule 4.29(1) of the Listing Rules.

#### **PricewaterhouseCoopers**

Certified Public Accountants

Hong Kong, 22 November 2010

#### APPENDIX IV

#### **COMPETENT PERSON'S REPORT**

The following is the text of a report from AMC Consultants, an independent technical specialist prepared for the sole purpose of incorporation in this circular.

#### **AMC Consultants Pty Ltd**

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### COMPETENT PERSON'S REPORT ON MINERALS AND METALS GROUP

#### MINMETALS RESOURCES LIMITED

#### AMC 210063 November 2010

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22 November 2010

The Directors
Minmetals Resources Limited
Twelfth Floor, China Minmetals Tower
79 Chatham Road South
Tsimshatsui
KOWLOON
Hong Kong

Dear Sirs

#### COMPETENT PERSON'S REPORT ON MINERALS AND METALS GROUP

Minmetals Resources Limited (MMR), a Hong Kong-incorporated company, is considering a transaction whereby MMR will acquire, through a special purpose vehicle (SPV) All Glorious Limited, Album Resources Private Limited (Album Resources) from China Minmetals Non Ferrous Metals Co. Ltd (CMN) (the Transaction). The major assets of Album Resources are managed by Minerals and Metals Group (MMG). The assets are:

- the Sepon copper/gold operation in Laos
- the Century zinc/lead mine in Queensland
- the Golden Grove zinc/copper mine in Western Australia
- the Rosebery zinc/lead mine in Tasmania
- the Avebury nickel mine in Tasmania (currently on care and maintenance)
- the Dugald River zinc project in Queensland
- the Izok Lake and High Lake prospects in the Nunavut territories of northern Canada
- various exploration projects in Australia, Asia and Canada.

In connection with the Transaction, the Directors of MMR have requested that:

- Grant Samuel & Associates Pty Limited (Grant Samuel) prepare a report which includes:
  - a valuation of Album Resources including a valuation of the Mineral Assets which complies with Chapter 18 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the Listing Rules), including, but not limited to, Rules 18.24 and 18.34 of the Listing Rules
  - a valuation of Album Resources which reflects a range of fair market values as a going concern, defined as the maximum price that could be realised in an open market over a reasonable period of time assuming that potential buyers have full information.
- AMC Consultants Pty Ltd (AMC) prepare:
  - a competent person's report in accordance with the Listing Rules (Competent Person's Report)
  - production and cost projections forecasts to be provided to Grant Samuel.

AMC has prepared the attached Report in the following form:

- Executive summary.
- Description of production assets.
- Description of development projects.
- Sources of information.
- Qualifications.

AMC210063-10rpt\_1 101122

Summaries of the detailed production and cost projections provided to Grant Samuel are included in the Report.

AMC has completed its engagement as a specialist in accordance with the VALMIN Code<sup>1</sup> and the Listing Rules.

AMC has visited MMG's production assets. AMC did not visit the development projects and exploration properties, however, AMC has examined material relevant to these projects and properties at MMG's head office in Melbourne.

In letters relating to AMC's engagement, MMR has agreed to comply with the obligations of the commissioning entity under the VALMIN Code, including that to the best of its knowledge and understanding, complete, accurate and true disclosure of all relevant material information has been made.

AMC has reviewed material technical reports and management information and held discussions with management staff both on-site and in the Melbourne offices of MMG. AMC has not audited the information provided to it, but has aimed to satisfy itself that all of the information has been prepared in accordance with proper industry standards and is based on data that AMC considers to be of acceptable quality and reliability. Where AMC has not been satisfied, it has included comment in the Competent Person's Report and where necessary adjusted the estimates and forecasts provided by AMC to Grant Samuel.

In preparing the Competent Person's Report, AMC has relied on information provided by MMG and AMC has no reason to believe that information is materially misleading or incomplete or contains any material errors. MMG has been provided with drafts of AMC's report relating to the Transaction to enable correction of any factual errors and notation of any material omissions. The views, statements, opinions and conclusions expressed by AMC are based on the assumption that all data provided to it by MMG are complete, factual and correct to the best of MMG's knowledge.

AMC's use, in the Competent Person's Report, of the terms mineral resources and ore reserves are in accordance with the JORC Code<sup>2</sup> and are as estimated by MMG at 30 June 2009. AMC has not performed, nor does it accept the responsibilities of a Competent Person as defined by the JORC Code in respect of the mineral resources and ore reserves estimates presented in the Competent Person's Report. In all cases, the mineral resources shown in the tables include mineral resources that have been converted to ore reserves.

AMC has not been commissioned to carry out an independent review of the status of MMG's tenements but has been advised by MMG that a review of its exploration and mining tenements has been undertaken and that they are in good standing.

To a limited extent, AMC's assessments and projections have relied on commercially sensitive information which, at MMG's request and with Grant Samuel's agreement, AMC has not detailed in its Competent Person's Report. Such sensitive information included metal prices and terms and conditions of sale of mineral products.

AMC has prepared production and capital and operating cost projections (modelling scenarios) for use by Grant Samuel. Three cases (a Reserves Only Case, Planning Case 1, and Planning Case 2) have typically been prepared for the production assets.

Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports, The VALMIN Code 2005 Edition, Prepared by The VALMIN Committee, a joint committee of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Mineral industry Consultants Association with the participation of the Australian Securities and Investment Commission, the Australian Stock Exchange Limited, the Minerals Council of Australia, the Petroleum Exploration Society of Australia, the Securities Association of Australia and representatives from the Australian finance

Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, The JORC Code 2004 Edition, Effective December 2004, Prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

Reserves Only Case is based only on ore reserves. AMC believes that the Reserves Only Cases complies with requirements of the Stock Exchange Of Hong Kong Ltd (HKEx) Listing Rules 18.30.

Planning Case 1 is typically based on ore reserve estimates and that part of other mineral resources and exploration potential for which AMC judges there is a high confidence of future conversion to ore reserves.

Planning Case 2 typically adds to Planning Case 1 tonnages from existing mineral resources and readily demonstrable exploration potential for which AMC has reasonable, but lesser confidence of future conversion to ore reserves than in Planning Case 1. In some cases, Planning Case 2 provides for a significant expansion of production and/or other technical upgrades and improvements. AMC believes that both Planning Case 1 and Planning Case 2 modelling scenarios are based on reasonable grounds.

In preparing its models, AMC has taken account of the estimated depletion of ore reserves by mining from 1 July 2009 to 30 June 2010. Estimates of future production and costs have been projected from this date. Production and costs are reported on a calendar (January to December) basis except where otherwise specified. AMC's modelling scenarios present six months production and costs estimates to December 2010. AMC has assumed an even spread of production volumes and expenditure across the full year unless otherwise noted.

AMC's review of operating costs has been restricted to site based costs. State or third-party royalties, taxes, concentrate shipping costs, smelting and refining charges have not been reviewed and are not included in costs detailed in the Competent Person's Report.

All monetary figures in the Report are expressed in 2010 Australian dollars (A\$) or United States dollars (US\$). Costs are presented on a cash cost basis unless otherwise specified. Historical costs are in nominal terms

For definitions of abbreviations used in the Competent Person's Report, refer to Appendix A.

Yours faithfully

A M Chuk M AuslMM Principal Consultant L J Gillett M AusIMM (CP)

#### CONTENTS

EXE	CUTIVE	E SUMMARY	1
1	SEPC	DN	11
	1.1	Introduction	11
	1.2	Geological Setting	12
	1.3	Copper Mineral Resources	13
	1.4	Copper Ore Reserves	14
	1.5	Gold Mineral Resources	14
	1.6	Gold Ore Reserves	15
	1.7	Potential for Additional Reserves	15
	1.8	Mining Operations	16
	1.9	Processing and Concentrate Handling	16
	1.10	Infrastructure	19
	1.11	Environment	
	1.12	Operating and Capital Costs	20
	1.13	AMC Modelling Scenarios	
		1.13.1 Sepon Copper	
		1.13.2 Sepon Gold	
	1.14	Technical Risks and Opportunities	
2	CENT	rury	
	2.1	Introduction	
	2.2	Geological Setting	28
	2.3	Mineral Resources	
	2.4	Ore Reserves	31
	2.5	Exploration and Potential for Additional Reserves	32
	2.6	Mining Operations	33
	2.7	Processing and Concentrate Handling	34
	2.8	Environment	36
	2.9	Operating and Capital Costs	
	2.10	AMC Modelling Scenarios	
	2.11	Technical Risks and Opportunities	39
3	ROSE	EBERY	40
	3.1	Introduction	40
	3.2	Geological Setting	40
	3.3	Mineral Resources	
	3.4	Ore Reserves	
	3.5	Potential for Additional Reserves	
	3.6	Operating History	
	3.7	Mining Operations	
	3.8	Processing and Concentrate Handling	
	3.9	Infrastructure	
	3.10	Environment	
	3.11	Operating and Capital Costs	
	3.12	AMC Modelling Scenarios	
	3.13	Technical Risks and Opportunities	
4	GOL	DEN GROVE	
	4.1	Introduction	52
	4.2	Geological Setting	
	4.3	Zinc and Copper Mineralisation	
	4.4	Mineral Resources	
	4.5	Zinc Mineral Resources	
	4.6	Zinc Ore Reserves	
	4.7	Copper Mineral Resources	
	4.8	Copper Ore Reserves	
	4.9	Gold Mineral Resources.	
	4.10	Gold Ore Reserves	
	4.11	Potential for Additional Reserves	
	4.12	Operating History	
	4.13	Mining Operations	
		U 1	

AMC210063-10rpt\_1 101122

	111	Processing and Concentrate Handling	50
		Infrastructure	
		Environment	
	4.17		
		AMC Modelling Scenarios.	
		Technical Risks and Opportunities	
5		SURY	
	5.1	Introduction	64
	5.2	Geological Setting	64
	5.3	Mineral Resource	66
	5.4	Ore Reserves	
	5.5	Exploration and Potential for Future Reserves	
	5.6	Mining Operations	
	5.7	Processing and Concentrate Handling	
	5.8 5.9	Environment	
	5.10	AMC Modelling Scenarios	
	5.10	Technical Risks and Opportunities	
6		ALD RIVER PROJECT	
Ü	6.1	Introduction	
	6.2	Geological Setting	
	6.3	Mineral Resources and Ore Reserves	
	6.4	Mining	73
	6.5	Processing and Concentrate Handling	73
	6.6	Infrastructure	75
	6.7	Environment	
	6.8	Capital and Operating Costs	
	6.9	AMC Modelling Scenarios	
-		Technical Risks and Opportunities	
7	7.1	ORATION	
	7.1	Introduction	
	1.2	7.2.1 Izok Lake	
		7.2.2 High Lake	
		7.2.3 Nunavut Gold Project	
		7.2.4 Nunavut Regional Exploration	
		7.2.5 Ontario Nickel Copper PGE Exploration	
		7.2.6 Pelly Bay Nickel Project	
	7.3	Golden Grove Regional	82
		7.3.1 Wiluna Project	82
	7.4	Sepon	82
		7.4.1 Regional Exploration	
	7.5	Other Asian Exploration	
		7.5.1 Indonesia	
•	0011	7.5.2 Australia Regional	
8 9		RCES OF INFORMATION	
9	QUAL	IFICATIONS	86
		TABLES	
<b>-</b>		0 0 11 15 1001 0000	40
Table		Sepon – Copper Mineral Resources as at 30 June 2009	13 14
Table Table		Sepon – Copper Ore Reserves as at 30 June 2009	14 1/1
Table		Sepon – Gold Ore Reserves as at 30 June 2009	
Table		Sepon – Copper Processing Performance	
Table		Sepon – Gold Processing Performance	
Table		Sepon – Operating Costs for Sepon Copper	
Table		Sepon – Operating Costs for Sepon Gold	
Table		Sepon – AMC Modelling Scenario Copper Reserves Case	
		• • • • • • • • • • • • • • • • • • • •	
AMC21	10063-10	Orpt_1 101122	vi

T-51- 4.40	Occasion AMO Madellita a Occasion Occasion Disputies Occasion	0.4
Table 1.10 Table 1.11	Sepon – AMC Modelling Scenario Copper Planning Case 1 Sepon – AMC Modelling Scenario Copper Planning Case 2	
Table 1.11	Sepon – AMC Modelling Scenario Gold Reserve Case	
Table 1.12	Sepon – AMC Modelling Scenario Gold Planning Case 1	25
Table 1.13	Sepon – AMC Modelling Scenario Gold Planning Case 2	25
Table 2.1	Century – Mineral Resources as at 30 June 2009	
Table 2.2	Century – Comparison of 2008 Model Depletion with Mill Production	
Table L.L	(12 Months to December 2009)	31
Table 2.3	Century - MCF's Calculated from a 36 Month Reconciliation of the 2009 Model	31
Table 2.4	Century – MCF's Comparison of 2009 Model Depletion with Mill Production	
	(12 Months to June 2010)	31
Table 2.5	Century – Ore Reserves as at 30 June 2009	31
Table 2.6	Century – LOM Production Schedule (Version 3.9)	33
Table 2.7	Century – Mine Concentrator Performance Summary	
Table 2.8	Century – AMC Modelling Scenario Reserves Case	38
Table 2.9	Century – AMC Modelling Scenario Planning Case 1	39
Table 3.1	Rosebery – Mineral Resource as at 30 June 2009	40
Table 3.2	Rosebery – Ore Reserves as at 30 June 2009	
Table 3.3	Rosebery – Ore Production Statistics	44
Table 3.4	Rosebery – Historical Metallurgical Performance	44
Table 3.5	Rosebery – Historical Cost Performance	
Table 3.6	Rosebery Reserves Only Case	
Table 3.7	Rosebery Planning Case 1	
Table 3.8	Rosebery Planning Case 2	
Table 4.1	Golden Grove – Zinc Mineral Resources as at 30 June 2009	
Table 4.2	Golden Grove – Zinc Ore Reserves as at 30 June 2009	
Table 4.3	Golden Grove – Copper Mineral Resources as at 30 June 2009	
Table 4.4	Golden Grove – Copper Ore Reserves as at 30 June 2009	
Table 4.5	Golden Grove - Gold Mineral Resources as at 30 June 2009	
Table 4.6 Table 4.7	Gossan Valley Exploration Drilling Mineralisation Intersections	
Table 4.7	Golden Grove – Operating and Capital Costs	
Table 4.9	Golden Grove – AMC Modelling Scenario Reserve Case	
Table 4.3	Golden Grove – AMC Modelling Scenario Planning Case 1	
Table 5.1	Avebury – Mineral Resource as at 30 June 2009	
Table 5.2	Avebury Planning Case 1	
Table 5.3	Avebury Planning Case 2	
Table 6.1	August 2008 Feasibility Study Mineral Resource at a 6% Zinc Cut-Off	
Table 6.2	Dugald River – Mineral Resources as at 30 June 2009	
Table 6.3	Dugald River – Average Open Circuit Flotation Testwork Results	
Table 6.4	Dugald River – Operating Cost Projections	
Table 6.5	Dugald River – Capital Cost Projections	
Table 6.6	Dugald River – Planning Case 1	
Table 6.7	Dugald River – Planning Case 2	78
Table 7.1	Canadian Exploration Projects – Izok Lake Mineral Resources	80
Table 7.2	Canadian Exploration Projects – High Lake Mineral Resources	81
	FIGURES	
Figure 1.1	Sepon – Location Map	11
Figure 1.2	Sepon – Contract Area	
Figure 1.3	Sepon – Copper and Gold Deposits	13
Figure 1.4	Sepon – Copper Processing Simplified Block Flow Diagram	17
Figure 2.1	Century – Location Map	
Figure 2.2	Century – Mining Leases	28
Figure 2.3	Century – Plan of Deposit Showing the Main Structural Features	29
Figure 2.4	Century – Regional Exploration Area	32
Figure 2.5	Century – Process Plant Schematic Flowsheet	
Figure 3.1	Rosebery – Total Mineral Resource, Ore Reserve and Production Levels	
	(1981 to 2008)	42

AMC210063-10rpt\_1 101122

Figure 3.2	Rosebery – Diagram of the Mine Lease Exploration Programme	43
Figure 3.3	Rosebery – Concentrator Flowsheet	46
Figure 4.1	Golden Grove – Operations Map	52
Figure 4.2	Golden Grove - Longitudinal Projection Gossan Hill Orebodies	54
Figure 4.3	Golden Grove - Longitudinal Projection Scuddles Orebodies	55
Figure 5.1	Avebury – Deposit Long Projection	65
Figure 5.2	Avebury – Deposit Cross Section 354,600E	65
Figure 6.1	Dugald River - Location Map	71
Figure 6.2	Dugald River – 2008 Feasibility Study Process Flowsheet	75
Figure 6.3	Dugald River – Infrastructure and Tenement Layout	77
Figure 7.1	Canadian Exploration Projects – Location of Projects	80

#### **APPENDICES**

APPENDIX A ABBREVIATIONS APPENDIX B SOURCES OF INFORMATION APPENDIX C CONTRIBUTORS TO THE REPORT

#### **EXECUTIVE SUMMARY**

#### **SEPON**

The Sepon Copper and Gold operation, located in the Lao People's Democratic Republic, commenced production of gold bullion in 2002 and copper cathode in 2005.

Supergene copper ore is mined from open pits and is derived from supergene resources. Ore is processed in a dedicated copper plant by crushing, grinding, and acid leaching at atmospheric pressure, followed by solvent extraction and electrowinning.

Oxide gold ore is mined from open pits and is processed in a dedicated gold plant using conventional carbon-in-leach technology.

#### **Kev Observations**

AMC's key observations for the Sepon operation are:

- 53% of the reported supergene copper Mineral Resource is currently classified as Inferred.
- Reported supergene copper Ore Reserve tonnages represent approximately 67% of the Measured and Indicated supergene copper Mineral Resources.
- Significant primary copper Mineral Resource tonnages have been reported none of which have been reported as Ore Reserves.
- 52% of the reported oxide gold Mineral Resource is currently classified as Inferred.
- Reported oxide gold Ore Reserve tonnages represent 22% of the Measured and Indicated oxide gold Mineral Resources.
- Significant primary gold Mineral Resource tonnages have been reported none of which have been reported as Ore Reserves.
- Approximately 40% of the reported total Mineral Resource is currently classified as Inferred.
- The Sepon copper plant is currently being expanded from a name plate capacity of 60 ktpa to 80 ktpa of copper production. The expansion is planned to be completed in October 2010, with annual copper cathode production to ramp-up after that.
- Current copper ore reserves are sufficient to sustain the copper plant until 2019 at the post-expansion production rate.
- Gold mining operations are planned to continue until early 2012, however, MMG have exploration
  plans in place with the goal of defining additional economic gold resources.
- After significant further study, exploration and investment, primary copper and gold resources at Sepon could prove to be economically extractable.

#### **AMC Modelling Scenarios**

AMC has developed three modelling scenarios for Sepon. Key aspects of AMC's modelling cases include:

#### Reserves Only Case - Copper

This scenario is based on the 30 June 2009 Ore Reserve which has been depleted for production from 1 July 2009 to 30 June 2010. Total ore processed in this scenario is 16.9 Mt at 4.0% Cu with mining completed in 2018 and processing completed in 2019. Copper cathode production of up to 81 ktpa. An average copper recovery of 91% to recover a total of 617 kt of cathode copper.

Total capital expenditure is US\$305M and average site operating costs of US\$2,600 per tonne of cathode copper.

AMC210063-10rpt\_1 101122

1

#### Planning Case 1 - Copper

Planning Case 1 is based on the Reserves Only Case with the addition of 5.8 Mt at 3.6% Cu of Inferred material. In Planning Case 1, 3.5 Mt of the additional ore is sourced from pits designed on the Thengkham South Inferred resource. The remaining 2.3 Mt is sourced from Inferred material associated with the Khanong, Thengkham North and Pha Bing deposits. Total ore processed of 22.8 Mt at 3.9% Cu with mining completed in 2018 and processing completed in 2022. Total recovered cathode copper is 810 kt.

Total capital expenditure is US\$336M and average site operating cost is US\$2,500 per tonne of cathode copper.

#### Planning Case 2 - Copper

Planning Case 2 is based on Planning Case 1 with the addition of 2.8 Mt at 3.1% Cu of Inferred material and exploration upside. In Planning Case 2, 0.5 Mt of the inferred material is sourced from an AMC estimated mining inventory resulting from the Thengkham West Inferred Resource of 2.3 Mt. The remaining 2.3 Mt added to Planning Case 1 is sourced from Inferred material and exploration upside associated with the Khanong, Thengkham North, Thengkham South and Pha Bing deposits. Total ore processed is 25.5 Mtpa at 3.8% Cu with mining completed in 2021 and processing completed in 2023. Total recovered cathode copper is 886 kt

Total capital expenditure is US\$348M and average site operating cost is US\$2,700 per tonne of cathode copper.

#### Reserves Only Case - Gold

This scenario is based on the 30 June 2009 Ore Reserve which has been depleted for production from 1 July 2009 to 30 June 2010. Total ore processed in this scenario is 1.4 Mt at 1.55 g/t Au with mining completed in 2010 and processing completed in 2010. The majority of ore treated in the Reserves Only case is from existing stockpiles.

Average gold recovery is 75% to recover a total of 52 koz of gold.

Average operating cost is US\$224/oz gold.

#### Planning Case 1 - Gold

Planning Case 1 is based on the Reserves Only Case with the addition of 2.5 Mt at 1.24 g/t Au from a number of small pits currently planned to be mined in the life-of-mine plan. Total ore processed is 3.86 Mt at 1.35 g/t Au with mining completed in 2012 and processing completed in 2012.

Total gold recovered is 126 koz.

Average operating cost is US\$548/oz gold.

#### Planning Case 2 – Gold

Planning Case 2 is based on Planning Case 1 with the addition of 2 Mt at 1.2g/t Au of ore that is added from an AMC estimate of the conversion of 3 Mt to 5.5 Mt of known exploration targets which are supported by drilling data. Total ore processed of 5.86 Mt at 1.30 g/t Au with mining completed in 2012 and processing completed in 2012.

Total gold recovered is 183 koz.

Average operating costs of US\$616/oz gold.

#### **Technical Risk and Opportunities**

Critical processing reagents such as limestone and pyrite are sourced on site. Interruptions to mining of these inputs could affect productivity. If the supply of such reagents is not sufficient to achieve forecast processing requirements copper production could be affected.

Damage to, or failure of, key equipment items in the processing plant, for example the rectiformer (which is part of the electrowinning cicuit), could cause delays to copper processing.

If MMG fail to continue to successfully manage community relations with local people interruptions to production could result.

If MMG fail to continue to implement effective environmental management plans production could be interrupted and costs could increase.

The significant prospectivity of the site and region, and the potential to make further discoveries of economic oxide gold and supergene copper deposits, could extend mine life or allow expansion of existing processing facilities.

The potential, after significant further study, exploration and investment, to establish primary gold and copper mining and processing operations. This potential is considered in AMC's exploration section.

MMG could further expand or make modifications to the existing copper processing plant in order to increase ore throughput or copper recovery.

#### **CENTURY MINE**

The Century operation is situated in the north-west Queensland mineral province. The operation includes the Century mine, located approximately 250 km north-west of Mount Isa and a concentrate slurry pipeline to a dewatering, storage and ship loading facility at Karumba 250 km east-north-east.

The deposit was discovered in 1990 in an area adjacent to a small reef style lead zinc mining operation dating from the late 1800s. Development commenced in 1998 with first concentrate shipment in 1999.

The orebody which is mined by open pit methods is well defined, though as an outcropping sedimentary sequence bounded by faults, there is little opportunity to extend the resource. The mine is scheduled to close in the 2014 to 2015 period.

#### **Key Observations**

AMC's key observations for the Century operation are:

- There is no reported Inferred Mineral Resource.
- Reported Ore Reserve tonnages represent approximately 72% of the Measured and Indicated Mineral Resources.
- It is unlikely that the Ore Reserve will be increased other than through increased conversion of the current resource.
- Mature operation with well established operating procedures.

#### **AMC Modelling Scenarios**

AMC has developed two modelling scenarios for Century Mine. The key aspects of AMC's modelling scenarios are as follows:

#### Reserves Only Case

This scenario is based on reported Ore Reserve as at 30 June 2009 adjusted for depletion to 30 June 2010. Annual waste and ore tonnages and grades are based on the 2010 Century LOM plan prepared by MMG. The mining inventory is 26.0 Mt at grades of 11.0% Zn, 1.1% Pb and 19 g/t Ag. Mining continues until December 2014.The annual ore processing rate is 5.7 Mtpa.

AMC210063-10rpt 1 101122

Zinc recovery is 79.1% and lead recovery is 61.2%, with zinc metal production averaging 496 ktpa, totalling 2,258 kt of metal over the remaining life.

Average site operating cost is estimated at A\$67.54/t of ore processed over the remaining 4.5 year mine life. Total remaining capital expenditure of A\$40M and closure/rehabilitation costs of A\$103M.

#### **Planning Case 1**

Annual waste and ore tonnages and grade are based on a 3.9% Zn cut-off grade mining schedule prepared in August 2010 by MMG which increases the mining inventory to 29.9 Mt at grades of 10.5% Zn, 1.1% Pb and 18 g/t Ag. Mining continues until August 2015. Annual ore processing rate is 5.9 Mtpa.

Zinc recovery is 78.1% and lead recovery is 58.0%, with zinc metal production averaging 476 ktpa, totalling 2,444 kt over the remaining life.

Average site operating cost is estimated at A\$64.69/t of ore processed over the remaining 5 year mine life. Capital expenditure remains unchanged from the Reserves Only Case.

#### **Technical Risk and Opportunities**

Century is a mature operation with mining and processing methods well developed through twelve years of operating experience. The operation is well equipped after a significant replacement and expansion programme implemented in recent years.

The deposit is constrained providing limited opportunities to expand the ore reserve. In the current life of mine plan, production concludes in December 2014.

Beyond possible impacts of commodity price changes, the only likely opportunity to expand the ore reserve is through the inclusion of marginal material within the current pit design. This may extend the mine life by up to one year

Significant geotechnical issues have impacted the mining operation. AMC considers that geotechnical issues may impact planned production during the remaining life of the mine. Measures are being undertaken by MMG to minimise this risk.

Mine call factors (MCFs) are applied to the resource in the reserve estimation process. In recent periods observed factors have varied significantly from prior estimates. As Stage 8 and Stage 9, the final stages of the mine, are mined current MCF estimates may prove unreliable.

The rupture of the concentrate pipeline in 2009 occurred in a section that had previously failed in 2002. The concentrate pipeline was initially installed with a PVC liner and the 2002 failure was attributed to the ingress of concentrate slurry between the liner and the pipe due to a localised problem in the liner. In that instance, the repair was made by removing the failed liner and, leaving an unlined 1.2 km section of pipe. Pitting corrosion has occurred in that unlined section of pipe which contributed to a second failure in 2009. With a 304 km length of pipeline and numerous pipe segments, there is a risk that other sections of pipe could also fail. However, the remainder of the pipeline is lined except for several monitoring spools. MMG is acutely aware of the situation and have increased the monitoring and wear assessment programme for the pipeline. AMC considers that with the procedures that have been initiated, the risk of another pipeline failure will be low through to December 2014.

#### **ROSEBERY MINE**

The Rosebery Mine is located in Western Tasmania. The deposit was first discovered in 1893, operations commenced in 1936 and have operated continuously since.

The deposit is considered Australia's largest volcanic-hosted polymetallic sulphide deposit and is located within the Mount Read Volcanic Arc. Zinc, lead, copper, silver and gold are recovered from the ore.

Mineralisation extends over a strike length of approximately 2.0 km and to a depth of 1.5 km.

#### **Key Observations**

AMC's key observations for the Rosebery operation are:

- 53% of the reported Mineral Resource (June 2009) is currently classified as Inferred.
- Reported Ore Reserve tonnages represent 47% of the Measured and Indicated Mineral Resources (June 2009)
- The mine produces some 720 ktpa of ore, and plans to maintain production at about this level to at least 2012.
- Mining and metallurgical processes are well established, and the mine ventilation system has recently been upgraded to provide enhanced operating conditions in the mine. However, Rosebery is a relatively deep mine with difficult operating conditions that are expected to become more difficult as the depth of mining increases.

#### **AMC Modelling Scenarios**

AMC has prepared three modelling scenarios for the Rosebery operation. Key aspects of the modelling scenarios are:

#### **Reserves Only Case**

This scenario is based on the 30 June 2009 Ore Reserve which has been depleted for production from 1 July 2009 to 30 June 2010. The current production rate of about 720 ktpa has been maintained for three full years. This scenario is based on the scheduled portion of the reported ore reserves that is able to be extracted continuously and within a given timeframe.

Mining head grades and metallurgical performances are generally in close agreement with those suggested in the MMG life of mine plan, with some minor changes to reflect recent historical performance. Operating costs are as presented by MMG in its plan and are consistent with historical performance.

Capital expenditure includes near mine exploration drilling and assumes that tailings storage facilities (TSF) upgrades and processing facility maintenance will occur.

#### Planning Case 1

Mining and processing inventory is based on the remaining Ore Reserves and that part of other Mineral Resources and exploration potential for which AMC judges there is a high confidence of future conversion to ore reserves. AMC considers that there is a historical basis of resource conversion which underpins the expectation of an expanded mining inventory. Haulage costs associated with the mining are forecast to increase by 50% over the life of mine in accordance with the increased depth of mining.

Capital expenditure will be required for near mine exploration drilling, processing facility maintenance and a new TSF.

#### Planning Case 2

The main differences in Planning Case 2 relative to Planning Case 1 are additions made to the mine production, sourced from areas which are currently exploration targets. AMC considers that there is a historical basis of exploration success which underpins the expectation of an expanded mining inventory.

The capital expenditure schedule considers additional near mine exploration drilling, additional ventilation upgrade, and mine haulage upgrade. The construction of a paste backfill plant is also included which will enable the mine to be less constrained and thereby achieve higher rates of production. This would allow the increased cost associated with the additional cement used in backfill to be offset by an improvement in productivity.

#### **Technical Risk and Opportunities**

Rosebery has a long history of successfully and reliably converting exploration targets into resources and reserves. Although AMC expects this to continue for the period of the scenarios modelled there is a risk that exploration and conversion to reserves may not be as successful as envisaged.

Mining will continue to move deeper and further from existing accesses to surface, and working conditions are hot and increasingly difficult. Increased issues associated with access, ground control and ventilation may impact on the mine's ability to achieve AMC's production scenarios. There is risk that the issues associated with deeper mining will constrain future production capacity. For example the addition of more haulage trucks to accommodate the increased distances to surface will adversely impact costs and the mine ventilation over time. A review of the long term mine haulage system will be required as the mine gets deeper.

The plant has a nominal throughput rate of 850 ktpa. This rate has not been achieved on an annualised basis potentially due to high zinc feed grades. Opportunity exists to improve the plant's performance and maintenance cost through upgrading or refurbishing the plant and reviewing operating procedures.

Acid drainage issues at Rosebery demand monitoring and action on the part of the mine operator and management of these issues requires modest capital and recurring expenditures. Decisions also need to be made regarding the future TSF requirement.

#### **GOLDEN GROVE MINE**

The Golden Grove base and precious metals operation is located approximately 450 km north-east of Perth and 280 km east of Geraldton in Western Australia. The operation consists of the Scuddles and Gossan Hill zinc and copper underground mines and the Scuddles concentrator.

Volcanic hosted massive sulphide (VHMS) mineralisation was discovered at Gossan Hill in 1971 and at Scuddles in 1979. Copper, zinc, lead, silver and gold are recovered from the ores mined at Golden Grove.

Scuddles underground operation, which commenced producing in 1990 was placed on care and maintenance in 2005, reopened in 2007 and was subsequently placed back on care and maintenance in January 2009. Production from Scuddles is currently scheduled to re-commence early in 2011.

Gossan Hill underground operations commenced production in 1998 and has operated continuously since that time.

The Gossan Hill deposit extends over a strike length of more than 2.2 km in multiple lenses and to a depth of approximately 1.5 km. Scuddles has a strike length of approximately 700m and extends to a depth of more than 1.4 km below surface.

#### **Key Observations**

AMC's key observations for the Golden Grove operation are:

- Reported Ore Reserve tonnages represent approximately 43% of the Measured and Indicated zinc Mineral Resources, and 27% of Measured and Indicated copper Mineral Resources.
- Approximately 40% of the reported Mineral Resource is currently classified as Inferred.
- Exploration in the Gossan Valley area about 6.5 km south of the Gossan Hill mine site has been successful in intersecting zinc and copper massive sulphide mineralisation. The intersections suggest a coherent body of massive sulphide mineralisation that is being targeted for further drilling in 2010.
- Mining and metallurgical processes are well established.
- The production rate achieved in 2008 was approximately 1.7 Mtpa. This reduced to approximately 1.5 Mtpa in 2009, and forecast production for 2010 is approximately 1.7 Mtpa.

#### **AMC Modelling Scenarios**

AMC has prepared three modelling scenarios for Golden Grove. Key aspects of the modelling scenarios are:

#### Reserves Only Case

This scenario is based on the 30 June 2009 Ore Reserve which has been depleted for production from July 2009 to June 2010. Production in the latter years of a reserve-only schedule tapers significantly beyond 2012 to a point where ongoing operation is impracticable. As a consequence not all reserves are included in the case modelled. This case generates a mine life to 2012 with annual production maintained at approximately 1.7 Mt until 2011, with a reduction in the production rate to approximately 1 Mt in 2012. In AMC's opinion the Reserves only case undercalls the likely mine life.

#### Planning Case 1

A mining and processing inventory comprising the reported Ore Reserves for Scuddles and Gossan Hill depleted for mining to 30 June 2010 plus approximately 1.6 Mt of additional zinc and copper mineralization that AMC considers likely to be mined. The case also includes a copper oxide open pit mining inventory of 1.8 Mt which has been evaluated at a Scoping Study level. The copper oxide open pit inventory comprises mostly copper oxide material and some copper sulphide material and is based on Mineral Resources reported as Inferred in June 2009 that AMC considers are likely to be mined. This case generates a mine life to 2014 with annual production maintained at approximately 1.7 Mt until 2013, with production reducing to 0.9 Mt in 2014.

#### Planning Case 2

The main differences in Planning Case 2 relative to Planning Case 1 is the inclusion of additional underground production from Xantho Extended, upper areas of Amity copper and down dip extension of Hougoumont at Gossan Hill and potential production sourced from Gossan Valley, a potential resource containing both zinc and copper mineralization that is currently being drilled out. Planning Case 2 also includes a significantly larger open pit, targeting gold oxide, zinc sulphide and copper sulphide mining inventories totalling 2.9 Mt. This is in addition to the open pit inventory included in Planning Case 1. The case generates a mine life to 2020 and maintains the same annual production rate of 1.7 Mt as scheduled in the other Cases modelled until 2019, reducing to 1.4 Mt in 2020.

#### **Technical Risk and Opportunities**

Sustaining the current rate of production from the Golden Grove operations beyond 2013/14 is heavily dependent on:

- upgrading confidence of known orebody extensions that are not currently included in reserves
- delineation of new ore sources.

A factor that presents an additional challenge to production from Gossan Hill is that an increasing portion of future production will need to be mined from deeper parts of the deposit.

The planned recommencement of production at Scuddles will be a positive in that it is an additional ore source, but its likely production rate of 0.3 Mtpa will only partially offset the impact of depletion of mining inventory at Gossan Hill.

The proposed copper oxide pit will only provide an additional short term ore source throughout 2013 and 2014

The outcome of the current exploration drilling programme at Gossan Valley will play a significant part in the possible extension of mine life at Golden Grove. Subject to defining the expected resources at Gossan Valley, timing of evaluation, approval and development of orebody access will be critical to maintaining the current production rate from Golden Grove.

The site closure cost allowance has been significantly increased to adequately allow for rehabilitation of the large quantity of sulphidic waste in the run of mine (ROM) pad at Gossan Hill. This increase has mitigated the risk that closure costs may be higher than anticipated.

#### **AVEBURY MINE**

The Avebury Mine is an underground mining operation located on the north-west coast of Tasmania, 6 km west of Zeehan. The deposit was discovered during 1997 to 1998. An access decline was excavated in 2003 to 2004, ore development commenced in June 2007 and production stoping commenced in January 2008.

In response to low metal prices, mining operations were suspended in December 2008 and milling in January 2009. Mining operations had not reached full scale production at the time operations were suspended. The mine is currently on care and maintenance.

#### **Key Observations**

AMC's key observations for the Avebury project are:

- Approximately 63% of the reported Mineral Resource is currently classified as Inferred.
- MMG did not report Ore Reserves for Avebury in 2009.
- The previously reported 2008 Ore Reserves included Proved and Probable Ore Reserves totalling 5.8 Mt at 1.0% Ni average grade and used a 0.7% Ni cut-off.
- MMG is considering options to improve the operating performance of the project which will enable it to resume operation.

#### **AMC Modelling Scenarios**

AMC has prepared two modelling scenarios for the Avebury operation based on MMG's feasibility study. However, as there are no reported reserves for Avebury, only Planning Cases have been prepared by AMC. Key aspects of the modelling scenarios are:

### Planning Case 1

This scenario is based on the scheduled portion of the reported mining inventory at full production.

The total tonnage and grades are underpinned by the Feasibility Study's mining plan that has been adopted without modification, based on a planned production rate of about 900 ktpa. Forecast mining costs have however been substantially increased by AMC to be more in line with industry experience.

Metallurgical performances assumed by AMC have in some cases been moderated slightly to reflect recent historical performance. Processing costs have been adopted as presented by MMG.

Capital expenditure on upgrades about the processing facility is included.

### Planning Case 2

In this scenario the mining plan has been extended by one full year on the assumption that there is no longer any constraint to mining due to the arsenic as a result of the installation of an arsenic leach plant.

Metallurgical performances assumed by AMC are increased to reflect the performance of a hydro metallurgical plant. Operating costs as presented by MMG have been increased nominally for the operation of the hydro metallurgical plant.

Capital expenditure for an arsenic leach plant is included.

#### **Technical Risk and Opportunities**

Current risks relate principally to the management of arsenic in the ore. Lesser risks are related to the ability to achieve the production schedule, and the constraints on production that would occur if the mining system reverts to a predominantly uncemented or waste rock type of backfill.

Assuming the care and maintenance regime is sufficient, it should be straightforward to reopen the mine. The tenements also have significant exploration potential.

As the process plant has yet to achieve design capacity metal output, it has not yet proven that the planned metallurgical recoveries can be achieved. The planned performance of the proposed leach plant is based on limited test work and requires further investigation.

#### **DUGALD RIVER PROJECT**

The Dugald River Project is a zinc-lead-silver deposit located in Queensland, Australia, approximately 65 km north-west of Cloncurry in north central Queensland. The general region is host to a number of significant base metal mining operations.

#### **Key Observations**

AMC's key observations for the Dugald River Project are:

- The project is a development opportunity; a Feasibility Study was completed in 2008 and the company
  is planning to consider an investment decision in regard to the project in the next 12 months.
- Planned mine operations would consist of a significant underground mine producing approximately 2 Mtpa.
- Capital expenditure required to establish the operation is in the order of A\$800M.
- Approximately 17% of the reported Mineral Resource is currently classified as Inferred.
- MMG has not reported an Ore Reserve for the project.

#### **AMC Modelling Scenarios**

AMC has prepared two production scenarios for Dugald River. A Reserves Only Case has not been prepared as MMG has yet to report an Ore Reserve. Key aspects of the modelling scenarios are:

### Planning Case 1

Planning Case 1 excludes Inferred Mineral Resource from the mining inventory and envisages that 39 Mt of ore at 12.3% Zn, 1.9% Pb and 42 g/t Ag will be mined. The production rate has been set at a maximum of 2.0 Mtpa. Costs in case 1 have been escalated by 5% from the estimates prepared in the 2008 Feasibility Study.

#### Planning Case 2

Planning Case 2 includes the Inferred Mineral Resource in the mining inventory and envisages that 43.5 Mt of ore at 12.2% Zn, 2% Pb and 40 g/t Ag will be mined. The production rate has been set at a maximum production of 2.2 Mtpa. Zinc metallurgical recovery has been increased from 83% to 86% over the first five years of operation to reflect possible opportunities in this regard. Costs have not been escalated from the 2008 estimates.

In both cases AMC has based its capital and operating cost estimates on those developed by MMG in the 2008 Feasibility Study. In Planning Case 1, AMC has reduced sustaining capital in line with the exclusion of Inferred Mineral Resource. AMC has increased the capital cost in Planning Case 2 to reflect the higher mined tonnage. In both cases, project approval has been assumed to occur in early 2011 with production commencing in 2014.

#### **Technical Risk and Opportunities**

The project status is feasibility study complete (2008), investment decision pending.

Although an ore reserve estimate is yet to be reported, the mining inventory estimate in the 2008 Feasibility Study has been prepared in accordance with good industry practice. Confidence in the reserve and mining inventory will be further improved once the 2009 Resource model is incorporated into the reserve model.

MMG has received letters of intent from four smelters covering the total envisaged concentrate production albeit with certain penalties for excess manganese content. There is a risk that manganese content will be higher than envisaged resulting in increased penalties.

From a technical and permitting perspective, AMC believes it reasonable to assume that production could commence within three years of the project being approved by MMG.

There is potential for the mineralisation to continue with depth. Also copper mineralisation has been identified in the hangingwall and throughout the tenements. The potential for the copper mineralisation to constitute a mineral resource is being investigated, although AMC has not included it in its production scenarios.

#### **EXPLORATION**

MMG has interests in a number of regional exploration projects in Australia, Asia and Canada as well as exploration projects associated with, or close to its existing mining projects. In addition MMG has established Commodity Task-Force Project Generation Teams, one each for copper, zinc and nickel, which are dedicated to defining the best mineral belts for specific target styles and target sizes in their respective commodities with the aim of discovering significant growth projects for MMG.

MMG's 2010 exploration budget is A\$38M. In addition, US\$4M to US\$7M has been allocated for the Izok Lake update feasibility study, and a contingence of approximately A\$6M has been established for emerging projects.

#### 1 SEPON

#### 1.1 Introduction

The Sepon copper-gold project is located in the Lao People's Democratic Republic (Lao PDR) approximately 40 km north of the town of Sepon in Savannakhet Province. Main access to the project is from Savannakhet, some 200 km along Route 9 and then via Route 28A to site.

Tenure is held under a Mineral Exploration and Production Agreement (MEPA) that was signed with the Lao PDR Government in June 1993 for a period of 50 years. The Sepon MEPA exploration and mining contract area occupies 1,250 km². The location of the project and the layout of the contract area are shown in Figure 1.1 and Figure 1.2.

Exploration by CRA/Rio Tinto between 1993 and 1999 resulted in the discovery of separate gold and copper deposits. Oxiana Limited acquired 80% of the project from Rio Tinto in 2000 and the remaining 20% in early 2004. In 2007, the Lao PDR Government exercised its long-standing option to acquire a 10% interest in the project. In 2009 OZ Minerals Limited sold its interest in the Sepon operation to MMG. MMG holds its interest in the Sepon project through its 100% beneficial ownership of Lane Xang Minerals Ltd (LXML) which is the manager of, and 90% equity holder in the project.

Copper and gold ores are mined and processed separately at Sepon. Production of gold dore commenced in December 2002 using a carbon-in-leach (CIL) process. Production of copper cathodes commenced in early 2005 using an oxide leach, solvent extraction and electrowinning process.

The project area is in moderately steep, dissected terrain surrounded by gently undulating hills. Some deposits i.e. Khanong copper and the Thengkham North copper, are located in relatively elevated areas with typical slopes of between 25° and 35°. Site elevations range from 200m to 700m above sea level.

The project area has a tropical, monsoonal climate, typically with a dry season between November and March, and a wet season between June and September. Average rainfall is around 2,200 mm per annum. The Namkok River is the main waterway in the project area, essentially running in a north-south direction through the central portion of the site and to the south of the town of Sepon.

Figure 1.1 Sepon – Location Map

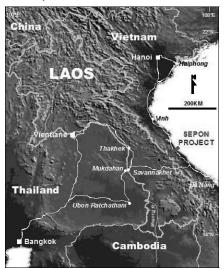
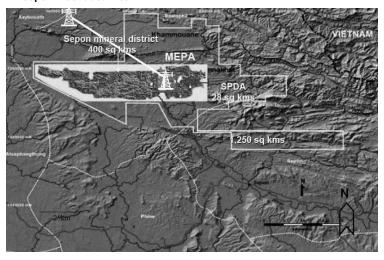


Figure 1.2 Sepon – Contract Area



#### 1.2 Geological Setting

Sepon mineral district stratigraphy comprises devonian to carboniferous aged continental fluvial and shallow to deep marine sediments deposited in a half graben basin and intruded by rhyodacite porphyries.

The sedimentary package and porphyry intrusions are important controls in the generation of the gold and copper mineralisation. The copper mineralisation is associated with the porphyries and related skarns and as oxidised secondary mineralisation adjacent to the porphyry intrusions.

Sediments generally dip moderately towards the north and north-west. Dominant fault directions are north-west parallel to the Truongson fault system and east-west parallel to the basin bounding faults. The intersection of east-west and north-east trending faults are important in localising mineralisation and rhyodacite porphyry intrusive stocks and associated dyke and sill complexes of similar composition.

The location of Sepon copper and gold deposits is shown in Figure 1.3. Four broad alteration and mineralisation styles are recognised, namely:

copper and gold skarn (e.g. Thengkham).

• copper and gold carbonate replacement (e.g. Khanong copper).

sediment-hosted gold
 (e.g. Discovery, Nalou, Namkok).

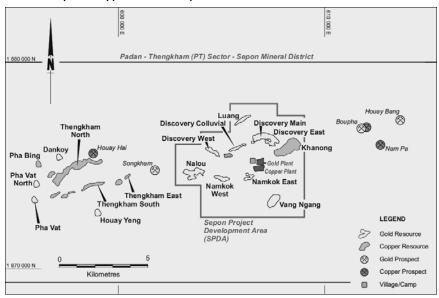
quartz stockwork porphyry (e.g. Primary copper mineralisation).

Supergene gold mineralisation has also been modelled for the Khanong, Thengkham North and Thengkham copper deposits. The other gold deposits are stand-alone occurrences of oxide and primary gold mineralisation.

Copper mineralisation occurs both as chalcopyrite in primary massive sulphide bodies and secondary mineralisation associated with the weathering and mobilisation of copper from primary mineralisation. Supergene enriched ore from the primary sulphide mineralisation is the only copper ore type currently being processed.

Large resources of primary chalcopyrite copper mineralisation have been delineated below the supergene mineralisation. However, this ore type cannot be processed with the current copper mill configuration.

Figure 1.3 Sepon – Copper and Gold Deposits



### 1.3 Copper Mineral Resources

Sepon Copper (Cu) Mineral Resources reported by MMG as at 30 June 2009 are presented in Table 1.1. Supergene and primary copper mineralisation are reported, although only supergene mineralisation is currently treated on-site. The resource models, which form the basis of the estimates, were prepared in 2009 and were adjusted to account for depletion by mining up to 30 June 2009.

Table 1.1 Sepon – Copper Mineral Resources as at 30 June 2009

Copper	Classification	Tonnes (Mt)	Copper (%)	Gold (g/t)	Silver (g/t)
Supergene Copper	Measured	19.7	3.18	0.2	19
	Indicated	8.2	3.31	0.2	13
	Inferred	30.87	1.65	0.2	7
	Subtotal	58.77	2.38	0.2	10
Primary Copper	Measured	2.07	1.70	0.2	7
	Indicated	1.16	1.70	0.2	7
	Inferred	20.06	0.88	0.3	6
	Subtotal	23.29	1.01	0.3	6
Total	•	82.06	1.99	0.2	9

The resources are contained in five deposits within the Sepon mining area; Khanong which is currently being mined, Pha Bing, Thengkham North, Thengkham East and Thengkham South. The Supergene Copper resources also include some 5.8 Mt of stockpiles, classified as Measured Resources.

AMC has reviewed the Sepon Copper Mineral Resource estimates and reconciliation data as reported in the Operations Monthly Reports which have been produced by MMG. Significant variations on a monthly basis were noted, however, the overall long term data correlates well and there is no suggestion of material bias.

#### 1.4 Copper Ore Reserves

Sepon Copper Ore Reserves reported by MMG as at 30 June 2009 are presented in Table 1.2. Ore Reserves are based on a copper price of US\$2.00/lb. The reserves contain supergene copper resources only.

Table 1.2 Sepon – Copper Ore Reserves as at 30 June 2009

Reserve Category	Deposit	Tonnes (Mt)	Copper (%)
Proved	Stockpiles	4.41	2.72
	Khanong	9.20	4.75
Probable	Khanong	0.78	4.22
	Thengkham North	2.98	4.08
	Phabing	1.27	4.11
Total		18.63	4.10

The Ore Reserve estimates include stockpiles and open pit reserves for the Khanong, Thengkham North and Pha Bing deposits.

The ore reserve cut-off grades range from 1.0% to 1.8% copper depending on metallurgical recovery and haulage distance to the processing plant.

Pit optimisation studies and preliminary pit designs have been prepared for the Thengkham South copper deposits based on Inferred Resources. MMG expects to report a substantial amount of Indicated Resources and Probable Reserves for this project in 2010.

#### 1.5 Gold Mineral Resources

The Sepon Gold Mineral Resources reported by MMG as at 30 June 2009 are presented in Table 1.3. Oxide, partially oxidised and primary gold mineralisation are reported, although only oxide mineralisation is currently treated on-site. The resource models, which form the basis of the estimates, were prepared in 2009 and were adjusted to account for depletion by mining up to June 2009.

Table 1.3 Sepon – Gold Mineral Resources as at 30 June 2009

Ore Type	Resource Classification	Tonnes (Mt)	Gold (g/t)	Silver (g/t)
Oxide Gold	Measured	4.24	1.0	3
	Indicated	3.28	1.9	5
	Inferred	2.91	1.0	5
	Subtotal	10.44	1.3	4
Partial Oxide Gold	Measured	2.38	1.6	9
	Indicated	5.91	2.1	8
	Inferred	1.82	0.7	6
	Subtotal	10.11	1.7	8
Primary Gold	Measured	5.35	3.0	7
	Indicated	13.45	2.6	8
	Inferred	5.64	1.8	7
	Subtotal	24.45	2.5	8
Total		45.00	2.0	7

Oxide and Partial Oxide Gold (0.5 g/t Au cut-off grade)

Primary Gold (1.0 g/t Au cut-off grade).

Oxide resources are currently estimated for 12 separate projects, with the major deposits being Khanong Pha Vat, Dankoy, Houay Yeng and Thengkham North. Stockpiles also represent a significant component of the Measured Resources.

AMC has reviewed the Sepon Gold Mineral Resources and reconciliation data as reported in the Operations Monthly Reports which have been produced by MMG. Significant variations on a monthly basis were noted, however, the overall long term data correlates well and there is no suggestion of material bias.

### 1.6 Gold Ore Reserves

Sepon oxide gold Ore Reserves are based on ore inventories from stockpiles and deposits including Discovery West, Houay Yeng, Pha Vat North, Dankoy, Vang Ngang East and the Khanong gossan material. Table 1.4 presents the Sepon gold Ore Reserves reported by MMG as at 30 June 2009.

Table 1.4 Sepon – Gold Ore Reserves as at 30 June 2009

Classification	Tonnes (Mt)	Gold (g/t )	Silver (g/t)
Proved	2.37	1.00	1
Probable	1.16	2.13	5
Total	3.52	1.38	2

Cut-off grades for gold deposits range from 0.45 g/t Au to 0.6 g/t Au depending on metallurgical ore type and haulage distances and used a gold price of US\$900/oz. Prices used in estimating the Sepon Gold Ore Reserve are marginally different to the MMG long term prices to reflect the shorter life of this operation.

In AMC's opinion, the copper and gold mineral resource and ore reserve estimates prepared for the Sepon Project are reasonable and have been reported by MMG in accordance with the requirements of the JORC Code

#### 1.7 Potential for Additional Reserves

New ore reserves will come from a combination of opportunities:

- The conversion of existing mineral resources to ore reserves e.g. at Thengkham South and Thengkham East.
- The generation of new Mineral Resources and Ore Reserves from known prospects that have been partly explored e.g. at Houy Poung, Tongpiang and Nalou South.
- The discovery of new mineralisation resulting from exploration.

The main priority in the short term for MMG is to increase the oxide gold inventory and upgrade supergene copper Mineral Resources to Ore Reserves.

To date, exploration has focused mostly on known mineralisation that was discovered by CRA/Rio Tinto, but is progressively being directed more at grassroots exploration. The exploration budget for 2010 is in the order of A\$15M with notionally A\$7.5M being spent on direct gold exploration and A\$6.2M on copper exploration, with a small commitment to other mineralisation styles.

Regionally, there is good potential for additional oxide gold and supergene copper mineralisation, with significant areas of favourable geology, host rocks and structures. In addition to sediment-hosted targets comparable to the currently defined deposits, mineralisation has been identified with quartz porphyry intrusions and skarns and gold-copper associations.

Known primary Mineral Resources are located immediately below existing oxide and supergene resources which supply ore feed to the existing plant facilities. The areas of known primary copper mineralisation include Discovery, Khanong and around Thengkham. The areas of known primary gold mineralisation include Discovery Main, Discovery West and Nalou. Studies are in progress to investigate options for processing the primary copper and gold ores which have the potential to significantly increase the reserves at Sepon.

AMC considers the potential for additional discoveries of gold and copper resources and conversion to reserves to be high.

#### 1.8 Mining Operations

Currently, copper ore is sourced from the Khanong Pit, and gold ore is sourced from Dankoy and Vang Nyang. On an annualised basis, gold and copper ore mining rates for the five months between January 2010 and May 2010 were nominally 2.1 Mtpa and 2.6 Mtpa respectively.

Copper ore production year-to-date is half of that budgeted. Forward mining in 2009, some negative reconciliations, contractor equipment utilisation, grade control assaying problems and most significantly UXO detection issues have adversely effected copper ore production.

Copper ore is stockpiled on the ROM pad by material type and grade. Significant stockpiles or copper ore allow for blending, as required by the processing schedule, and act as a buffer during periods of low mining productivity, for example due to high rainfall. Due to the large stockpiles of copper ore, AMC is advised that 2010 copper cathode production will not be affected by mining problems experienced during the first five months of 2010.

In the five month period between January 2010 and May 2010, open pit material movement for the gold and copper operations combined achieved a nominal annualised rate of 16 Mtpa (total ore and waste) with a strip ratio of 2.4t of waste to 1.0t of ore. The vast majority of material mined was weathered, but blasting was common. MMG plans to blast around 35% of material mined when developing life of mine (LOM) schedules.

Current LOM copper plans schedule ore mining to commence from Pha Bing in 2011, and from Thengkham in late 2014.

Geotechnical engineering planning and monitoring work for current and future pits is routinely undertaken and no significant pit wall failures were observed.

The primary mining fleet comprises 35t to 40t articulated haul trucks and backhoes ranging in size up to 80t class. The fleet has been found to be well-suited to the moderate material movement requirements, the steep topography, the wet environment and the high clay content of the material mined. Benches are blasted in 5m increments and excavated in 2.5m flitches.

Mining is carried out, by mining contractors, seven days per week, two shifts per day. Mine scheduling allows for lower productivity resulting from rain by reducing the number of days available for mining during periods of high average rain fall. The Khanong copper and the gold pits grade control is typically based on 1m sample intervals from 20m vertical reverse circulation (RC) grade control holes drilled on a 5m x 5m pattern.

#### 1.9 Processing and Concentrate Handling

### **Copper Processing**

The copper processing plant at Sepon produces copper cathodes in an integrated hydro-metallurgical processing facility. The processing route consists of atmospheric acid/ferric sulphate leaching, followed by conventional solvent extraction and electrowinning. The facility is novel in that it produces all of the ferric sulphate and most of the sulphuric acid to satisfy the internal needs of the copper leaching circuit. This is achieved by recovery of sulphides from leached residue by flotation, and subsequent oxidation of the sulphide concentrate in a pressure oxidation autoclave.

Construction of the plant commenced in 2003 and was successfully commissioned by March 2005. The design nameplate capacity of the original plant was 60,000 tpa of copper cathodes. An expansion of the plant is under currently implementation. The processing circuit is presented in a block flow diagram in Figure 1.4

Run-of-mine (ROM) ore is crushed in a toothed roll crusher and conveyed to a primary ball mill where it is ground in acidic recycled process solution. Acidic ferric sulphate solution is added to the slurry and leaching occurs in a series of agitated tanks at atmospheric pressure and a target temperature of around 80°C to 85°C. Over 90% of the copper is leached from the ore by the end of this step.

The leached slurry is pumped to a leach thickener and the copper solution is removed and clarified then pumped to a solvent extraction plant for copper recovery. The residue slurry from the leach thickener is washed free of copper in a series of counter current wash thickeners. Make-up water and barren solution (raffinate) from the solvent extraction plant is utilised for washing.

In the solvent extraction plant, the copper containing solution is contacted with an organic solvent and copper is extracted from solution to the solvent. The loaded organic solvent is then stripped of copper by contact with highly acidic spent electrolyte returning from the electrowinning plant. The loaded electrolyte produced from stripping is pumped back to the electrowinning area. The electrowinning plant is a state-of-the-art facility with automatic stripping equipment for removal of the copper cathodes from the stainless steel cathode blanks.

Residue slurry from the counter current washing circuit is subjected to rougher and scavenger flotation to recover pyrite and other un-leached copper sulphides. The pyrite flotation concentrate is cleaned and pumped to the pressure oxidation autoclave section. Tailings from the flotation section are neutralised with limestone, lime and gold plant tailings before disposal in the tailings storage facility.

ROM Ore Ore Blending and Crushing Oxygen Crushed Ore Acidic Ferric Solution Pyrite Autoclave Atmospheric Ore Grinding Ground Slurry Leaching Leaching Process Acid Leached Pvrite Solution Concentrate Slurry Copper Residue Slurry Solvent Counter Current Pyrite Flotation Extraction Washing Loaded Flotation Strip Barren Solution Tails Solution Water Lime/Limestone Tailings Copper Gold Plant Tails Elecrowinning Neutralisation Final Tailings Copper Cathodes to Dam

Figure 1.4 Sepon – Copper Processing Simplified Block Flow Diagram

The oxidation autoclave operates at a temperature of approximately 220°C and a total pressure of 3,000 kPa. Oxygen required for the process is produced in a dedicated oxygen plant located at the site. The oxidised slurry is subjected to a heat recovery step and then pumped to the concentrate atmospheric leach circuit, where the remaining copper is leached and ferric sulphate is solubilised for use in the main atmospheric copper leaching circuit.

Reported plant performance over the last four years is summarised in Table 1.5.

Table 1.5 Sepon – Copper Processing Performance

Year	Ore Processed	Feed Grade	Stripped Copper Cathode	Plated Copper Recovery
	(Mt)	(Cu %)	(kt)	(%)
2006	1.23	5.6	60.8	89.5
2007	1.23	5.7	62.5	91.2
2008	1.33	5.4	64.1	90.9
2009	1.41	5.4	67.6	90.5

Copper production has shown continuous improvement for operations to date. A number of plant production improvement projects have been completed over the last two years which have resulted in an increase in plant capacity above design. The current plant capacity is considered to be around 70 kt of cathode copper per annum. Plant copper recovery of 90% to 91% is being maintained. The standard of plant operation and housekeeping is considered by AMC to be high.

A significant plant expansion to facilitate a treatment rate of approximately 1.9 Mtpa of ore is currently underway. A second oxidation autoclave was commissioned in 2009. Other expanded sections of the plant are being commissioned as they are completed. The project expansion was initially commenced in early 2008 but was halted in late in the year as a result of the world downturn in the Global Financial Crisis (GFC). Construction recommenced in late 2009, and is planned for completion in October 2010. When completed the expansion will result in an increase of copper production capacity to approximately 80,000 tpa of cathode.

The key components of the expansion are as follows:

- Increased capacity of the ROM crusher.
- Increased atmospheric ore leaching capacity.
- Additional oxygen production facilities.
- Additional heat exchangers and cooling tower.
- Installation of a new eight thickener counter current washing train and clarifiers.
- Installation of a flotation feed deslime plant and additional pyrite flotation capacity.
- Installation of a second pressure oxidation autoclave (completed).
- Installation of 24 new electrowinning cells with a dedicated rectiformer.

Ore for the upgraded plant will initially come from the existing Khanong mine and later from the new copper deposits being developed at Pha Bing, Thengkham North and Thengkham South.

Metallurgical characterisation of samples from these new deposits have shown mineralogical similarities to that of equivalent ore types from Khanong. Ongoing testwork and ore characterisation studies will be undertaken to provide further understanding of these orebodies for ore blending purposes. Due to similarities in copper mineralogy (mineral type not necessarily quantity) the geometallurgical models used for predicting recovery are considered by AMC to be reasonably robust.

Some preliminary investigations have been undertaken to evaluate the primary copper deposit. This preliminary work was aimed at producing either a saleable copper concentrate, or a concentrate which could be processed through part of the current copper processing plant (hydrometallurgical treatment via total pressure oxidation). To AMC's knowledge no detailed studies, or engineering work has commenced on this project.

### **Gold Processing**

The Sepon gold process plant utilises conventional CIL technology for recovery of gold. The initial processing facilities were installed in 2002. A major plant expansion consisting of an additional crushing and grinding circuit, and expanded leaching facilities was commenced in 2003. The upgraded plant was successfully commissioned early in 2005. The nameplate ore treatment capacity of the upgraded plant is 2.5 Mtpa.

Run-of-mine ore is fed to two parallel crushing and grinding circuits. Ground slurry from the milling circuits is combined and fed to the CIL tanks where the slurry is agitated in cyanide solution in the presence of granulated carbon. Gold is leached from the ore and adsorbed to the carbon. The gold is recovered from the carbon by elution, electrowinning and smelting techniques. The barren leached slurry is subjected to cyanide detoxification prior to being added to the copper plant tailings for neutralisation and disposal.

Reported plant performance over a four year period is summarised in Table 1.6.

Table 1.6 Sepon – Gold Processing Performance

Year	Feed (Mt)	Head Grade (Au g/t)	Gold Produced (oz)	Gold Recovery (%)
2006	2.91	2.25	176,325	83.7
2007	2.16	1.79	102,386	81.5
2008	2.32	1.60	93,071	74.4
2009	2.47	1.66	105,036	81.3

Ore throughput in 2006 was well in excess of the name-plate capacity, but in latter years has decreased due to lack of ore from the mine as pits are exhausted. Current throughput typically requires operation of only one milling circuit which can operate at a rate of 2.4 Mtpa.

Plant recovery is variable and dependent on ore source and the amounts of transitional and carbonaceous ore periodically encountered in plant feed. The plant will continue to operate at a low production rate as current ore sources are exhausted.

Metallurgical testwork and preliminary engineering studies have been undertaken to establish the feasibility of installing a processing facility for treating ore from the Sepon primary gold resource. The carbonaceous primary mineralisation has been found to be refractory and preg-robbing. The preliminary studies evaluated flotation and pressure oxidation as the favoured treatment route. More recent investigations have been focused on whole ore roasting and further study work with this option is planned. Economic studies to date suggest that a larger gold resource than currently exists is required to make the project viable.

#### 1.10 Infrastructure

Power consumption for the total operation is in the order of 25,000 MWh per month, and is supplied from neighbouring Thailand. A second power line is being installed to improve reliability of supply and increase maximum demand capability. The second line is due for completion by October 2010 at a cost of A\$30M.

There are approximately 1,400 LXML employees and 3,100 contractor employees on-site with the majority of the local workers housed in the nearby town.

Expatriate employees account for 16% of the total workforce, and these employees regularly travel back to their country of origin as part of the work cycle. An air charter service is available to transport employees to site via an airstrip near the process plants. Whilst on site, employees are accommodated in two separate camps, Hinsom and Padan, which are close to the processing plants.

Water is drawn from nearby rivers for use in the plants and elsewhere. Water is recycled to the plant where possible.

#### 1.11 Environment

Environmental management at Sepon is mediated through approvals from the Lao PDR Government and involves 11 environmental management plans which are updated every two years. The copper project was incorporated into the approvals in 2002.

Emissions, especially to water, are managed to Lao, World Bank/International Finance Corporation and internally-imposed standards.

Acid mine drainage is a major environmental issue, and is being effectively managed by treatment of acidic drainage by addition of lime and caustic soda in engineered ponds prior to discharge to local streams. Exceedances of water-quality thresholds are detected through a sophisticated monitoring programme, and reported to government as required by conditions of the project approval documents; none of the exceedances are considered to have constituted a significant environmental hazard, because two-yearly aquatic biological monitoring continues to demonstrate the ecological integrity of downstream environments.

Considerable effort is put into identification of potentially acid-forming (PAF) mine waste in advance of extraction, so that such material can be properly managed by encapsulation with inert and/or acid-consuming material. There are sufficient amounts of inert and/or acid-consuming waste to also allow encapsulation of the operating tailings dam, which will have acid-producing copper tails on its surface. Detailed planning for closure of this dam is well advanced, based on geochemical testwork and modelling of the performance of an inert cover, possibly compacted, which would prevent moisture and oxygen reaching the sulphidic tailings at rates sufficient to cause significant acidification.

Impacts on groundwater, especially from acid drainage, require more intensive assessment and monitoring, but this is not considered by AMC to be a significant environmental issue; there has been no wide-scale impact on groundwater to date, and the demonstrably-high environmental performance at Sepon should provide for prompt and responsible management of issues that could arise in future.

An external Environmental and Social Audit was conducted in 2008, updating a 2007 study. While non-compliances were recorded, none is considered by AMC to be of sufficient importance or urgency to significantly affect project operations or impose significant unplanned costs. Importantly, in the context of the Equator Principles, the audit noted critical contributions to community development in the mine region, especially small business incentives and support.

A December 2009 closure and rehabilitation estimate of US\$126.3 (95% confidence, raw costs) or US\$68.3 (95% confidence, NPV, 8% discount rate) is considered by AMC to have been rigorously developed, using realistic unit rates and with appropriate allowance for post-decommissioning monitoring and management, especially of acid drainage. These closure costs are approximately 10% greater than those estimated in 2008, reflecting appropriate refinement of closure plans.

### 1.12 Operating and Capital Costs

Recent actual operating costs for Sepon copper and gold operations are presented in Table 1.7 and Table 1.8.

Table 1.7 Sepon – Operating Costs for Sepon Copper

Item	Units	2007	2008	2009
Production Parameters				
Ore and Waste Mined	Mt	6.93	6.54	8.17
Ore Mined	Mt	1.94	1.55	2.42
Ore Milled	Mt	1.22	1.33	1.41
Recovered	kt	62.50	64.10	67.56
Cash Operating Costs				
Mining	US\$M	15.74	19.54	23.15
Processing	US\$M	40.81	51.63	48.83
Transport/Port	US\$M	7.06	7.9	6.40
Maintenance	US\$M	13.89	14.02	12.06
Administration	US\$M	20.54	32.17	32.52
Total Site Costs	US\$M	98.03	125.27	122.98

Table 1.8 Sepon – Operating Costs for Sepon Gold

Item	Units	2007	2008	2009
Ore and Waste Mined	Mt	2.89	5.48	8.99
Ore Mined	Mt	1.51	1.61	2.83
Ore Milled	Mt	2.16	2.32	2.47
Recovered	koz	102.40	93.10	105.04
Cash Operating Costs				
Mining	US\$M	9.46	16.49	21.39
Processing	US\$M	15.04	14.26	13.80
Transport/Port	US\$M	0.45	0.34	0.41
Maintenance	US\$M	4.48	4.12	3.93
Administration	US\$M	11.24	13.10	10.98
Total Site Costs	US\$M	40.68	48.35	50.50

### 1.13 AMC Modelling Scenarios

#### 1.13.1 Sepon Copper

AMC has scheduled three modelling scenarios for Sepon Copper operations, based principally on a LOM plan prepared by MMG in late 2009.

AMC has scheduled a maximum post-expansion copper cathode production ramp up over 2011, 2012 and 2013 of 78 kt, 80 kt and 81 kt respectively. After 2013 AMC has scheduled maximum copper cathode production of 81 kt.

AMC has also scheduled a maximum plant throughput of 2 Mtpa. During the final years of AMC's schedules plant throughputs are limited to 1.9 Mtpa to reflect reduced plant productivities due to the requirement to treat material blends with less favorable processing characteristics.

AMC has adopted the year-to-date copper recovery of 90.3% for 2010. AMC has applied a copper recovery of 91% for years after 2010 to reflect improvements made during the copper plant expansion.

The key aspects of AMC's modelling scenarios are as follows:

### Reserves Case - Copper

The Reserves Case is based on a total ore processing inventory of 16.9 Mt grading 4.01% Cu. The processing inventory is derived from the AMC depleted June 2009 Ore Reserves.

Mining is completed in 2018 with ore processing ceasing in 2019 after production of  $617 \, \mathrm{kt}$  of copper cathode.

Capital and operating costs have been based on those estimated by MMG in its LOM plan.

#### Planning Case 1 - Copper

Planning Case 1 is based on a total ore processing inventory of 22.7 Mt grading 3.91% Cu. The processing inventory is derived from the AMC depleted June 2009 Ore Reserves with the addition of 5.8 Mt of Inferred material. In Case 1, 3.5 Mt of the additional ore is sourced from pits designed on the Thengkham South Inferred resource. The remaining 2.3 Mt is sourced from Inferred material associated with the Khanong, Thengkham North and Pha Bing deposits.

Mining is completed in 2018 with ore processing ceasing in 2022 after production of 810 kt of copper cathode.

Capital and operating costs have been based on those estimated by MMG in its LOM plan.

#### Planning Case 2 - Copper

Planning Case 2 is based on a total ore processing inventory of 25.5 Mt grading 3.82% Cu. The processing inventory is based on AMC's Planning Case 1 with the addition of 2.8 Mt of Inferred material and exploration upside. In Planning Case 2, 0.5 Mt of the Inferred material is sourced from an AMC estimated mining inventory resulting from the Thengkham West inferred resource of 2.3 Mt. The remaining 2.3 Mt added to Planning Case 1 is sourced from Inferred material and exploration upside associated with the Khanong, Thengkham North, Thengkham South and Pha Bing deposits.

Mining is completed in 2021 with ore processing ceasing in 2023 after production of 886 kt of copper cathode.

Capital and operating costs have been based on those estimated by MMG in its LOM plan.

The Sepon Copper Reserves Case, Planning Case 1 and Planning Case 2 are summarised in Table 1.9, Table 1.10 and Table 1.11.

#### 1.13.2 Sepon Gold

AMC has developed three modelling scenarios for Sepon Gold operations, based on a recent LOM plan provided by MMG. The key aspects of AMC's modelling scenarios are as follows:

### Reserves Case - Gold

The Reserves Case is based on a total ore processing inventory of 1.4 Mt grading 1.55 g/t Au and a gold recovery of 75%. The processing inventory is derived from the AMC depleted June 2009 Ore Reserves.

Mining is completed in 2010 with ore processing ceasing in 2010 after production of 52 koz of gold.

Capital and operating costs have been based on those estimated by MMG in its LOM plan.

### Planning Case 1 – Gold

Planning Case 1 is based on a total ore processing inventory of 3.86 Mt grading 1.35 g/t Au and a gold recovery of 75%. The processing inventory is based on the MMG LOM plan.

Mining is completed in early 2012 with ore processing ceasing in early 2012 after production of 126 koz of gold. Additional ore is included from a number of pit designs, including, Thengkham South, Thengkham East, Houy Yang Stage 5, Dankoy and Namkok West.

Capital and operating costs have been based on those estimated by MMG in its LOM plan.

### Planning Case 2 - Gold

Planning Case 2 is based on a total ore processing inventory of 5.86 Mt grading 1.3 g/t Au and a gold recovery of 75%. The processing inventory is based on the MMG LOM plan plus the addition of 2 Mt derived from exploration targets. The additional 2 Mt is sourced from an AMC estimate of the conversion of 3 Mt to 5.5 Mt of known exploration targets which are supported by drilling data.

Mining is completed in 2012 with ore processing ceasing in 2012 after production of 183 koz of gold.

Capital and operating costs have been based on those estimated by MMG in its LOM plan.

The Sepon Gold Reserves Case, Planning Case 1 and Planning Case 2 are summarised in Table 1.12, Table 1.13 and Table 1.14. Maintenance, administration and sustaining capital costs for gold cases are listed in the respective copper case.

Table 1.9 Sepon – AMC Modelling Scenario Copper Reserves Case

Item	Unit	Total	2010	2011	2012	2013	2014	2015 - 2017	2018 - 2019
Production									
Total Material Movement	kt	91,211	3,327	5,819	16,890	16,893	13,849	32,376	2,058
Waste Mined	kt	79,735	1,475	4,338	14,394	15,623	13,110	29,027	1,768
Ore Mined	kt	11,477	1,853	1,481	2,497	1,270	739	3,348	289
Strip Ratio	t:t	6.9	0.8	2.9	5.8	12.3	17.7	8.7	6.1
Ore Processed	kt	16,944	760	1,863	1,911	1,935	1,935	5,735	2,805
Cu Recovered	kt	617	34	78	80	81	81	220	43
Operating Costs									
Mining	US\$M	379	16	37	61	61	53	132	20
Processing	US\$M	554	27	64	66	67	67	191	73
Maintenance and Asset Management	US\$M	173	11	21	21	21	21	63	16
Administration	US\$M	479	29	58	58	58	58	174	44
Shipping and Refining	US\$M	21	1	3	3	3	3	7	1
Total Operating Costs	US\$M	1,606	84	183	209	209	201	567	153
Capital Costs									
Exploration	US\$M	11	11	-	-	-	-	-	-
Resource Development	US\$M	36	2	8	6	4	4	12	-
Sustaining	US\$M	40	5	8	7	5	5	8	2
Expansion	US\$M	79	41	28	11	-	-	-	-
Safety, Environment and Compliance	US\$M	19	2	3	2	2	2	6	2
Closure and Rehabilitation	US\$M	120	-	-	-	-	-	-	120
Total Capital Costs	US\$M	305	61	46	26	11	11	26	124

Table 1.10 Sepon – AMC Modelling Scenario Copper Planning Case 1

Item	Unit	Total	2010	2011	2012	2013	2014	2015 - 2017	2018 - 2020	2021 - 2022
Production										
Total Material Movement	kt	123,646	3,327	5,819	16,890	16,893	16,892	50,675	13,150	-
Waste Mined	kt	106,358	1,104	4,042	13,894	15,369	15,997	44,889	11,063	-
Ore Mined	kt	17,287	2,223	1,777	2,996	1,524	894	5,786	2,087	-
Strip Ratio	t:t	6.2	0.5	2.3	4.6	10.1	17.9	7.8	5.3	-
Ore Processed	kt	22,754	760	1,863	1,911	1,935	1,935	5,805	5,700	2,845
Cu Recovered	kt	810	34	78	80	81	81	243	177	35
Operating Costs										
Mining	US\$M	463	16	37	61	61	61	183	44	-
Processing	US\$M	738	27	64	66	67	67	200	177	71
Maintenance and Asset										
Management	US\$M	214	11	21	21	21	21	63	53	4
Administration	US\$M	590	29	58	58	58	58	174	145	10
Shipping and Refining	US\$M	27	1	3	3	3	3	8	6	1
Total Operating Costs	US\$M	2,032	84	183	209	209	209	628	424	85
Capital Costs										
Exploration	US\$M	11	11	-	-	-	-	-	-	-
Resource Development	US\$M	36	2	8	6	4	4	12	-	-
Sustaining	US\$M	63	5	8	7	5	5	15	13	5
Expansion	US\$M	79	41	28	11	-	-	-	-	-
Safety, Environment and										
Compliance	US\$M	27	2	3	2	2	2	6	6	4
Closure and Rehabilitation	US\$M	120	-	-	-	-	-	-	-	120
Total Capital Costs	US\$M	336	61	46	26	11	11	33	19	129

Table 1.11 Sepon – AMC Modelling Scenario Copper Planning Case 2

ltem	Unit	Total	2010	2011	2012	2013	2014	2015 - 2017	2018 - 2020	2021 - 2023
Production										
Total Material Movement	kt	160,497	3,327	5,819	16,890	16,893	16,892	50,675	45,386	4,615
Waste Mined	kt	140,455	1,104	4,042	13,894	15,369	15,997	44,889	41,045	4,115
Ore Mined	kt	20,042	2,223	1,777	2,996	1,524	894	5,786	4,342	500
Strip Ratio	t:t	7.0	0.5	2.3	4.6	10.1	17.9	7.8	9.5	8.23
Ore Processed	kt	25,509	760	1,863	1,911	1,935	1,935	5,805	5,735	5,565
Cu Recovered	kt	886	34	78	80	81	81	243	208	81
Operating Costs										
Mining	US\$M	605	16	37	61	61	61	183	168	17
Processing	US\$M	821	27	64	66	67	67	200	187	143
Maintenance and Asset										1
Management	US\$M	270	11	21	21	21	21	63	63	49
Administration	US\$M	677	29	58	58	58	58	174	174	68
Shipping and Refining	US\$M	30	1	3	3	3	3	8	7	3
Total Operating Costs	US\$M	2,401	84	183	209	209	209	628	600	279
Capital Costs										
Exploration	US\$M	11	11	-	-	-	-	-	-	-
Resource Development	US\$M	48	2	8	6	4	4	12	12	-
Sustaining	US\$M	61	5	8	7	5	5	15	9	7
Expansion	US\$M	79	41	28	11	-	-	-	-	-
Safety, Environment and Compliance	US\$M	29	2	3	2	2	2	6	6	6
Closure and Rehabilitation	US\$M	120	-	_	-	_	_	_	_	120
Total Capital Costs	US\$M	348	61	46	26	11	11	33	27	133

Table 1.12 Sepon – AMC Modelling Scenario Gold Reserve Case

Item	Unit	Total	2010
Production			
Total Material Movement	kt	568	568
Waste Mined	kt	450	450
Ore Mined	kt	118	118
Strip Ratio	t:t	3.8	3.8
Ore Processed	kt	1,399	1,399
Au Recovered	Koz	52	52
Operating Costs			
Mining	US\$M	2	2
Processing	US\$M	10	10
Maintenance and Asset Management	US\$M	-	-
Administration	US\$M	-	-
Shipping and Refining	US\$M	0.33	0.33
Total Operating Costs	US\$M	12	12

Table 1.13 Sepon – AMC Modelling Scenario Gold Planning Case 1

Item	Unit	Total	2010	2011	2012
Production					
Total Material Movement	kt	14,653	3,388	11,182	83
Waste Mined	kt	12,451	2,888	9,529	34
Ore Mined	kt	2,693	991	1,653	50
Strip Ratio	t:t	4.6	2.9	5.8	0.7
Ore Processed	kt	3,856	1,458	2,023	374
Recovered	koz	126	47	66	12
Operating Costs					
Mining	US\$M	41	9	31	-
Processing	US\$M	27	10	14	3
Maintenance and Asset Management	US\$M	-	-	-	-
Administration	US\$M	-	-	-	-
Shipping and Refining	US\$M	1	0.31	0.43	0.08
Total Operating Costs	US\$M	69	20	46	3

Table 1.14 Sepon – AMC Modelling Scenario Gold Planning Case 2

Item	Unit	Total	2010	2011	2012
Production					
Total Material Movement	kt	25,276	3,388	10,805	11,083
Waste Mined	kt	21,451	2,888	9,529	9,034
Ore Mined	kt	4,693	991	1,653	2,050
Strip Ratio	t:t	4.6	2.9	5.8	4.4
Ore Processed	kt	5,856	1,458	2,023	2,374
Recovered	koz	183	47	66	70
Operating Costs					
Mining	US\$M	71	9	30	31
Processing	US\$M	41	10	14	17
Maintenance and Asset Management	US\$M	-	-	-	-
Administration	US\$M	-	-	-	-
Shipping and Refining	US\$M	1	0.31	0.43	0.48
Total Operating Costs	US\$M	113	20	45	48

#### 1.14 Technical Risks and Opportunities

In AMC's opinion the main technical risks at Sepon are:

- If the supply of processing reagents is not sufficient to achieve forecast processing requirements
  copper production could be affected and operating costs could increase Sepon mines inputs for the
  processing of copper on site, including limestone and pyrite. Interruptions to mining of these inputs
  could affect productivity.
- Damage to, or failure of, key equipment items in the processing plant, for example the rectiformer (which is part of the electrowinning cicuit), could cause delays to copper processing.
- If MMG fail to continue to successfully manage community relations with local people interruptions to production could result.
- If MMG fail to continue to implement effective environmental management plans production could be interrupted and costs could increase.

In AMC's opinion the main technical opportunities at Sepon are:

- The significant prospectivity of the site and region, and the potential to make further discoveries of
  economic oxide gold and supergene copper deposits, which in turn could allow for the extension or
  expansion of production for existing processing facilities.
- The potential, after significant further study, exploration and investment, to establish primary gold and copper mining and processing operations. This potential is considered in AMC's exploration section.
- MMG could further expand or make modifications to the copper processing plant in order to increase
  ore throughput or copper recovery.

#### 2 CENTURY

#### 2.1 Introduction

The Century Mine is situated in the north-west Queensland mineral province. The operation includes the Century Mine, located approximately 250 km north-west of Mount Isa and a 304 km concentrate slurry pipeline to a dewatering, storage and ship loading facility at Karumba a further 250 km east-north-east as shown in Figure 2.1.

The area around the mine is characterised by flat low-lying plains and low limestone, sandstone and siltstone hills. The Boodjamulla (Lawn Hill) National Park is located approximately 10 km to the west of the mine. The area features semi arid terrain, receiving approximately 530 mm of rainfall annually.

The Century Mine commenced operation in 1998 and over the 12 years since, has produced approximately 500 ktpa of zinc in concentrates. Production in 2009 was significantly reduced to 360 kt as a consequence of a failure in the concentrate slurry pipeline to Karumba which halted concentrate production for three months. The remaining ore reserves are expected to have been depleted by 2015.

Mornington Is.

Karumba
Normanton

Doomadgee

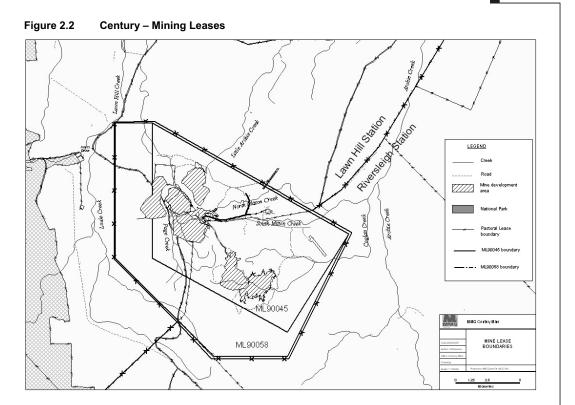
Underground Slurry Pipeline

Far North
Queensland
National
Park

Mt. Isa

Figure 2.1 Century – Location Map





### 2.2 Geological Setting

The zinc-lead-silver stratiform mineralisation at the Century Mine is hosted by a thick sequence of mid-Proterozoic rocks of the Mount Isa Inlier.

The Century deposit comprises the Lawn Hill Formation siltstones, shales and sandstones. Mineralisation occurs within laminated carbonaceous shales, which are interbedded with waste or lower grade sideritic siltstones or mudstones. The mineralisation shows good lateral continuity with well-defined stratigraphic marker horizons. The Proterozoic sequence is gently folded into a broad syncline, generally dipping between 5° to 25° steepening to 70° at the western margin of the basin. The deposit is dislocated by faulting, and unconformably overlain by up to 100m of Cambrian limestones. Where the mineralisation approaches the Cambrian unconformity, there is a zone of haematite alteration where ore grade mineralisation has generally been leached and altered.

The deposit extends 1,400m north-south and 1,200m east-west, reaching a maximum depth of approximately 350m. The total mineralised package is up to 45m thick and is subdivided into Upper and Lower ore zones, separated by approximately 4m to 6m of siltstone waste. Sulphide mineralisation comprises principally of sphalerite and galena with lesser pyrite.

A deposit scale structural review was commissioned in 2002. The study refined the main bounding structures and internal structures within the deposit and formed the basis of the structural interpretation for the April 2005 geological model. Mapping data collected since 2005 has been added to the most recent April 2008 model. The revised main bounding structures and the most significant internal structures are illustrated in Figure 2.3.

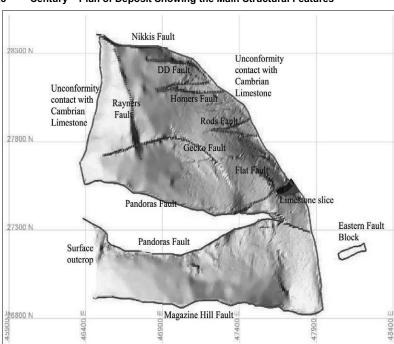


Figure 2.3 Century – Plan of Deposit Showing the Main Structural Features

Source: Update of Mineral Resource Estimate April 2008.

In addition to the 11 key bounding and internal faults shown in Figure 2.3, two important structures impacting the mineralisation are:

- Cambrian limestone and associated Paleo-weathering (haematite) surface the overlying Cambrian limestone forms the boundary to the deposit along the eastern margin of the South and North Blocks. It also forms the boundary to the western margin of the North Block. The haematite alteration, which has leached all mineralisation has been treated as a hard boundary for modelling purposes, despite the stratigraphy continuing through until being truncated by the limestone.
- Carbonate Breccia (CBX) occurs as irregularly shaped dykes and sills within the Proterozoic and Cambrian rocks. Due to the irregular nature of CBX, it is unable to be modelled from drillhole intersections alone. Detailed mapping during mining has increased the understanding of the characteristics and controls on CBX distribution. Previous studies show that the CBX has displaced approximately 1% to 2% of predicted ore reserves.

#### 2.3 Mineral Resources

Century Mineral Resources reported by MMG as at 30 June 2009 are presented in Table 2.1. The resources are based on drilling conducted between 1990 and 2007, involving detailed geological logging of over 1,000 drillholes of which 421 diamond drillholes intersected mineralisation and were used in grade estimation. Eighty four RC and percussion drillholes intersected the orebody and were used for geological and unit thickness interpretation only. A geophysical logging system used to log production blast holes has been used to log deeper RC holes. The geophysical logs are used to locate the mineralised zones. Pit mapping data was collected and used to generate reference surfaces bounding structures and internal structures. The detailed mapping of the pit surface has added greatly to the understanding of the geological structures.

A full quality assurance/quality control (QA/QC) programme of sample checks has been carried out throughout the series of drilling programmes, although the main focus was generally on the zinc grades, and in the latest drilling for lead and silver also. Good precision has been achieved and no biases have been detected in the drilling, sampling, and assay programmes. AMC has not reviewed the drilling results in detail but considers the procedures used for drilling, logging and sampling to be of a suitable standard and that the QA/QC programme is complete and appropriate.

Mineralisation in the Eastern Fault Block is poorly defined and currently is considered to be uneconomical and is not included in the resource estimate.

Table 2.1 Century – Mineral Resources as at 30 June 2009

Category	Tonnes (Mt)	Zinc (%)	Lead (%)	Silver (g/t)
Measured	32.2	12.3	1.5	34
Indicated	9.4	11.3	1.6	37
Inferred	0.2	10.1	1.1	33
Total	41.8	12.1	1.5	35

Reported at a cut-off grade of 3.5% zinc.

The last independent mineral resource estimate was carried out by Snowden in June 2008. The 2009 model includes revised internal and bounding structural data collected during mining. The 2009 model was constructed by combining the estimated vertical thickness of each unit with the modelled reference surface and bounding structures. The vertical thickness of each unit was estimated using ordinary kriging from the vertical thickness of drillhole composites. Block grades were estimated by ordinary kriging using full seam composites.

The geological modelling and the grade estimation methods used for the 2009 resource estimate are slightly different to the 2008 method due to a new version of Vulcan software being used. The unfolding technique allowed the unfolding of composites in space to maintain the true spatial relationship between composites; this was completed using the projection unfolding technique not previously used due to complications with applied distances. This technique had little effect on the evenly distributed zinc grades but caused a minor change to both lead and silver grades.

New mapping data on the location of faults has resulted in the removal of 0.42 Mt from the April 2009 model due to the repositioning of bounding faults.

Bulk density has been estimated for each block based on an adjusted regression equation for the percentage zinc, lead, iron, manganese, and sulphur content. The calculated bulk density has been adjusted for rock type (shale or siltstone) based on correlation studies comparing the stoichiometric density versus the measured bulk density of grab samples. AMC considers that the bulk density values used in the resource and reserve estimates are suitable.

The North and South Block deposits comprise Measured and Indicated Mineral Resources with a minor component of Inferred. Measured Resources are located in the area that has been directly interpolated from drillhole data and where resources are greater than 5m from interpreted major internal structures (due to uncertainty in the exact location of these structures). Indicated Resources are located in the margins of the deposits, including the areas contained within the 5m boundary around major structures.

Reconciliation between the 2008 mineral resource model and the tonnage and grades milled after adjustments for changes in ROM stockpiles and other losses over a 12 month period to December 2009 show significant differences. The milled tonnes are 7% lower than the model but, more significantly, the milled grade is 18%, 23% and 19% lower than estimated for zinc, lead and silver respectively. Some of the difference may be due to difficulties in measuring the stockpiles.

Differences between the resource model tonnes and grades and the milled tonnes and grades over a 36 month period are generally used to develop a mine call factor (MCF), which is used to adjust future production and ore reserve estimates. Table 2.1 shows the calculated MCF based on the previous 12 months of production up to December 2009 (MCF 2009) and the MCF that was used for estimating purposes in June 2008 (Ore Reserve MCF). The MCF 2009 shows a lowering of the factor and possible decrease in the models grade estimation accuracy.

Table 2.2 Century – Comparison of 2008 Model Depletion with Mill Production (12 Months to December 2009)

Estimate	Tonnes (t)	Zinc (%)	Lead (%)	Silver (g/t)	Zinc Metal (t)	Lead Metal (t)	Silver Metal (t)
Resource vs Milled	-6.9%	-17.5%	-22.5%	-19.4%	-23.7%	-27.9%	-25.0%
MCF 2009 CY09 Actual Recon	0.931	0.825	0.775	0.806	0.763	0.721	0.750
Ore Reserve MCF (June 2008 Model)	0.976	0.886	0.919	0.895	0.865	0.897	0.873

The 2009 Mineral Resource was converted into an Ore Reserve by using the mining factors calculated from reconciliation of mining to mill production for the 36 month period ending 30 June 2009. The MCF's were further refined to reflect the mining performance in steep and shallow parts of the ore body and also the narrower marginal sections of the ore body. Table 2.3 details MCF's calculated from a 36 month reconciliation of the 2009 Model.

Table 2.3 Century - MCF's Calculated from a 36 Month Reconciliation of the 2009 Model

Area	Tonnes (t)	Zinc (%)	Lead (%)	Silver (%)
Steep MARG MCF	1.463	0.477	0.571	0.524
Steep UZ/LZ MCF	1.222	0.833	0.712	0.944
Shallow MARG MCF	1.122	0.582	0.655	0.523
Shallow UZ/LZ MCF	0.943	0.902	0.902	0.880

Reconciliation between the 2009 Mineral Resource model and the tonnage and grades milled after adjustments for changes in ROM stockpiles and other losses over a 12 month period to June 2010 show improvements from the 2008 model. Table 2.4 details MCF's for this period.

Table 2.4 Century – MCF's Comparison of 2009 Model Depletion with Mill Production (12 Months to June 2010)

Estimate	Tonnes (t)	Zinc (%)	Lead (%)	Silver (g/t)	Zinc Metal (t)	Lead Metal (t)	Silver Metal (t)
Resource vs Milled	-2.8%	-15.1%	-12.6%	-14.7%	-16.6%	-15.0%	-17.4%
MCF 2009 (12 month actual recon)	0.972	0.849	0.874	0.853	0.834	0.850	0.826
ORE Reserve MCF (June 2009 model)	1.047	0.851	0.810	0.828	0.856	0.806	0.808

#### 2.4 Ore Reserves

Century Ore Reserves as reported by MMG as at 30 June 2009 are presented in Table 2.5. The MCF calculated as at 31 March 2009.

Table 2.5 Century – Ore Reserves as at 30 June 2009

Classification	Tonnes (Mt)	Zinc (%)	Lead (%)	Silver (g/t)
Proved	20.5	11.6	1.0	18
Probable	9.7	10.5	1.2	24
Total	30.2	11.2	1.1	20

The Ore Reserve estimate is based on a zinc equivalent cut-off grade of 4.85% calculated using a zinc price of US\$0.74/lb, lead price of US\$0.65/lb, silver price of US\$12.00/oz and an exchange rate of 0.73 (A\$:US\$). Prices used in estimating the Century Ore Reserve are marginally different to the MMG long term prices to reflect the shorter life of this operation.

The commodity prices and exchange rate assumptions are as used by MMG in their 2009 Ore Reserve estimating processes reported as at 30 June 2009.

It is important to recognise that Ore Reserves are typically run using long term commodity price and foreign exchange forecasts rather than spot prices and rates. Therefore, short term or recent fluctuation in spot commodity prices or foreign exchange rates would not be reflected in a re-run of reserves.

In view of the recent strength in commodities markets, there has been some upward revision of long term commodity price assumptions by MMG. However, these have been offset to a certain extent by the assumption of a strengthened long term Australian dollar, which results in higher operating costs in US dollar terms (the functional currency of MMG) given most of MMG's operating costs are Australian dollar denominated. As a result, reserves would be expected to be marginally higher if run using today's long term assumptions rather than those at 30 June 2009.

In AMC's opinion the mineral resource and ore reserve estimates prepared for the Century Mine are reasonable and have been reported by MMG in accordance with the JORC Code.

#### 2.5 Exploration and Potential for Additional Reserves

Due to the constraints imposed by bounding faults to the deposit and completeness in mineral resource definition, it is unlikely that additional resources will be delineated at the Century deposit. Further drilling on the Century deposit is largely being focused on mineral resource definition and geotechnical assessment in boundary areas.

Notwithstanding the constraint to exploration on the Century deposit, MMG holds interests in and manages exploration over  $4,603 \, \text{km}^2$  stretching some 150 km to the north-west and south-east from Century (Figure 2.4).

The Century exploration programme has focused on:

- the discovery of Century style (i.e. large strata bound sediment hosted) mineralisation remote from the Century deposit
- known vein style reef related mineralisation in the immediate vicinity of the mine and targets broadly associated with the Termite Range Fault, a significant feature in the area.

Figure 2.4 Century – Regional Exploration Area

In regard to the regional exploration for large strata bound sediment hosted targets, given the extent of exploration undertaken on the tenement package, and the limited remaining mine life at Century, AMC is of the opinion that there is a low likelihood that any discovery that might be made will materially impact the operation at Century.

In AMC's opinion the vein deposit targets may provide mill feed for the Century mill or an alternative reduced scale milling operation. Of these targets, the most prospective is the Silver King deposit which lies some 2 km to the south west of the Century deposit. A concept study was completed in 2008 base on mineral resources which had been established in the area of the historic underground workings. The study recommended that a feasibility study be completed; however this was not progressed at that time. MMG has identified a down plunge extension to the identified mineral resource. This extension to the known resource is not sufficiently drilled to be included in a mineral resource estimate, but is now the subject of an application for expenditure to carry out a drilling programme aimed at developing an Indicated Mineral Resource.

Outside of its interest in zinc and lead, MMG is examining opportunities to develop phosphate deposits which have been identified in the region within the Georgina Basin. The concept would involve utilisation of the Century processing plant, slurry pipeline and port facilities after mining at Century ceases. The work is currently at concept stage.

#### 2.6 Mining Operations

The mining operation at Century is a conventional truck and shovel open pit operation employing a fleet of 170t to 220t capacity haul trucks and four Liebherr 996 hydraulic shovels for bulk mining and a number of smaller 180t to 250t hydraulic excavators for selective ore mining. The pit has been mined in a series of stages, six of which have been completed. Stage 7 and Stage 8 are yet to be completed and 9 remains to be mined.

Significant planning has been undertaken to optimise the production schedule to mine closure in 2014. Influence on this work include the need to manage several geotechnical issues which have impacted pit operations in recent years, an interest in delaying waste removal, maximising in-pit dumping, construction of improved sumps to the west of the pit, and mill ore requirements. Material movements taken from the most recent schedule (version 3.9) are summarised in Table 2.6.

Table 2.6 Century – LOM Production Schedule (Version 3.9)

Material	Units	Total	2010	2011	2012	2013	2014
Waste	Mt	81.71	21.86	42.24	14.69	2.89	0.02
Selective Waste	Mt	20.35	2.02	4.02	6.55	5.61	2.16
Ore	Mt	24.70	2.88	5.91	6.02	5.78	4.10
Total	Mt	126.76	26.77	52.17	27.26	14.28	6.28

AMC considers the mine production schedule achievable but notes that high bench advance rates over the next three years present an increased risk to planned production.

Significant geotechnical issues have imposed on the pit operations over the past two years. The principal events are a series of failures to the South West Wall in December 2008 and January 2009, and failures to the North Wall and North West Wall in early 2009. An independent review was completed in March 2010 as a part of an ongoing external audit process established under the site's Geotechnical Management Plan. Key points noted in the review include:

- The redesign of the pit wall below the North and North West Wall failures and the need for continuing vigilance to adjust designs according to geological conditions.
- The revised Stage 8 cut-back effectively removes the large scale failure in the South wall however it
  was not possible to design pit walls with an ideal orientation to bedding.
- Batters to Bedding walls have been very successful.
- Pit wall drainage holes have been successful and require ongoing installation.

In-pit dumps have experienced significant settlement following several heavy rain episodes. This has
impacted on dump ramp usage.

In general, material movements at Century have decreased significantly over the past year and this trend will continue. Currently this has lead to a surplus of mining equipment on site. AMC considers that the mine equipment fleet at Century has the capacity to meet the planned material movement schedule and is appropriate for the task.

### 2.7 Processing and Concentrate Handling

The processing plant was designed to produce over 500 ktpa of zinc in concentrate utilising flotation as the principal means of beneficiation. The unique characteristic of the process is that an ultra-fine grind is required to achieve a satisfactory liberation of the sphalerite from certain gangue minerals.

The plant flowsheet is illustrated schematically in Figure 2.5. ROM ore is crushed and fed through a coarse ore stockpile to the grinding circuit which comprises a SAG mill followed by two parallel ball mills.

Concentrator Process Overview

Tal 187 options product

Set 187 op

Figure 2.5 Century – Process Plant Schematic Flowsheet

In the first stage of the flotation process, part of the naturally floating carbon contained in the ore is removed and discharged with the final plant tailings. A pre-flotation roughing-cleaning sequence is employed for this purpose.

In the second stage of the flotation circuit, lead concentrate is produced through roughing and cleaning flotation with the lead concentrate being generated from the cleaning stage. The lead flotation circuit tailings gravitate to the primary zinc flotation circuit which incorporates a rougher-scavenger sequence, with the scavenger concentrate being reground in sand mills prior to the first zinc cleaning stage.

The concentrates from the rougher and the first zinc cleaner stages become the feed to the ultra-fine milling/cleaning circuits. This combined product is reground to a nominal sizing of 80% finer than 6 microns to release silica before being processed through four stages of ultra-fine cleaning to produce the final zinc concentrate. The ultra-fine circuit tailings are combined with the zinc scavenger tailings as well as initial carbon pre-flotation concentrate and directed to the tailings thickener from which the thickened product is pumped to the tailings dam.

The lead and zinc concentrates are also separately thickened before being sequentially pumped as discrete product batches through a single pipeline over a distance of 304 km to the port site at Karumba.

The concentrates are dewatered at Karumba using separate thickeners, pressure filters and in the case of the zinc concentrate, an oil-fired rotary dryer in order to control the final product moisture. Final zinc concentrates are pelletised during this drying process. Dried concentrates are stored in a covered shed prior to reclaim for loading into a transfer vessel which transports both lead and zinc concentrates to ships anchored in the Gulf of Carpentaria.

The plant was designed to accommodate the changing lead:zinc ratio of the feed ore over the mine life. The original design criteria were as follows:

- An annual feed rate of 5 Mtpa ore.
- An average feed grade of 12.5% zinc at an average zinc recovery of 82.2% with sufficient flotation capacity for an annual zinc output of approximately 520 kt of zinc in a 57.5% zinc concentrate.
- A lead concentrate grade of 60% lead at 52% lead recovery from an average 1.7% lead feed.

Recent plant metallurgical performance statistics are summarised in Table 2.7 in conjunction with data from the Five Year Production Plan.

Table 2.7 Century – Mine Concentrator Performance Summary

Year	Feed	Head	Grade		Conce	ntrate		Zinc Metal
	(kt)	Zinc (%)	Lead (%)	Zinc (%)	Zinc Recovery (%)	Lead (%)	Lead Recovery (%)	(t)
FY2003	5,168	12.6	1.7	58.7	79.9	70.0	74.0	520,300
FY2004	5,391	11.7	2.4	57.9	80.3	67.2	72.7	504,224
FY2005	5,313	11.8	1.5	57.3	80.3	66.7	69.2	501,481
FY2006	5,330	12.3	2.2	57.5	79.2	66.9	68.2	515,716
FY2007	5,594	11.6	1.3	56.6	77.8	64.6	63.3	502,037
FY2008	5,541	11.8	1.2	56.7	79.4	65.6	62.4	521,469
CY2009	4,200	11.0	0.64	57.2	78.2	63.4	49.2	360,569
Qtr 1 2010	1,267	11.4	1.2	57.5	79.8	67.1	48.3	116,639
Average to 2009	5,220	11.8	1.6	57.5	79.3	66.7	65.6	489,285
Plan 2010	5,677	11.5	1.1	57.0	79.7	66.0	58.2	518,791
Plan 2011	5,757	11.2	0.92	56.7	79.2	65.5	60.4	513,137
Plan 2012	6,020	10.7	1.1	56.7	80.0	65.5	62.7	513,091
Plan 2013	5,661	11.5	1.2	56.7	79.5	65.5	63.0	517,002
Plan 2014	5,291	10.4	1.0	56.7	77.0	65.5	58.4	422,695

The annual zinc output has varied from 502 kt to 520 kt for the majority of the operating period, with an average annual production rate of 509 kt of zinc for the period from 2003 to 2008. Production during 2009 was adversely impacted by an unscheduled plant shutdown from early October to late December as a consequence of a failure of the concentrate pipeline to Karumba. On a pro-rata basis, the production for the March Quarter of 2010 would equate to an annualised production of 467 kt of zinc metal.

Performance data suggest that the zinc flotation circuit has the capacity to recover approximately 510 ktpa of zinc in concentrate under normal operating conditions. It is noted that the Five Year Plan projects zinc output in excess of the long term average production rate. Although sufficient primary grinding capacity exists to accommodate the planned ore throughput rates, capacity constraints may exist in the flotation circuit which will limit the overall production of zinc metal to the long term annual average.

AMC notes that in relation to lead flotation, future lead grades are expected to be lower than the historical averages and a decrease in lead recovery will be a natural response to the lower feed grade.

#### 2.8 Environment

Environmental management at Century is of a high standard, based on rigorous, risk-based assessment of potential impacts and implementation of sound environmental management plans and programmes to manage those impacts.

Some acid-generating mine waste is being backfilled into minded-out areas; this waste will likely be the only waste requiring rehabilitation at the time of decommissioning. Other potentially acid-generating mine waste is progressively encapsulated with limestone material in out-of-pit waste stockpiles, with limestone bunds surrounding the stockpiles during construction to neutralise any acid drainage. Limestone bases are constructed under stockpiles located over pre-existing surface drainage channels to ensure that drainage reporting to the broader environment is non-acidic. Final landform designs include an impermeable (10-6 m/s) seal between acid-generating waste and overlying limestone, which will be up to 20m thick on the outer batters. Preliminary "store-and-release" trials for waste-stockpile covers were conducted in 2005, and additional trials are continuing through to 2010. AMC considers it unlikely that acid mine drainage will be a significant problem at Century, both during operations and after closure – the availability of large quantities of acid-consuming mine waste, and the rigorous planning and scheduling of management of potentially acid-forming waste, are the prime basis of this view.

Mine dewatering (up to 350 l/s) has been shown to have no impact on the nearby Boodjamulla (Lawn Hill) National Park, and the discharge of excess mine water to Little Archie Creek has been effected without significant exceedance of end-of-pipe thresholds imposed by the regulator (Queensland EPA). A rigorous water-monitoring programme, based on a comprehensive pre-operations baseline, provides for efficient assessment of potential impacts and operational performance. Water management studies in 2010 are aimed at assessment of how structures (waste stockpiles, TSFs, ponds etc.) might interact with the local and regional groundwater; these studies should provide a solid basis for planning cost-effective post-closure monitoring and management programmes.

An October 2009 failure of the slurry-transport pipeline to Karumba resulted in a large spill of concentrate causing potential impacts on grazing cattle, as well as ecological damage. The spill was cleaned up by removal of contaminated soil to the tailings storage facility at the mine, and recurrence appears to have been avoided.

A 1-in-200-year rainfall event in early 2009 resulted in contamination of Page Creek near the mine-site. In March 2010 the company was fined A\$130,000 for this pollution event. As well as meeting the A\$350,000 costs of immediate remediation, the company has committed A\$8M to further protection of the creek, including improvement of water-management systems at the mine. AMC assumes that the improved systems have and will significantly reduce risks of recurrence.

A risk-based closure plan was developed in June 2010, with work requirements and closure standards well identified. A LOM closure estimate of A\$102.2M is considered by AMC to be realistic, and based on unit rates that reflect current costs for equipment hire and rehabilitation activities. AMC has taken areas of disturbance by type (e.g., waste stockpile, TSF etc.) from the closure plan and applied unit rates for current closure activities in the Western Australian environment to derive a closure cost that is within 10% of the MMG estimate of June 2010. It is noted that closure plans exclude the Karumba facilities (potential future use by others) and the slurry pipeline that lies outside the Lawn Hill lease boundary. AMC considers this to be a realistic basis for assessing actual liabilities.

A bank guarantee for A\$54.07M is in place to indemnify the State of Queensland against closure liabilities. The fact that this provision is significantly less than likely actual closure costs is not unusual: in all Australian jurisdictions, it is common for such environmental (closure) bonds to cover only 40% to 70% of actual closure costs

Karumba port operations involve the filtering of slurries prior to shed storage and shipment. Lead concentrate is stored after filtration at moisture contents of 11% to 13% and zinc concentrate are dried after filtration to below the 13% Transport Moisture Limit (TML). These near-TML moisture contents can reasonably be expected to minimise dust emissions, which have proven problematical at other ports, notably Esperance in Western Australia. Slurry-transport water is treated prior to its use in pasture irrigation as an environmental positive.

The legal status of the statutory environmental approval for operations at Karumba was investigated in 2008, following a Queensland EPA audit. Resolution of this technical issue (operations were unaffected) was complicated by legislation changes in January 2008. A new and comprehensive development application was resubmitted during Q3 2009. The operator remains in negotiation with the regulator and anticipates final resolution by the end of 2010. Concern at elevated levels of lead, cadmium and zinc in rainwater tanks in Karumba in early 2007 led to monitoring of blood lead levels of residents. Of 52 residents tested, only two, who worked in lead-risk jobs, showed lead levels above health trigger thresholds. Subsequent testing of residents showed none to have unacceptably-elevated blood lead levels. At the direction of the Queensland EPA, the Century operators undertook a programme of monitoring levels of heavy metals in rainwater tanks in Karumba in 2007 and 2008; some tanks required cleaning. AMC assumes this matter to now be resolved, but flags the risks, both technical and socio-political, involved; the lead-contamination issue at Esperance in Western Australia at about the same time is still hazarding the export of mineral concentrates through that port.

Sulphur dioxide emissions from Karumba port facilities caused complaints in 2007, but it appears that careful management of operations, together with ground-level air-quality monitoring, have successfully resolved this matter.

### 2.9 Operating and Capital Costs

Planned unit cash operating costs for 2010 as presented to AMC by MMG are:

Mining (excluding deferred waste) A\$7.15/t ore mined
 Processing A\$23.97/t ore milled
 Maintenance/Asset Management A\$7.99/t ore milled
 Port Costs A\$5.04/t ore milled
 Administration A\$12.05/t ore milled
 Total site operating cost A\$56.67/t ore milled

Capital expenditure in 2010 is forecast at A\$13.9M plus capitalised mine development costs of A\$156.98M.

### 2.10 AMC Modelling Scenarios

AMC has developed two modelling scenarios for Century Mine. The key aspects of AMC's modelling scenarios are as follows:

### Reserves Only Case

- Annual waste and ore tonnages and grade are based on the 2010 Century LOM Plan (version 3.9) prepared by MMG. Ore reserves are based on reported reserves as at 30 June 2009 adjusted for depletion to June 2010.
- The mining inventory is 26.0 Mt at grades of 11.0% Zn, 1.1% Pb and 19 g/t Ag. Mining continues until December 2014.
- Annual ore processing rate of 5.7 Mtpa.

- Zinc recovery of 79.1% and lead recovery of 61.2%, with zinc production averaging 496 ktpa, totalling 2,258 kt over the remaining life.
- Average operating costs estimated at A\$67.54/t of ore processed over the remaining six year mine
  life. Total remaining capital expenditure of A\$40M and closure/rehabilitation costs of A\$103M.

#### **Planning Case 1**

- Annual waste and ore tonnages and grade are based on a 3.9 cut-off grade mining schedule prepared in August 2010 by MMG.
- The mining inventory is 29.9 Mt at grades of 10.5% Zn, 1.1% Pb and 18 g/t Ag. Mining continues until August 2015.
- Annual ore processing rate of 5.9 Mtpa.
- Zinc recovery of 78.1% and lead recovery of 59.0%, with zinc production averaging 476 ktpa, totalling 2,444 kt over the remaining life.
- Average operating costs estimated at A\$64.69/t of ore processed over the remaining six year mine
  life. Total remaining capital expenditure of A\$40M and closure/rehabilitation costs of A\$103M.

AMC has not prepared a Planning Case 2 for the Century Mine as a consequence of the constrained nature of the Mineral Resources limits expansion opportunities.

The Century Mine Reserves Only Case and Planning Case 1 are summarised in Table 2.8 and Table 2.9.

Table 2.8 Century – AMC Modelling Scenario Reserves Case

Item	Units	Total/Average	2010	2011	2012	2013	2014
Production Parameters							
Total Movement	Mt	126.8	26.8	52.2	27.3	14.3	6.3
Ore Mined	Mt	24.7	2.9	5.9	6.0	5.8	4.1
Strip Ratio	w/o	4.1	7.6	7.1	2.4	0.5	-
Ore Processed	Mt	26.0	3.0	5.8	6.0	5.7	5.5
Zn Recovered	kt	2,258.3	272.5	513.1	513.1	517.0	442.6
Pb Recovered	kt	169.0	18.1	32.0	42.4	43.9	32.5
Cash Operating Costs							
Mining	A\$M	456.3	92.5	180.7	100.5	56.6	25.9
Processing	A\$M	779.1	89.8	172.7	180.6	169.8	166.2
Administration	A\$M	296.6	37.3	74.7	74.7	70.0	40.0
Concentrate Transport and Port	A\$M	222.0	27.8	48.4	49.8	50.1	45.8
Total Operating Cost	A\$M	1,754.0	247.4	476.5	405.5	346.6	278.0
Capital Costs							
Sustaining	A\$M	40.0	7.0	14.7	11.1	3.6	3.6
Expansion	A\$M	-	-	-	-	-	-
Closure and Rehabilitation	A\$M	103.0	-	-	-	-	103.0
Total Capital Cost	A\$M	143.0	7.0	14.7	11.1	3.6	106.6

Table 2.9 Century – AMC Modelling Scenario Planning Case 1

Item	Units	Total/Average	2010	2011	2012	2013	2014	2015
Production Parameters								
Total Movement	Mt	129.9	18.4	55.4	33.3	11.6	8.7	2.6
Ore Mined	Mt	28.6	3.3	5.3	6.3	5.9	5.5	2.2
Strip Ratio	w/o	3.5	4.2	8.6	3.6	0.4	0.1	0.0
Ore Processed	Mt	29.9	3.0	5.8	6.1	6.0	5.5	3.4
Zn Recovered	kt	2,443.7	272.5	516.5	473.5	468.5	446.1	266.6
Pb Recovered	kt	195.1	19.6	30.8	39.8	46.2	46.9	11.8
Cash Operating Costs								
Mining	A\$M	466.3	64.6	190.7	118.7	46.0	35.5	10.7
Processing	A\$M	912.2	89.8	173.9	183.4	180.0	166.3	118.9
Administration	A\$M	309.6	37.3	74.7	74.7	70.0	42.0	11.0
Concentrate Transport and Port	A\$M	245.6	27.8	48.7	46.2	45.5	43.4	34.0
Total Operating Cost	A\$M	1,933.7	219.5	488.0	423.0	341.5	287.2	174.6
Capital Costs								
Sustaining	A\$M	40.0	7.0	14.7	11.1	3.6	3.6	-
Expansion	A\$M	-	-	-	-	-	-	-
Closure and Rehabilitation	A\$M	103.0	-	-	-	-	-	103.0
Total Capital Cost	A\$M	143.0	7.0	14.7	11.1	3.6	3.6	103.0

#### 2.11 Technical Risks and Opportunities

Century is a mature operation with mining and processing methods well developed through twelve years of operating experience. The operation is well equipped after a significant replacement and expansion programme implemented in recent years.

The deposit is constrained providing limited opportunities to expand the ore reserve. In the current LOM plan, production concludes in December 2014.

Beyond possible impacts of commodity price changes, the only likely opportunity to expand the ore reserve is through the inclusion of marginal material within the current pit design. This may extend the mine life by up to one year.

AMC considers that geotechnical issues may impact the production during the remaining life of the mine. Measures are being undertaken by MMG to minimise this risk.

MCFs are applied to the resource in the reserve estimation process. In recent periods observed factors have varied significantly from prior estimates. As Stage 8 and Stage 9, the final stages of the mine, are mined current MCF estimates may prove unreliable.

The rupture of the concentrate pipeline in 2009 occurred in a section that had previously failed in 2002. The concentrate pipeline was initially installed with a PVC liner and the 2002 failure was attributed to the ingress of concentrate slurry between the liner and the pipe due to a localised problem in the liner. In that instance, the repair was made removing the failed liner, leaving an unlined 1.2 km section of pipe. Pitting corrosion has occurred in that unlined section of pipe which contributed to the second failure in 2009. With a 304 km length of pipeline and numerous pipe segments, there is a risk that other sections of pipe could also fail, however the remainder of the pipeline is lined except for several monitoring spools, MMG is acutely aware of the situation and have increased the monitoring and wear assessment programme for the pipeline. AMC considers that with the procedures that have been initiated, the risk of another pipeline failure will be low through to December 2014.

#### 3 ROSEBERY

#### 3.1 Introduction

The Rosebery deposit is considered Australia's largest volcanic-hosted polymetallic sulphide deposit and is located within the Mount Read Volcanic Arc of Western Tasmania. The deposit was first discovered in 1893 and operations commenced in 1936. The mid-Cambrian Mount Read Volcanics are host to other significant deposits including Hercules, Que River, Hellyer and Mt Lyell.

The Rosebery Mine is an underground mining operation within Mining Lease ML 28M/2008 Zinc, lead, copper, silver and gold are recovered from the ore that extends over a strike length of approximately 2.0 km and to a depth of 1.5 km. The mine produces some 700 ktpa of ore, and plans to maintain production at about this level in the current plan to at least 2012.

## 3.2 Geological Setting

The Rosebery deposit is stratiform comprising of zinc-lead-silver-copper-gold mineralisation hosted by the mid-to-late Cambrian volcanic and pyroclastic rocks of the Mount Read Volcanics. The host sequence comprises well stratified volcaniclastic sandstone, siltstone, quartz pumice breccia, feldspar porphyry and black shale. Stacked ore lenses occur with a north-south strike, dipping 45° to the east. The ore bodies appear to plunge generally at 20° to 30° northward along strike.

The footwall rocks comprise more than 800m of rhyolitic volcanic tuffs, breccias and pumice. The hanging wall rocks comprise up to 300m of rhyolitic volcaniclastics, pumice breccias with black mudstone-shale.

The principal ore minerals at Rosebery include sphalerite and galena with lesser proportions of chalcopyrite and tetrahedrite together with minor arsenopyrite and pyrrhotite. Gold is generally free, being present with silver as electrum. The relative proportions of the sulphide minerals vary throughout the orebody with lead-zinc mineralisation being generally located in the hanging wall and with chalcopyrite and pyrite towards the footwall.

The texture of the sulphide mineralisation ranges from massive through to disseminated, with coarse grained mineralisation intersecting vein mineralisation in some instances.

## 3.3 Mineral Resources

The Rosebery Mineral Resource reported by MMG as at June 2009 are presented in Table 3.1. The mineral resources are inclusive of ore reserves.

Table 3.1 Rosebery – Mineral Resource as at 30 June 2009

Classification	Tonnes (Mt)	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)	Gold (g/t)
Measured	3.80	14.3	0.5	3.9	146.9	2.1
Indicated	2.89	15.5	0.5	3.9	130.2	2.1
Inferred	7.41	11.1	0.3	3.9	140.4	1.6
Total	14.10	12.9	0.4	3.9	140.1	1.9

The cut-off criteria used to estimate the resource are based on the recoverable quantity of each metal contained in one tonne of resource that will be paid for by the smelters at the selected metal prices. For the June 2009 Mineral Resource the cut-off criteria had a value of A\$125/t³. A minimum width criterion of 3m was most often used, however thinner intersections than this were considered if continuity was high and grades sufficiently rich to enable the intersection to bulk out to meet a 5m minimum thickness at A\$125/t cut-off grade.

AMC observes that the interpreted mineralisation boundaries are based solely on continuity of mineralisation and the cut-off value. AMC believes that this application of cut-off values to determine the mineralisation boundary may result in potentially unwarranted volatility in the reported resources (as a result of fluctuations in the assumed metal prices) and unrealised opportunity for minor economic gains to be made in mining and processing by better defining the geological domains and controls in the interpretation prior to the application of the cut-off value and completion of the mine design. AMC understands that this method is to be replaced by a more geological based method in late 2010.

Rosebery mine site implemented a QA/QC programme into the drill core assaying process using certified reference material made from Rosebery mine material for the first time in November 2007. The implementation of the QA/QC programme appears to have been done poorly with too few samples being submitted in the trial period from November 2007 to March 2008. Poor results continued to be received in the QA/QC programme into 2009 with a low bias being exhibited in many metals. Regular meetings have been introduced between site and Burnie Research Laboratories (BRL) in May 2009. At this time it was established that incomplete digestion of sample material was the likely cause of the bias from August 2008 to December 2008. Sample sizings are also poor with 53% of analysis failing to reach the required criteria of 90% passing 75 micron, this has been discussed with BRL and is being monitored. Second laboratory checks have a reasonable high rate of correlation with all metals (except gold which was omitted) correlating to 98% or more for 284 samples.

AMC does not regard the deficiencies identified in the execution and status of the QA/QC programme as a material issue affecting the valuation of the Rosebery operation as the mine has a long history of successful operation predating the implementation of the programme.

AMC is of the opinion that the mineral resource estimates prepared for Rosebery mine are reasonable and have been reported by MMG in accordance with the JORC Code.

## 3.4 Ore Reserves

Rosebery Ore Reserves reported by MMG as at 30 June 2009 are presented in Table 3.2.

Table 3.2 Rosebery – Ore Reserves as at 30 June 2009

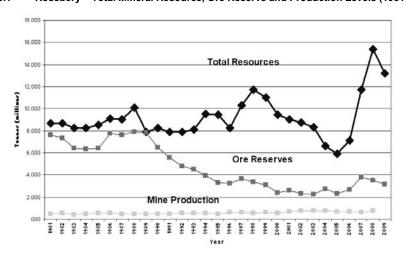
Classification	Tonnes (Mt)	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)	Gold (g/t)
Proved	1.73	13.3	0.38	3.6	131	1.81
Probable	1.42	15.7	0.46	3.8	129	1.77
Total	3.15	14.4	0.42	3.7	130	1.79

In its more recent history, Rosebery has only been able to maintain an inventory of reserves sufficient to sustain production for between three and five years as shown in Figure 3.1. It has been considered unnecessary to incur the cost of establishing a larger reserve base as historically, conversion of mineral resources to reserves has been reliably achieved, with a predicable conversion ratio of approximately 60% at previously applied cut-offs. AMC considers this reserve generation strategy reasonable for the current operating plan but insufficient for substantial expansion or extension decisions.

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<sup>&</sup>lt;sup>3</sup> The following metal prices were used; zinc US\$1,984/t, lead US\$1,323/t, copper US\$4,409/t, silver US\$11/oz, gold US\$750/oz, at an exchange rate of 0.70 (A\$/US\$).

Figure 3.1 Rosebery – Total Mineral Resource, Ore Reserve and Production Levels (1981 to 2008)



AMC has reviewed the reserve estimation process and is of the opinion that adequate allowances have been made for recovery, dilution and other modifying factors and that the reserves are reasonable. Reporting of reserves into Proved and Probable categories is consistent with the requirements of the JORC Code. It is noted that the cut-off value criteria for the resources and reserves has been significantly increased since the 2008 estimation and this has resulted in a significant increase in the average reported grades of the material contained in the 2009 estimation. Overall, AMC considers that extraction of the reserves can reasonably be justified.

## 3.5 Potential for Additional Reserves

The Mine lease exploration at Rosebery has been broken into multiple areas as shown in Figure 3.2.

MMG ROSEBERY Project Aegis Drill Priorities from 2009 to 2011 Area 7 Upper B (OC) 1 Snake Gully Area 4 Upper K Lens Area 3 V Deeps T . T . T . T Area 6 Mt Black North Area 2 Area 1 W-K Deeps X Lens Deeps

Figure 3.2 Rosebery - Diagram of the Mine Lease Exploration Programme

Exploration of the area along strike and down dip of the Rosebery Mine mineralisation is continuing with the completion of Project Horizons in 2009 and with the commencement of Project Aegis. Project Aegis has a proposed cost of A\$20M and will run from 2010 to 2012 inclusive. Proposed works include drilling from underground and surface as well as the development of three exploration drill drives.

The remaining exploration budget for the 2010 calendar year for project Aegis is A\$1.5M, which will be spent on the completion of two deep holes under V lens, 1 deep underground hole under K lens, up dip drilling into the still open upper K area where there is the potential for 150 vertical metres of mineralisation and two deep surface holes with multiple wedges at a 100 vertical metre spacing, for a total of approximately 8,000m of diamond drilling.

Planned for 2010, 2011 and 2012 are the mining of three multipurpose exploration drill drives. The proposed drives include an 80m extension to W exploration drive which is almost complete, mining of 53X footwall drive which after drilling is completed will become the main access for the X orebody, and a drive joining W to K lenses at level 54 which once drilling is completed will be used as a travel way.

The greatest potential for significant underground exploration success is along strike and down plunge of V, W and X lenses in Areas 1, 2 and 3 and down dip of N lens. Recent drilling below X lens is showing an marked increase in alteration of the host rocks, which is to be expected approaching the granite.

Other prospective areas on the lease include Jupiter, where drilling is currently underway, and South Hercules. Additional targets adjacent to the main mineralisation are currently being prioritized.

## 3.6 Operating History

Recent financial year production statistics are summarised in Table 3.3 and Table 3.4. An average annualised ore processing rate of 736 kt has been attained for the 12 year period to March 2010. The process plant has a nominal capacity of 850 ktpa. However, higher processing rates than those achieved historically would require additional capital expenditure and/or a major change in the process plant operating strategy. Bottlenecks in the plant vary depending on ore grade. The ore processing rate is constrained by flotation capacity when zinc grades exceed approximately 12% and by the crushing/grinding circuit at zinc grades below 11%.

Table 3.3 Rosebery – Ore Production Statistics

Year	Production			Head Grade		
Ending	(kt)	Lead (%)	Zinc (%)	Copper (%)	Silver (g/t)	Gold (g/t)
FY 1999	706	3.6	12.3	0.38	101	1.7
FY 2000	633	4.2	12.2	0.34	118	1.9
FY 2001	735	4.5	11.2	0.37	156	2.2
FY 2002	756	3.9	11.6	0.29	130	1.8
FY 2003	805	3.8	11.2	0.35	110	1.9
FY 2004	739	3.8	13.8	0.45	118	2.1
FY 2005	690	4.5	14.7	0.36	155	1.6
FY 2006	672	4.8	13.7	0.36	147	1.4
FY 2007	707	4.1	12.9	0.40	157	1.7
FY 2008	815	4.1	11.1	0.34	120	1.2
CY2009	795	4.0	12.1	0.43	135	1.3
Qtr 1 2010	175	4.2	12.5	0.46	116	1.3
Average	732	4.1	12.4	0.37	131	1.7

Table 3.4 Rosebery – Historical Metallurgical Performance

Financial Year	Au Dore	Zinc Co	ncentrate	Copper Co	oncentrate	Lead Co	ncentrate
	Recovery (%)	Zinc (%)	Recovery (%)	Copper (%)	Recovery (%)	Lead (%)	Recovery (%)
FY 1999	10.9	55.1	89.4	22.7	49.0	65.3	76.9
FY 2000	25.5	55.4	90.3	23.2	51.7	65.7	81.8
FY 2001	22.6	56.3	88.9	22.8	57.7	65.3	79.9
FY 2002	18.2	56.3	90.3	22.0	56.8	67.2	81.7
FY 2003	23.1	57.1	88.3	20.2	52.5	62.5	84.0
FY 2004	16.3	57.1	87.4	20.4	64.3	63.9	83.1
FY 2005	16.1	57.3	88.1	20.6	65.4	64.3	83.9
FY 2006	23.2	56.5	89.4	20.0	62.6	64.8	79.4
FY 2007	32.7	55.1	90.9	21.3	55.5	63.9	81.0
CY 2008	25.6	55.4	88.9	19.4	46.5	65.0	74.0
CY2009	21.3	55.7	88.6	20.1	53.6	65.0	79.0
Qtr 1 2010	24.2	55.6	86.8	20.9	53.7	65.3	77.1
Average	21.5	56.1	89.1	21.2	55.8	64.8	80.3

## 3.7 Mining Operations

In 2009, the mine produced 721 kt of ore, while budgeted ore production for 2010 is 720 kt grading approximately 12.9% Zn. Currently, all production from Rosebery comes from the lower levels (approximately 1,200m below surface).

The ore lenses at Rosebery vary in size but are typically 100m to 400m in length (along strike) and 100m to 600m in vertical height. Ore widths vary up to approximately 25m (true width). The dip of the lodes is approximately  $45^{\circ}$ .

Access to the underground workings is via a decline and trucks are used to haul ore to the surface. Mechanised mining methods are used, including bench stoping with fill, modified Avoca stoping, open stoping (longitudinal open stoping in narrow lodes and transverse stoping in the wider lodes), with some slashing of pillars. Remnant stoping is under consideration for remnant ore in the upper levels of the mine.

Backfill, using either uncemented or cemented rockfill is an important part of the stoping cycle. The backfill helps maintain stability of the ore zone which then helps ensure successful mining of the remaining stopes and pillars.

Truck haulage distances from production areas on the lower levels of the mine are considerable (approximately 6 km) and are a significant component of the overall mining costs.

Mining at Rosebery is carried out by a combination of contractor and owner operator miners. A total of 355 people were employed across the site as at 31 December 2009. Engineering services are performed by a mixture of original equipment manufacturers (OEM) and other contractors, as well as MMG employees.

The mine uses a fleet of modern rubber tyred equipment. The fleet consists of:

- Underground haulage trucks (Elphinstone AD55's).
- Development jumbos (Atlas Copco drills).
- Production drills (Atlas Copco).
- Load haul dump (LHD) units with tele-remote and automated operation capabilities.
- Ancillary vehicles such as IT and light vehicles.

Overall, the geotechnical aspects of the project appear to be well analysed, understood and managed.

Rosebery is a deep mine with extensive underground workings. Currently, the primary intake air travels long distances before it reaches the lower working areas and hence is subject to an increase in temperature due to the high virgin rock temperatures at depth. Two refrigeration plants have been operated underground previously, and this is now reduced following implementation of the ventilation system upgrade in 2010 which reportedly has significantly improved the operating conditions underground.

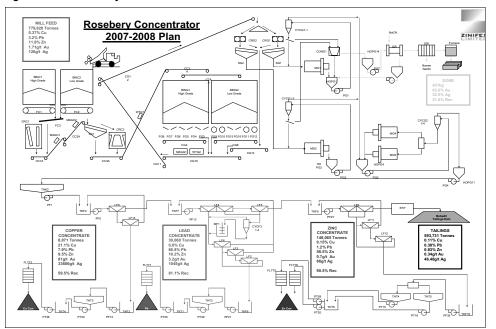
Rosebery currently has a nominal surface exhaust capacity of 400 m³/s. A major ventilation upgrade including new surface ventilation shaft and internal extension shafts is currently near completion and a further ventilation fan upgrade to take the final capacity to 600 m³/s is yet to be completed.

## 3.8 Processing and Concentrate Handling

Sulphide mineralisation including chalcopyrite, galena, sphalerite and tetrahedrite as well as free gold occurs at Rosebery. Separate copper, lead and zinc flotation concentrates are produced. A proportion of the free gold is also recovered into a gravity concentrate using a Knelson concentrator from which a gold-silver doré is produced. The sphalerite and pyrite tend to exhibit a slightly coarser liberation size than the chalcopyrite. The principal sulphide gangue mineral is pyrite although non-sulphide gangue minerals dominate.

The Rosebery process plant flowsheet and operating plan for FY08 are illustrated in Figure 3.3.

Figure 3.3 Rosebery – Concentrator Flowsheet



The flotation circuit is of a contemporary design with the sequential flotation of copper, lead and zinc concentrates. Significant value of the copper concentrate occurs as a consequence of the elevated precious metal content.

Reagents are added to the copper circuit flotation feed to enhance the flotation of the copper mineral while the flotation of the other sulphides is inhibited using sodium meta-bisulphite in conjunction with control of the flotation pH using lime.

Tailings from the copper circuit are conditioned before passing to the lead circuit where a rougher concentrate is produced which is processed through three stages of closed circuit cleaning. Tails from the rougher cells pass through a scavenger circuit. The scavenger concentrate is cycloned, with the cyclone overflow joining the rougher concentrate in the cleaner circuit feed. Cyclone underflow is reground before also joining the cleaner circuit feed.

The lead circuit tailings are conditioned with copper sulphate before passing to the zinc circuit rougher cells. The zinc rougher concentrate is cleaned in a two stage cleaner circuit. No regrinding is currently employed in either of the copper or zinc circuits.

A single thickener and filter are used for each of the copper and lead concentrates while two thickeners and filters are required to handle the larger volume of zinc concentrate. The filtration circuits are flexible providing backup, if required. Concentrates are railed to the port of Burnie for export.

The zinc circuit tailings pH is adjusted using lime prior to being discharged into the TSF.

AMC considers that in general there is potential for improved plant performance because not all the installed flotation capacity is utilised with the current circuit arrangements. Furthermore, the use of lower flotation densities could be conducive to generating a more selective separation of the value minerals.

An asset management programme was put in place during 2008 to manage risks and improve the reliability of the processing plant. Mill availability has improved since the middle of 2008 reflecting the effectiveness of the maintenance planning and programmed maintenance effort. In the 6 month period July to December 2008, the plant processed 411 kt of ore with a plant availability of 93.7%. A total of 815 kt of ore was processed through CY2008 which as will be noted from the data provided in Table 3.3 represents the highest 12 month throughput tonnage recorded in the past 12 years of operation. The benefit of this continued maintenance effort is reflected in the fact that the ore treatment rate since 2008 has continued to exceed the long term average. Lower throughput rates of 720 kt are planned for the 2011 and 2012 years which should ease the maintenance pressures on the process plant operation.

A number of engineering studies have been carried out on the surface concentrator in order to evaluate a proposed upgrade to these facilities. Based on this a capital expenditure programme has been identified to ensure ongoing statutory compliance and minimise the risk of production interruptions.

Gravity circuit gold recovery has been variable, an expected outcome given the variability in gold grade and the nature of free gold in the ore. AMC considers that this feature is likely to continue.

#### 3.9 Infrastructure

Rosebery is an established operation and there are no known upgrades to infrastructure required based on the current mining and processing plan.

### 3.10 Environment

The Rosebery operation is subject to robust environmental management protocols (ISO 14001), reflecting the significant risks associated with acid mine drainage and protection of stream water quality. Environmental performance is regularly monitored through corporate audit, with only minor water-quality issues being identified, and through regular reporting to government as required by statutory permits; there is no current or imminent threat of coercive action by regulators.

An environmental bond (bank guarantee) of A\$12.1M is lodged for the operation. The November 2009 closure estimate is A\$15.25M, with a further A\$17.8M required for the adjacent Hercules Mine, which is a "legacy" site held by the Rosebery operation. AMC considers the amounts appropriate for the present purpose. Progressive rehabilitation, including work on "legacy" sites, has reduced both long term closure financial liabilities and short term risks of environmental incidents associated with acid drainage.

Acid drainage risks are heightened by the high rainfall at the site. Acid drainage is managed with a sophisticated system which collects contaminated water which is then treated in a dedicated effluent treatment plant before discharge to the TSF and polishing pond and ultimately to the Pieman River.

There have been predictable minor exceedances of water-discharge thresholds set by the regulator, but these are generally the result of high rainfall/runoff events which inherently provide dilution of contaminants. Importantly, the frequency of exceedances has decreased in the last four years, reflecting progressive improvement of the water capture and treatment systems.

Closure liabilities are being annually reviewed by an external consultant, using a probabilistic approach. Unit rates applied to different closure activities reflect current costs, and the adoption of an 80% confidence limit for closure estimates is considered by AMC to be appropriate. A total closure liability of A\$33.05M for Rosebery/Hercules is therefore considered realistic, but could require close scrutiny towards the end of mine life, when the duration and costs of post-decommissioning monitoring of water management and discharge systems would be more easily identified.

## 3.11 Operating and Capital Costs

Recent historical cost performance for Rosebery is given in Table 3.5. There is an upward trend in costs and capital expenditure over the last three years, consistent with general trends in the mining industry over the period combined with increasing depth of mining (and consequently increasing ground support and haulage costs) and exploration activity during 2009. MMG has since introduced significant cost control measures to contain costs and delay all possible capital expenditure. Substantial capital expenditure associated with the upgrade of the South Marionoak TSF has been reportedly deferred beyond 2011. The major mine ventilation upgrade has been substantially completed and an outstanding amount of A\$5M remains on that project.

Table 3.5 Rosebery – Historical Cost Performance

Item	2008	½ Year 2009
Mining Costs (A\$M)	70.2	30.5
Capital Recharge (A\$M)	19.6	13.8
Processing Costs (A\$M)	25.8	13.5
G&A (A\$M)	21.7	8.4

## 3.12 AMC Modelling Scenarios

AMC has prepared three modelling scenarios for the Rosebery operation based on MMG's budget plan and latest LOM plan. Key aspects of the modelling scenarios are:

#### **Reserves Only Case**

The main points are:

- Based on the scheduled portion of the reported ore reserves that occurs within a given timeframe.
- The total tonnage and feed grade presented in the plan is underpinned by the current reserves
  estimate and AMC considers it to be realistic. AMC has maintained the current production rate of
  about 720 ktpa and believes this rate is achievable and supported by historical performance.
- Metallurgical performances assumed by AMC are generally in close agreement with those suggested
  in the plan, but have in some cases been moderated slightly to reflect recent historical performance.
   Operating costs as presented by MMG in its plan have been adopted without modification. AMC
  believes these cost estimates are achievable and are supported by historical performance.
- Capital expenditure on near mine exploration drilling and the assumptions that TSF upgrades and processing facility maintenance will occur.
- Refer Table 3.6.

Table 3.6 Rosebery Reserves Only Case

Item	Units	Total/Av.	2010	2011	2012	2013
Total Ore Mined	000 t	1,800.00	360.00	720.00	720.00	-
Ore mined Grade						
Zn Head Grade	%	12.6	12.3	12.7	12.6	-
Cu Head Grade	%	0.4	0.4	0.4	0.4	-
Pb Head Grade	%	3.9	4.3	3.8	3.8	-
Au Head Grade	g/t	1.8	1.79	1.79	1.79	-
Ag Head Grade	g/t	130.1	130.1	130.1	130.1	-
Total Recovered Metal						
Zn	000 t	209.2	40.7	84.6	83.9	-
Cu	000 t	4.0	0.8	1.6	1.6	-
Pb	000 t	55.5	12.2	21.6	21.6	-
Au	000 oz	70.5	14.1	28.2	28.2	-
Ag	000 oz	6,708.4	1,341.7	2,683.4	2,683.4	-
Total Unit Costs						
Mining & Milling						
Mining Underground	A\$M	187.0	36.2	73.8	76.9	-
Ore (external source)	A\$M	0.0	0.0	0.0	0.0	-
Processing - all ore	A\$M	64.7	12.6	25.6	26.5	-
G & A	A\$M	44.2	8.5	17.6	18.1	-
Transport	A\$M	10.3	2.0	4.1	4.1	-
Total Operating Costs	A\$M	306.1	59.3	121.1	125.6	-
Capital Expenditure						
Resource Development						
Exploration Infill drilling	A\$M	2.0	0.7	1.3	-	-
Sustaining						
Plant & Infrastructure	A\$M	32.6	8.1	24.5	-	-
Mine Development	A\$M	-	-	-	-	-
Underground Mine	A\$M	6	2.6	3.4	-	-
Expansion						
CE - expansion plant and infrastructure	A\$M	-	-	-	-	-
CE - expansion underground	A\$M	-	-	-	-	-
CE - rehabilitation	A\$M	33.1	-	-	-	33.1
Total Capital Costs	A\$M	73.6	11.4	29.2		33.1

## Planning Case 1

The main features of Planning Case 1 are:

- Based on ore reserve estimates and that part of other mineral resources and exploration potential for which AMC judges there is a high confidence of future conversion to ore reserves. AMC considers that there is a historical basis of resource conversion which underpins the expectation of an expanded mining inventory. Haulage costs associated with the mining are forecast to increase by 50% over the LOM in accordance with the increased depth of mining.
- Capital expenditure on near mine exploration drilling and the assumptions that processing facility maintenance will occur and a new TSF will be required.
- Refer Table 3.7.

Table 3.7 Rosebery Planning Case 1

Item	Units	Total/Av.	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Ore Mined	000 t	6,120.0	360.0	720.0	720.0	720.0	720.0	720.0	720.0	720.0	720.0	-	
Ore mined Grade													
Zn Head Grade	%	11.2%	12.3%	12.7%	12.6%	11.4%	11.4%	10.2%	10.2%	10.2%	10.2%	-	
Cu Head Grade	%	0.3%	0.4%	0.4%	0.4%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	-	-
Pb Head Grade	%	3.8%	4.3%	3.8%	3.8%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	-	-
Au Head Grade	g/t	1.5	1.79	1.79	1.79	1.55	1.55	1.37	1.37	1.37	1.37	-	-
Ag Head Grade	g/t	130.5	130.10	130.10	130.10	130.48	130.48	130.76	130.76	130.76	130.76	-	-
Total Recovered Metal													
Zn	000 t	632.8	40.7	84.6	83.9	75.9	75.9	68.0	68.0	68.0	68.0	-	-
Cu	000 t	10.4	0.8	1.6	1.6	1.3	1.3	1.0	1.0	1.0	1.0	-	-
Pb	000 t	181.4	12.2	21.6	21.6	21.0	21.0	21.0	21.0	21.0	21.0	-	-
Au	000 oz	205.3	14.1	28.2	28.2	24.4	24.4	21.5	21.5	21.5	21.5	-	-
Ag	000 oz	22,879.0	1,341.7	2,683.4	2,683.4	2,691.1	2,691.1	2,697.1	2,697.1	2,697.1	2,697.1	-	
Total Unit Costs													
Mining & Milling													
Mining Underground	A\$M	663.6	36.2	73.8	76.9	77.6	78.4	79.1	79.8	80.5	81.2	-	
Ore (external source)	A\$M	-	-	-	-	-	-	-	-	-	-	-	-
Processing - all ore	A\$M	223.9	12.6	25.6	26.5	26.5	26.5	26.5	26.5	26.5	26.5	-	-
G&A	A\$M	152.5	8.5	17.6	18.1	18.1	18.1	18.1	18.1	18.1	18.1	-	-
Transport	A\$M	31.3	2.0	4.1	4.1	3.7	3.7	3.4	3.4	3.4	3.4	-	-
Total Operating Costs	A\$M	1,071.4	59.3	121.1	125.6	126.0	126.7	127.1	127.8	128.5	129.2		
Capital Expenditure													
Resource Development													
Exploration Infill drilling	A\$M	13.4	0.7	1.3	1.4	2.0	2.0	2.0	2.0	2.0	-	-	-
Sustaining													
Plant & Infrastructure	A\$M	152.6	8.1	24.5	18.5	17.0	26.9	26.8	26.8	4.0	-	-	
Mine Development	A\$M	-	-	-							-	-	
Underground Mine	A\$M	25.0	2.6	3.4	3.4	3.2	3.2	3.2	6.0		-	-	
Expansion		1											
CE - expansion plant and infrastructure	A\$M	-	-	-	-	-	-	-	-	-	-	-	-
CE - expansion underground	A\$M	15.0	5.0	-	-	-	-	10.0	-	-	-	-	-
CE - rehabilitation	A\$M	33.1	-	-	-	-	-	-	-	-	-	33.1	-
Total Capital Costs	A\$M	239.0	16.4	29.2	23.3	22.2	32.1	42.0	34.8	6.0	-	33.1	

## Planning Case 2

The main differences in Planning Case 2 relative to Planning Case 1 are:

- Typically adds to Planning Case 2 tonnages from existing mineral resources and readily demonstrable
  exploration potential for which AMC has reasonable, but lesser confidence of future conversion to ore
  reserves than in Planning Case 2.
- Additions are made to the mine production, sourced from areas which are currently exploration targets. AMC considers that there is a historical basis of exploration success which underpins the expectation of an expanded mining inventory.
- The capital expenditure schedule considers additional near mine exploration drilling, additional
  ventilation upgrade, and mine haulage upgrade. The inclusion of a paste backfill plant will enable the
  mine to be less constrained and thereby achieve higher rates of production, with the increased cost
  associated with increased usage of cement to be offset by an improvement in productivity.
- Refer Table 3.8.

Table 3.8 Rosebery Planning Case 2

Item	Units	Total/Av.	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Ore Mined	000 t	7,050.0	360.0	720.0	720.0	750.0	750.0	750.0	750.0	750.0	750.0	750.0	-
Ore mined Grade													
Zn Head Grade	%	11.1%	12.3%	12.7%	12.6%	11.4%	11.4%	10.2%	10.2%	10.2%	10.2%	10.2%	-
Cu Head Grade	%	0.3%	0.4%	0.4%	0.4%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	-
Pb Head Grade	%	3.7%	4.3%	3.8%	3.8%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	-
Au Head Grade	g/t	1.5	1.79	1.79	1.79	1.54	1.54	1.37	1.37	1.37	1.37	1.37	-
Ag Head Grade	g/t	130.5	130.10	130.10	130.10	130.49	130.49	130.76	130.76	130.76	130.76	130.76	-
Total Recovered Metal													
Zn	000 t	720.6	40.7	84.6	83.9	78.7	78.7	70.8	70.8	70.8	70.8	70.8	-
Cu	000 t	11.7	0.8	1.6	1.6	1.3	1.3	1.0	1.0	1.0	1.0	1.0	-
Pb	000 t	208.5	12.2	21.6	21.6	21.9	21.9	21.9	21.9	21.9	21.9	21.9	-
Au	000 oz	233.1	14.1	28.2	28.2	25.3	25.3	22.4	22.4	22.4	22.4	22.4	-
Ag	000 oz	26,362.8	1,341.7	2,683.4	2,683.4	2,803.5	2,803.5	2,809.5	2,809.5	2,809.5	2,809.5	2,809.5	-
Total Unit Costs													
Mining & Milling													
Mining Underground	A\$M	768.9	36.2	73.8	76.9	80.9	81.6	82.4	83.1	83.9	84.6	85.4	-
Ore (external source)	A\$M	-	-	-	-	-	-	-	-	-	-	-	-
Processing - all ore	A\$M	253.5	12.6	25.6	26.5	27.0	27.0	27.0	27.0	27.0	27.0	27.0	-
G&A	A\$M	170.6	8.5	17.6	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	-
Transport	A\$M	35.7	2.0	4.1	4.1	3.9	3.9	3.5	3.5	3.5	3.5	3.5	-
Total Operating Costs	A\$M	1,228.6	59.3	121.1	125.6	129.8	130.5	131.0	131.7	132.5	133.2	134.0	-
Capital Expenditure													
Resource Development													
Exploration Infill drilling	A\$M	15.4	0.7	1.3	1.4	2.0	2.0	2.0	2.0	2.0	2.0	-	-
Sustaining													
Plant & Infrastructure	A\$M	156.6	8.1	24.5	18.5	17.0	26.9	26.8	26.8	4.0	4.0	-	-
Mine Development	A\$M	-	-	-	-	-	-	-	-	-	-	-	-
Underground Mine	A\$M	25.0	2.6	3.4	3.4	3.2	3.2	3.2	6.0	-	-	-	-
Expansion		l										1	
CE - expansion plant and infrastructure	A\$M	-	-	-	-	-	-	-	-	-	-	-	-
CE - expansion underground	A\$M	27.0	5.0	-	12.0	-	-	10.0			-	-	-
CE - rehabilitation	A\$M	33.1	-	-	-	-	-	-		-	-	-	33.1
Total Capital Costs	A\$M	257.0	16.4	29.2	35.3	22.2	32.1	42.0	34.8	6.0	6.0		33.1

## 3.13 Technical Risks and Opportunities

Rosebery has a long history of successfully and reliably converting exploration targets into resources and reserves. Although AMC expects this to continue for the period of its production scenarios there is a risk that exploration and conversion to reserves will not be as successful as envisaged.

Mining will continue to move deeper and further from existing accesses to surface, and working conditions are hot. Increased issues associated with access, ground control and ventilation may impact on the mine's ability to achieve AMC's production scenarios. There is risk that the issues associated with deeper mining will constrain future production capacity. For example the addition of more haulage trucks to accommodate the increased distances to surface will adversely impact costs and the mine ventilation over time. A review of the long term mine haulage system will be required.

The plant has a nominal throughput rate of 850 ktpa. This rate has not been achieved on an annualised basis potentially due to high zinc feed grades. Opportunity exists to improve the plant's performance and maintenance cost through upgrading or refurbishing the plant and reviewing operating procedures.

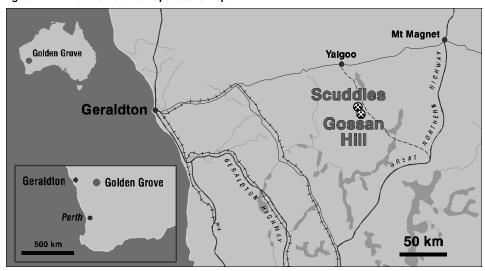
Acid drainage issues at Rosebery demand monitoring and action on the part of the mine operator and management of these issues requires modest capital and recurring expenditures. Decisions also need to be made regarding the future TSF requirement.

## 4 GOLDEN GROVE

## 4.1 Introduction

The Golden Grove base and precious metals operation is located approximately 450 km north-east of Perth and 280 km east of Geraldton in Western Australia, as shown in Figure 4.1.

Figure 4.1 Golden Grove – Operations Map



The plant at Golden Grove was built in 1990 and was acquired by MMG in the acquisiton of some of the assets of OZ Minerals Ltd in June 2009. Golden Grove consists of the Scuddles and Gossan Hill zinc and copper underground mines and the Scuddles concentrator.

Volcanic hosted massive sulphide (VHMS) mineralisation was discovered at Gossan Hill in 1971 and at Scuddles in 1979. Scuddles, which commenced producing in 1990 was placed on care and maintenance in 2005, with all production then sourced from the Gossan Hill operations, which started producing in 1998. The Scuddles mine was reopened in 2007 and was subsequently placed back on care and maintenance in January 2009. Production from Scuddles is currently scheduled to re-commence early in 2011. The production rate achieved in 2008 was approximately 1.7 Mtpa. This reduced to approximately 1.5 Mtpa in 2009, and forecast production for 2010 is approximately 1.7 Mtpa.

Copper, zinc, lead, silver and gold are recovered from the ores mined from the Gossan Hill and Scuddles orebodies. The Gossan Hill deposit which is approximately 3.5 km along strike from the Scuddles operation extends over a strike length of more than 2.2 km in multiple lenses and to a depth of approximately 1.5 km. Scuddles has a strike length of approximately 700m and extends to a depth of more than 1.4 km below surface.

## 4.2 Geological Setting

The Golden Grove deposits are located in the Murchison Province of the Archaean Yilgarn Block within the Yalgoo Singleton Greenstone Belt. Mineralisation occurs within a sequence of felsic to intermediate volcaniclastic sediments, lavas and associated autoclastic breccias.

The Golden Grove Domain that hosts the Gossan Hill and Scuddles deposits lies on the eastern limb of the Warriedar Fold Belt where the stratigraphy dips steeply west and is west facing. The domain is bound to the west by the Mougooderra Faultand to the east, north and south by granitic rocks. The Golden Grove Domain has been metamorphosed to greenschist facies, post sulphide deposition.

The Golden Grove Domain is subdivided into three groups of which the Gossan Hill Group is of primary economic interest and consists of a sequence of felsic volcaniclastic and coherent volcanic rocks with an average thickness of 3 km and a north-south strike extent of 28 km. VHMS mineralisation is located in the central part of the Gossan Hill Group.

All currently exploited mineralisation occurs within two members of the Golden Grove Formation (part of the Gossan Hill Group) and known locally as GG4 and GG6. Exploration has identified mineralisation in other units such as GG2 and GG3 (in the footwall) and SC2 and SC3 (in the hangingwall).

Overlying the mineralised sequence at both deposits is a thick sequence of lavas and lava breccias. Post mineralisation intrusives including dacite, dolerite and rhyolite dykes commonly cross-cut the mineralisation.

## 4.3 Zinc and Copper Mineralisation

Mineralisation at Gossan Hill occurs as massive sulphides hosted within a volcanically derived sedimentary package. Figure 4.2 shows a longitudinal projection of the mineralisation at Scuddles. It is divided into six lenses, Main, Central/Intermediate, Deeps, Zeewijk, Batavia and the recently defined Cervantes. All lenses have similar mineralisation characteristics.

Figure 4.2 shows a longitudinal projection of the mineralisation at Gossan Hill, which generally dips sub-vertically and is divided into two zones.

The lower zone within the GG4 member contains the primary copper mineralisation, comprising pyrite-magnetite-pyrrhotite-chalcopyrite. The main copper lenses are A Copper and Q (GG4) Copper, but copper is also significant in Amity, Hougoumont (GG6), Ethel and C Zinc lenses.

The upper zone within the GG6 member hosts the primary zinc mineralisation as a pyrite-sphalerite assemblage, which is often underlain by a pyrite-pyrrhotite-chalcopyrite stringer zone. The main known zinc lenses are A, B and C Zinc, and the more recently discovered Amity, Hougoumont (GG6 & HW), Catalpa, Ethel, Cambewarra and Xantho.

Both the primary copper and primary zinc Mineral Resources extend to depth from the base of oxidation. Oxide copper mineralisation exists above the primary copper mineralisation and oxide gold (and silver) mineralisation exists above the primary zinc mineralisation.

At Scuddles, the mineralised sequence occurs within GG6, a sequence of fine-grained sandstone to siltstones with poorly sorted breccias. It is composed primarily of massive zinc and copper sulphides with an underlying stringer sulphide zone.

Figure 4.3 shows a longitudinal projection of the mineralisation at Scuddles. It is divided into six lenses, Main, Central/Intermediate, Deeps, Zeewijk, Batavia and the recently defined Cervantes. All lenses have similar mineralisation characteristics.

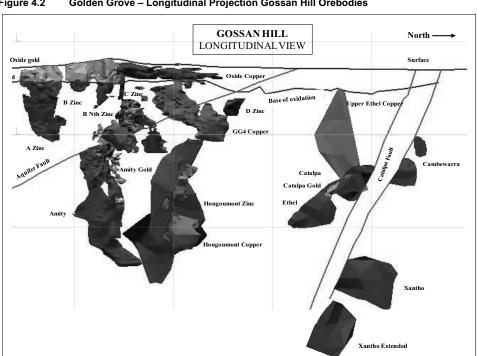


Figure 4.2 Golden Grove - Longitudinal Projection Gossan Hill Orebodies

## **Mineral Resources**

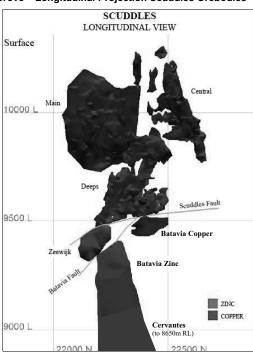
Significant increases to total Mineral Resources since June 2007 have resulted from the addition of Inferred Mineral Resources for Xantho Extended at Gossan Hill and Cervantes at Scuddles as well as re-interpretation of some mineralisation models and re-evaluation of material previously considered unrecoverable.

Golden Grove underground Mineral Resources are based on diamond drilling that has been carried out by the various operators of the project since discovery. Procedures for data collection and assay have varied over time and assay quality control in the past may not have met current industry standards. AMC understands that common industry protocols for assay quality control are now in place.

AMC notes that there are very few cyanide soluble copper assays and no cyanide soluble zinc assays in the data for estimation of oxide resources. High cyanide soluble values could have an impact on metallurgical recoveries in evaluating open pit gold mineralisation. Oxide gold Mineral Resource estimates are based on work carried out by previous operators. The oxide gold Mineral Resource has been restated at 30 June 2009 as Inferred Resource to reflect the lack of quality control information on the historic drillhole data. A significant change in the oxide copper Mineral Resource is attributable to new drillhole information, revised geological interpretation and block modelling.

Density determinations are routinely carried out on drill core in primary sulphide orebodies. In the oxide open pit data, density data may not be reliable due to porosity, but AMC does not expect the potential impact on the oxide Mineral Resource to be material.

Figure 4.3 Golden Grove – Longitudinal Projection Scuddles Orebodies



Underground Mineral Resource estimates are based on the interpretation of separate copper and zinc lodes notionally on a 4% Zn cut-off for zinc lodes and a 0.2% Cu cut-off for copper lodes. High grade internal domains may be interpreted in copper lodes at a 1% Cu cut-off. Post-mineralisation intrusive bodies that remove sulphide mineralisation are also interpreted. Resource estimation used block modelling with grade estimation using ordinary kriging. Mineral Resource to Ore Reserve conversion in 2009 is about 36% although historically the conversion rate is about 50%.

Mineral Resources are reported at a value cut-off that reflects the nett smelter return. A value of A\$70/t was used for resource reporting. Resource classification is largely based on drillhole spacing.

AMC has reviewed the Mineral Resource and Ore Reserve estimates for Golden Grove which are set out in the following sections. AMC is of the opinion that the Mineral Resource and Ore Reserve estimates are reasonable and have been reported by MMG in accordance with the JORC Code.

## 4.5 Zinc Mineral Resources

Zinc Mineral Resources reported by MMG as at 30 June 2009 are presented in Table 4.1.

Table 4.1 Golden Grove – Zinc Mineral Resources as at 30 June 2009

Classification	Tonnes (Mt)	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)	Gold (g/t)
Measured	4.1	12	0.4	1.2	84	1.6
Indicated	0.8	12	0.6	2.1	120	2.2
Inferred	4.0	11	0.7	0.7	64	1.0
Total	8.9	12	0.6	1.1	78	1.4

Cut-off grade for the primary zinc resources is based on the nett smelter return value of A\$70/t. Figures are rounded according to JORC Code guidelines.

#### 4.6 Zinc Ore Reserves

Zinc Ore Reserves reported by MMG as at 30 June 2009 are presented in Table 4.2.

Golden Grove - Zinc Ore Reserves as at 30 June 2009 Table 4.2

Classification	Tonnes (Mt)t	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)	Gold (g/t)
Proved	1.2	13	0.4	1.5	73	1.6
Probable	0.9	11	0.4	1.7	95	2.0
Total	2.1	12	0.4	1.6	82	1.7

Cut-off grade based on nett smelter return values of A\$110/t. Scuddles Ore Reserves previously applied a nett smelter return value of A\$70. Copper price used is US\$2.00/lb, zinc price of US\$0.90/lb, lead price of US\$0.70/lb, silver price of US\$11/oz, gold price of US\$750/oz and an exchange rate of 0.75 (A\$/US\$).

## **Copper Mineral Resources**

Copper Mineral Resources reported by MMG as at 30 June 2009 are presented in Table 4.3.

Table 4.3 Golden Grove - Copper Mineral Resources as at 30 June 2009

Mineral Resource	Classification	Tonnes (Mt)	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)	Gold (g/t)
Primary Copper	Measured	10	0.6	3.1	0.0	19	0.6
	Indicated	3.2	0.4	2.8	-	14	0.5
	Inferred	5.8	0.9	3.2	-	28	0.7
Total		19	0.7	3.1	0.0	21	0.6
Oxide Copper	Measured	-	-	-	-	-	-
	Indicated	-	-	-	-	-	-
	Inferred	2.5	-	2.3	-	-	-
Total		2.5	-	2.3	-	-	-

Cut-off grade for the primary copper Resources is based on the nett smelter return value of A\$70 per tonne. Oxide copper reported at a 0.5% Cu cut-off grade. Figures are rounded according to JORC Code guidelines.

## 4.8 Copper Ore Reserves

Copper Ore Reserves reported by MMG as at 30 June 2009 are presented in Table 4.4.

Table 4.4 Golden Grove - Copper Ore Reserves as at 30 June 2009

Classification	Tonnes (Mt)	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)	Gold (g/t)
Proved	2.6	0.4	3.5	0.0	18	0.4
Probable	1.0	0.4	3.2	0.1	21	0.5
Total	3.6	0.4	3.4	0.0	19	0.5

Cut-off grade based on a Nett Smelter Return value of A\$110/t. Scuddles Ore Reserves previously applied a nett smelter return value of A\$70. Copper price used is US\$2.00/lb, zinc price of US\$0.90/lb, lead price of US\$0.70/lb, silver price of US\$11/oz, gold price of US\$750/oz and an exchange rate of 0.75 (A\$/US\$).

## 4.9 Gold Mineral Resources

Gold Mineral Resources reported by MMG as at 30 June 2009 are presented in Table 4.5.

Golden Grove - Gold Mineral Resources as at 30 June 2009 Table 4.5

Classification	Tonnes (Mt)	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)	Gold (g/t)
Measured	-	-	-	-	-	-
Indicated	-	-	-	-	-	-
Inferred	1.1	-	-	-	100	3.2
Total	1.1	-	-	-	100	3.2

Reported at a 1.0 g/t Au cut-off grade.

## 4.10 Gold Ore Reserves

No gold ore reserves have been reported.

## 4.11 Potential for Additional Reserves

Most recent exploration work has focussed on near mine Mineral Resource extension and delineation drilling, particularly of the deeper orebodies at Gossan Hill and Mineral Resource extensions for the reopening of the Scuddles mine.

Further drilling from the Xantho decline is required to upgrade the Inferred Resources of Xantho and Xantho Extended deposits to Indicated Resource and exploration between the Hougoumont and Xantho deposits.

An RC drilling programme into the oxide copper mineralisation resulted in re-estimation of the Mineral Resource and re-classification as Inferred Resource.

Exploration in the Gossan Valley area about 6.5 km south of the Scuddles plant has been successful in intersecting zinc and copper massive sulphide mineralisation. Drillhole intersections reported publicly by MMG are listed in Table 4.6. The intersections suggest a coherent body of massive sulphide mineralisation that is being targeted for further drilling in 2010. AMC has considered a contribution from Gossan Valley in one of the modelling scenarios (Planning Case 2).

Table 4.6 Gossan Valley Exploration Drilling Mineralisation Intersections

Hole Number	From (m)	To (m)	Length (m)	Grade
GVDD021	556.2	568.5	12.3	3.9% Cu
	570.5	606.8	36.3	17.8% Zn
GVDD021D1	480.6	485.6	5	5% Cu
	532.1	546.2	14.1	5.33% Cu
	551.3	553.6	2.3	7.5% Zn
GVDD022D3	687.2	692.2	5	3.3% Cu
GVDD023	618	655.7	37.7	6% Zn*
		including	8.4	17% Zn*

<sup>\*</sup>estimated.

## 4.12 Operating History

The annual production rate from Golden Grove increased from 1.4 Mtpa to 1.7 Mtpa in 2008 with almost all production from the Gossan Hill mine. A major ventilation upgrade was completed early in 2008 at Gossan Hill to accommodate the increasing depth of mining and the increase in production rate. The mine is predominantly owner-operator in the areas of development, production drilling, shotcreting and charging-up. Some truck haulage to the surface is still carried out by a contractor.

## 4.13 Mining Operations

Scuddles has both decline and shaft access. The shaft is used for hoisting of production and the decline for personnel and materials movement. Gossan Hill has decline access only and all ore is trucked to the surface where it is crushed and transported approximately 3 km via an overland conveyor to the concentrator located adjacent to the Scuddles shaft.

Mining at both Scuddles and Gossan Hill uses the sub-level open stoping method.

Open pit mining operations at Gossan Hill are currently being evaluated to target shallow copper oxide material as well as deeper copper sulphides which overlay the upper stoping areas. There is also potential for a larger open pit operation which targets shallow gold oxide and deeper zinc sulphide material adjacent to the currently planned copper oxide pit.

Consideration has also been given to a separate mining operation at the Gossan Valley project, based on intersections of significant copper and zinc mineralisation and a considered potential total of approximately 5 Mt of zinc and copper ore. The Gossan Valley contribution to Planning Case 2 comprises approximately 2.7 Mt of zinc ore grading 14% Zn and 0.4 Mt of copper ore grading 4% Cu. It has been assumed that the operation will be similar to Gossan Hill, comprising decline access, with longhole stoping and truck haulage of ore to the surface for processing in the existing concentrator.

#### 4.14 Processing and Concentrate Handling

Underground copper and zinc sulphide ores have been treated for many years, and the metallurgical response is well understood. There is little information on the copper and zinc sulphide ores from the proposed open pits but the metallurgical response should be similar to the underground ores provided the blend does not contain significant amounts of transition ore.

Copper oxide ore from the open pit will be campaigned through the existing flotation circuit. The ore will require sulphidisation as part of the flotation process. AMC considers the predicted performance from this ore of 80% recovery and 26% Cu concentrate grade to be reasonable.

Gold oxide ore from the open pits is proposed to be toll treated off-site. This ore contains significant silver values and some cyanide soluble copper. At this stage, a satisfactory treatment process for this ore has not been finalized.

Two basic ore types are produced at Golden Grove; low precious metal copper ore, and zinc ore containing significant lead, silver and gold. These ores are mined at both Gossan Hill and Scuddles and have been treated separately on a campaign basis through the same plant.

The Gossan Hill ore is crushed to approximately 90 mm then conveyed to the concentrator. Scuddles ore is crushed underground prior to being hoisted to the surface stockpile. To increase the grinding circuit throughput 40% of the ore is crushed in a secondary crusher to minus 75 mm. Ore is withdrawn from the surface stockpiles using vibrating feeders and conveyed to the grinding circuit.

The grinding circuit consists of a semi autogenous (SAG) mill, a ball mill and a pebble crusher. Crushed ore is fed to the 6.7m x 2.1m SAG mill fitted with a 1,500 kW drive, 125 mm grinding media is added to the mill.

Pulp is discharged through 75 mm pebble ports onto a 10 mm x 25 mm trommel screen. Trommel screen oversize is crushed to approximately 10 mm and returned to the SAG mill. SAG mill trommel undersize (-10 mm) is mixed with the ball mill discharge and pumped to the ball mill cyclones. The cyclone overflow is fed to the flotation circuit. Cyclone underflow is fed to the secondary ball mill which is a 6.7m x 3.8m unit fitted with a 1,500 kW drive, 65 mm and 40 mm balls are added to this mill.

The normal flotation feed sizing is approximately 80% passing 110 micron, the relatively is coarse grind has little or no effect on flotation performance.

The grinding circuit throughput needs to average 217 tph to achieve the budgeted throughput of 1.7 Mt. This throughput rate is being achieved by crushing approximately 40% of the feed to minus 75 mm in a secondary crusher. If the mill feed became significantly harder, there is capacity to crush a greater portion in the secondary crusher. A study is underway to investigate the replacement of the primary crusher with a unit capable of crushing to minus 75 mm. This could eliminate result in significant cost saving by eliminating the secondary crushing stage.

The copper ore flotation circuit consists of a talc pre-float stage, if required, followed by the copper flotation stage. The talc prefloat is discarded to tailing. Copper concentrate grade ranges from 22% to 25% Cu and recovery from 88% to 92%.

Zinc ores contain significant amounts of silver, gold and lead that must be recovered prior to zinc flotation. This maximises the recovery of precious metals to the lead concentrate and improves zinc flotation by removing galena from the feed to the zinc section.

The high precious metal (HPM) circuit consisting of roughers, scavengers and two stages of cleaning. The performance of the HPM circuit is variable being dependent on head grade and mineralogy.

Regrinding of the HPM lead rougher concentrate is being investigated to liberate some galena sphalerite composites which will improve both the HPM lead concentrate grade and the zinc recovery in the zinc circuit.

The zinc flotation circuit consists of roughers, scavengers and two stages of cleaning. Zinc concentrate grade ranges from 50% to 54% Zn and recovery from 90% to 95%.

Concentrates are thickened then filtered. HPM concentrate is filtered using vacuum disc and copper and zinc concentrates are sent to a pressure filter. Concentrates are trucked to Geraldton for export.

Tailings from the flotation sections are classified in the backfill preparation plant, the coarse fraction being pumped underground as mine fill and the fines pumped to the TSF.

The five year metallurgical plan shows the processing plant treating approximately 1.7 Mtpa to 1.9 Mtpa in 2010 to 2012. Operating experience has demonstrated that this treatment rate and that the proposed metallurgical performance can be achieved.

The oxide copper ore performance has been established by extensive laboratory testwork and should be achievable.

#### 4.15 Infrastructure

Golden Grove is a fly-in-fly-out operation with a sealed airstrip and is serviced by charter flights from both Perth and Geraldton. It has an established camp which provides accommodation for the workforce.

The site is connected to the state grid by a 132 kV transmission line.

Potable water is sourced from an onsite bore and raw water is sourced from water pumped from the underground operations.

## 4.16 Environment

Golden Grove is characterised by sophisticated and high-quality environmental management systems and performance, with experienced environmental personnel ensuring integration of environmental imperatives into planning and operations. Environmental challenges are generally managed in a pre-emptive manner, based on sound research and diligent monitoring and reporting. All relevant licences and permits are in place, with good compliance; 13 reports were made to the Department of Environment and Conservation in 2009, but they mostly related to the now-remedied elevated cadmium levels in water discharged from the site (see below).

Closure planning is well advanced, with detailed work programmes identified and costed at current rates. A 2010 closure estimate of A\$43.5M (nett of demolition costs of A\$8.9M) is considered by AMC to be appropriate for valuation purposes. In future, TSF3 could add as much as A\$10M, although this increase could be offset by cost-saving opportunities currently being reviewed. This estimate does not include remediation of contaminated sites, which is considered unlikely to be required because of the future-land-use thrust of Western Australia's contaminated sites legislation – people-intensive land uses of the sites in future are improbable. Closure will be facilitated by the availability of oxide waste from the proposed Gossan Hill open pit, especially for capping of TSF1.

The significant environmental challenges requiring sustained management input in future are the management of acid drainage, surface-water management and heavy-metal contamination from mine-water discharge into the freshwater Lake Wownaminya; these are discussed further below. While no dust-management issues at the Port of Geraldton have been reported, the current socio-political focus in Western Australia on dust emissions from port-handling of mineral concentrates, especially at Esperance and Fremantle, demand vigilance, risk-awareness and pre-emptive planning.

Some historical sites of impact from acid drainage have been treated, but significant risk remains. The Gossan Hill ROM stockpile is the largest, with the need for capture and management of acid drainage identified by site personnel. Coffer dams have been constructed to collect ROM runoff, but further work is needed on hydraulic modelling and possibly lining of dams to manage contamination risks. Encapsulation of the ROM stockpile could become economically more feasible with development of an open pit, which will provide large volumes of inert, and possibly acid-consuming, mine waste within close proximity.

All areas which could possibly generate contaminated surface flows are equipped with drainage and containment systems, but low return-frequency designs (1 in 10-year, rather than 1 in 100-year) have resulted in some overtopping incidents. A LOM water management strategy, based on a predictive water balance model, is currently being developed to provide greater environmental protection.

In 2008, the environmental regulator expressed concern about high levels of cadmium (Cd) in water discharged to Lake Wownaminya. To remedy this issue, all mine water is now treated in the Mine Water Clarifier (MWC) after lime-dosing and treatment with flocculent, and then discharged to Pond B, which has been redesigned to give better mixing. Additional, manual lime-dosing in Pond B is carried out when required. Reduction of the pH set-point in the MWC from 12.0 to 11.5 has removed repetition of a one-off incident of high-pH (9.3) water reporting to Lake Wownaminya, and more rigorous removal of sediment in underground sumps in the Gossan Hill mine has further strengthened the wastewater management system. No elevated Cd levels have been recorded since the upgrade of the system. An apparent high selenium content in discharged water in 2009 was shown to be a laboratory assay error.

A detailed contaminated-site assessment of Lake Wownaminya is being undertaken to characterise the extent of heavy metal contamination of sediments and identify treatment options.

## 4.17 Operating and Capital Costs

Operating and capital costs for Golden Grove from 2007 to 2009 are summarised in Table 4.7. It should be noted that some costs such as electric power are expected to increase in the coming years.

In addition to normal sustaining capital, the current capital budget allows for expenditure of A\$2M to upgrade the processing plant to treat copper oxide ore.

Table 4.7 Golden Grove – Operating and Capital Costs

Item	Units	2007	2008	2009
Production Parameters	•			
Ore Mined	kt	1,446	1,794	1,549
Ore Processed	kt	1,453	1,661	1,410
Cash Operating Cost				
Mining	A\$M	113.0	138.8	93.2
Processing/Mntce	A\$M	40.6	46.3	39.8
Administration	A\$M	19.2	27.5	16.6
Conc. Transport/Port	A\$M	10.6	12.9	12.9
Total Operating Cost	A\$M	183.4	225.5	162.5
Capital Cost	•			
Sustaining Capital	A\$M	67.9	114.8	25.8
Total Capital	A\$M	67.9	114.8	25.8

#### 4.18 AMC Modelling Scenarios

MMG has provided AMC with a LOM plan detailing production for Golden Grove from 2010 based on mining reported reserves and additional non reserve material. AMC was also provided with a breakdown of the 30 June 2009 Ore Reserve which was then depleted based on reserve depletions reported in site monthly reports for July 2009 to June 2010.

As the Reserve Only Case is based on the 30 June 2009 Ore Reserve, depleted for production up to 30 June 2010, the life of the operation modelled in this case undercalls the likely mine life as it does not consider any possible additions to reserves since 2009, nor does it consider tonnage in extensions to orebodies currently being mined that are not currently at reserve status.

Information for the copper oxide open pit has been sourced from the mine design and cost estimate report for that project. The larger open pit included in Planning Case 2 is based on information provided and modelled by AMC in the 2009 review of the Golden Grove operations.

AMC has used the available information to prepare three scenarios for Golden Grove. Key aspects of the modelling scenarios are:

#### **Reserve Only Case**

This scenario is based on the June 30 2009 Ore Reserve which has been depleted for production from July 2009 to June 2010. Production in the latter years of a reserve only schedule tapers significantly beyond 2012. As a consequence not all reserves are included in the case modelled. As previously mentioned, not considering any possible additions to reserves since June 2009 undercalls the likely mine life. This case generates a mine life to 2012 with annual production maintained at approximately 1.7 Mt until 2011, with a reduction in the production rate to approximately 1 Mt in 2012.

## **Planning Case 1**

A mining and processing inventory comprising the reported Ore Reserves for Scuddles and Gossan Hill depleted for mining to 30 June 2010 plus approximately 1.6 Mt of additional zinc and copper mineralisation that AMC considers likely to be mined. The case also includes a copper oxide open pit mining inventory of 1.8 Mt which has been evaluated at a Scoping Study level. The copper oxide open pit inventory comprises mostly copper oxide material and some copper sulphide material and is based on Mineral Resources reported as Inferred in June 2009 that AMC considers are likely to be mined. This case generates a mine life to 2014 with annual production maintained at approximately 1.7 Mt until 2013, with production reducing to 0.9 Mt in 2014.

## Planning Case 2

The main differences in Planning Case 2 relative to Planning Case 1 are:

Additional underground production from Xantho Extended, upper areas of Amity copper and down dip extension of Hougoumont at Gossan Hill and potential production sourced from Gossan Valley, a potential resource containing both zinc and copper mineralisation that is currently being drilled out. Planning Case 2 also includes a significantly larger open pit, targeting gold oxide, zinc sulphide and copper sulphide mining inventories totalling 2.9 Mt. This is in addition to the open pit inventory included in Planning Case 1. The case generates a mine life to 2020 and maintains the same annual production rate of 1.7 Mt as scheduled in the other cases modelled until 2019, reducing to 1.4 Mt in 2020.

The modelling scenarios are summarised in Table 4.8, Table 4.9 and Table 4.10.

Table 4.8 Golden Grove – AMC Modelling Scenario Reserve Case

Item	Unit	Total	2010	2011	2012
Production					
Total Material Movement	kt	3,573	895	1,703	974
Waste Mined	kt	-	-	-	-
Ore Mined	kt	3,573	895	1,703	974
Strip Ratio	t:t	-	-	-	-
Ore Processed	kt	3,607	850	1,700	1,057
Cu Recovered	kt	71	15	31	24
Pb Recovered	kt	15	4	7	4
Zn Recovered	kt	121	32	63	26
Ag Recovered	koz	2,787	736	1,320	731
Au Recovered	koz	56	15	26	15
Operating Costs					
Mining	A\$M	241.0	53.7	109.4	77.9
Processing	A\$M	105.6	22.7	45.4	37.5
Concentrate Transport and Port	A\$M	56.8	15.0	25.6	16.2
Administration	A\$M	40.1	8.3	17.9	13.9
Total Operating Costs	A\$M	443.5	99.7	198.3	145.5
Capital Costs					
Resource Development	A\$M	-	-	-	-
Sustaining	A\$M	44.1	28.5	15.6	-
Expansion	A\$M	-	-	-	-
Closure and Rehabilitation	A\$M	43.5	-	-	43.5
Total Capital Costs	A\$M	87.6	28.5	15.6	43.5

Table 4.9 Golden Grove – AMC Modelling Scenario Planning Case 1

Item	Unit	Total	2010	2011	2012	2013	2014
Production							
Total Material Movement	kt	22,382	895	7,657	8,844	4,250	736
Waste Mined	kt	15,344	-	5,980	7,106	2,241	17
Ore Mined	kt	7,039	895	1,677	1,738	2,009	719
Strip Ratio	t:t	-	-	293	14	2	-
Ore Processed	kt	7,073	850	1,700	1,700	1,696	1,127
Cu Recovered	kt	138	19	28	30	37	25
Pb Recovered	kt	21	4	8	6	2	1
Zn Recovered	kt	226	40	80	60	27	18
Ag Recovered	koz	4,413	776	1,506	1,215	569	346
Au Recovered	koz	82	14	28	24	10	7
Operating Costs							
Mining	A\$M	410.1	53.7	121.8	104.1	77.1	53.3
Processing	A\$M	198.8	22.7	45.4	45.4	45.3	40.0
Concentrate Transport and Port	A\$M	120.5	32.8	28.9	25.4	19.7	13.8
Administration	A\$M	76.3	8.3	17.9	17.9	17.9	14.3
Total Operating Costs	A\$M	805.7	117.5	214.0	192.8	160.0	121.4
Capital Costs							
Resource Development	A\$M	16.2	9.4	6.8	-	-	-
Sustaining	A\$M	104.7	24.2	40.1	40.4	-	-
Expansion	A\$M	-	-	-	-	-	-
Closure and Rehabilitation	A\$M	43.5	-	-	-	-	43.5
Total Capital Costs	A\$M	164.4	33.6	46.9	40.4	-	43.5

Table 4.10 Golden Grove – AMC Modelling Scenario Planning Case 2

Item	Unit	Total	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Production													
Total Material Movement	kt	115,407	895	7,657	8,844	2,070	31,739	21,705	22,225	15,970	1,877	1,585	840
Waste Mined	kt	97,457	-	5,980	7,106	354	30,017	20,000	20,000	14,000-	-	-	-
Ore Mined	kt	17,950	895	1,677	1,738	1,716	1,722	1,705	2,225	1,970	1,877	1,585	840
Strip Ratio	:	-	-	293	14	-	61	40	23	23	-	-	-
Ore Processed	kt	17,510	799	1,700	1,700	1,701	1,700	1,700	1,700	1,700	1,700	1,700	1,410
Cu Recovered	kt	299	17	28	30	36	30	30	26	26	26	27	23
Pb Recovered	kt	37	4	8	6	3	3	3	3	3	3	2	3
Zn Recovered	kt	823	40	80	60	27	66	78	102	104	104	93	69
Ag Recovered	koz	9,316	754	1,506	1,215	569	622	723	679	679	679	600	1,289
Au Recovered	koz	159	14	28	24	10	12	13	12	12	8	8	17
Operating Costs													
Mining	A\$M	1,302.2	53.7	124.0	107.7	57.1	195.8	159.7	174.7	155.4	107.9	101.2	64.9
Processing	A\$M	467.5	21.3	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	37.7
Concentrate Transport and Port	A\$M	304.2	17.1	27.7	24.9	19.9	25.2	30.1	36.1	33.2	33.2	31.5	25.3
Administration	A\$M	183.7	8.3	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	14.3
Total Operating Costs	A\$M	2,257.6	100.4	215.0	195.9	140.3	284.3	253.1	274.1	251.9	204.4	196.0	142.2
Capital Costs													
Resource Development	A\$M	65.2	9.4	13.6	15.2	12.5	8.5	6.1	-	-	-	-	-
Sustaining	A\$M	213.2	24.2	40.1	40.4	36.0	31.0	20.5	16.0	5.0	-	-	-
Expansion	A\$M	190.3	-	-	23.5	64.8	45.7	28.3	22.5	5.5	-	-	-
Closure and Rehabilitation	A\$M	43.5	-	-	-	-	-	-	-	-	-	-	43.5
Total Capital Costs	A\$M	512.3	33.6	53.7	79.1	113.3	85.2	54.9	38.5	10.5	-		43.5

## 4.19 Technical Risks and Opportunities

Sustaining the current rate of production from the Golden Grove operations beyond 2013/14 is heavily dependent on:

- upgrading confidence of known orebody extensions that are not currently included in reserves
- delineation of new ore sources.

A factor that presents an additional challenge to production from Gossan Hill is that an increasing portion of future production will need to be mined from deeper parts of the deposit.

The planned recommencement of production at Scuddles will be a positive in that it is an additional ore source, but its likely production rate of 0.3 Mtpa will only partially offset the impact of depletion of mining inventory at Gossan Hill.

The proposed copper oxide pit will only provide an additional short term ore source throughout 2013 and 2014

The outcome of the current exploration drilling programme at Gossan Valley will play a significant part in the possible extension of mine life at Golden Grove. Subject to defining the expected resources at Gossan Valley, timing of evaluation, approval and development of orebody access will be critical to maintaining the current production rate from Golden Grove.

The site closure cost allowance has been significantly increased to adequately allow for rehabilitation of the large quantity of sulphidic waste in the ROM pad at Gossan Hill. This increase has mitigated the risk that closure costs may be higher than anticipated.

#### 5 AVEBURY

#### 5.1 Introduction

The Avebury nickel mine is currently on care and maintenance.

The Avebury Mine is an underground mining operation within Mining Lease ML 3M/2003. The deposit is located on the north-west coast of Tasmania, 6 km west of Zeehan. The deposit was discovered during 1997 to 1998. An access decline was excavated in 2003 to 2004, ore development commenced in June 2007 and production stoping commenced in January 2008. In response to low metal prices, mining operations were suspended in December 2008 and milling in January 2009.

Mining operations had not reached full scale production at the time operations were suspended.

#### 5.2 Geological Setting

Avebury is a nickel sulphide deposit located in the mid Cambrian, Mc Ivor Hill Ultramafic Complex, which has been intruded into Proterozoic and Cambrian aged sediments and volcanics. The nearby Heemskirk and Pine Hill granites are believed to have been the source of mineralisation.

The Avebury mineralisation is predominantly nickel sulphides such as pentlandite, with pyrrhotite and magnetite, occurring as steeply dipping gradational domains within and predominantly adjacent to the margins of the serpentinised Mid to Late Cambrian McIvor Hill Ultramafic Complex. The mineralisation and host sequence generally strike east-north-east with mineralisation domains of between 2m and 40m in thickness, with an average true width of 10m. There are 28 mineralised nickel domains with four main domains. Mineralogical characterisation being undertaken in 2009 and 2010 indicates that a proportion, approximately 0.15% nickel, is in the form of nickel silicates rather than nickel sulphides. With the exception of some recent drilling all geological data has been assayed for total nickel only. The block model contains total nickel which is inclusive of nickel silicates that cannot be recovered by the existing floatation process.

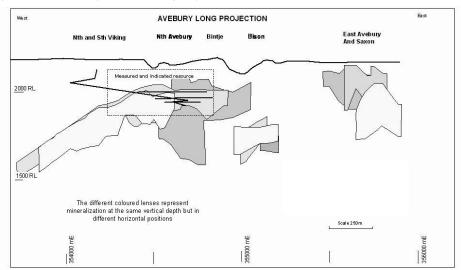
Further work is planned to establish the benefit of committing to assaying all samples for sulphide and silicate nickel.

The Avebury host rock and mineralisation contains low grade background arsenic in the form of nickel arsenides. There appears to be no correlation between the arsenic and nickel geological domains. There are some zones within the mineralisation with significant arsenic levels in excess of 1%. Arsenic has been interpreted and modelled separately in the mineral resource estimate. Before the suspension of operations, procedures were implemented to manage the arsenic content of the ore through grade control and blending. Insufficient time elapsed before suspension of operations to estimate the success of these procedures.

Near mine exploration and resource definition drilling commenced in May 2010. The aim of this drilling is to join East Avebury with the main Avebury deposit, increase the Mineral Resource and assist to gain a better understanding of the mineralisation controls.

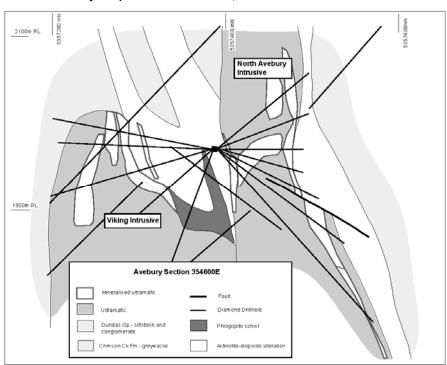
Figure 5.1 shows a long projection of the Avebury mineralisation, with the different lenses shown as different colours. Figure 5.2 shows a geological cross section of the Avebury deposit.

Figure 5.1 Avebury – Deposit Long Projection



\*Lenses Separated in the East are Shown as Different Colours.

Figure 5.2 Avebury – Deposit Cross Section 354,600E



#### 5.3 Mineral Resource

The Avebury Mineral Resource reported by MMG as at 30 June 2009 is presented in Table 5.1.

Table 5.1 Avebury – Mineral Resource as at 30 June 2009

Classification	Tonnes (Mt)	Nickel (%)
Measured	3.4	1.1
Indicated	4.7	1.0
Inferred	14.0	0.9
Total	22.0	1.0

Resources are stated at 0.4% Ni cut-off grade

Mineral Resources are total nickel, inclusive of sulphide and silicates mineralisation.

The mineral resource has increased since the previously reported figures in June 2008 with the inclusion of additional in mine and exploration drilling undertaken between June 2008 and December 2008. The Mineral Resource was updated prior to closure but not publicly reported until June 2009. The increase in the Inferred Mineral Resource is the inclusion of the East Avebury mineralisation and down dip North Avebury and Viking.

It should be noted that a 0.4% nickel cut-off was used for resource estimation and that down dip and along strike continuity becomes difficult to maintain at a cut-off grade greater than 1% nickel.

## 5.4 Ore Reserves

MMG did not report an Ore Reserves for Avebury in 2009.

The previously reported 2008 Ore Reserves included Proved and Probable Ore Reserves totalling 5.8 Mt at 1.0% nickel average grade and used a 0.7% nickel cut-off.

It should be noted that there is only a small margin between the 2008 reserve grade and the revised cut-off grade (0.9% nickel).

## 5.5 Exploration and Potential for Future Reserves

There is significant potential for exploration success in the Zeehan Mineral Field and the Mt Read Volcanics. The area contains numerous significant orebodies and many small scale historic workings. The area in which MMG has tenure to the south-west of the Avebury mine lease is highly prospective for ultramafic nickel sulphide and skarn style deposits.

Near-mine and district wide exploration has been on-going since the discovery of the main Avebury deposit, with successful near mine exploration adding to the planned mine life. Exploration programmes have used aeromagnetics, broad spaced surface mapping, geochemical soil sampling, diamond drilling to test for anomalous nickel, arsenic, zinc and chromium.

The Mining Lease 2M/2007 which existed over the Melba Flats area, 5 km north-east of Zeehan on the Murchison Highway, has been converted back into an exploration lease by MMG. Additional exploration will be undertaken for what is believed to be a more traditional higher grade nickel sulphide style mineralisation. The Melba Flats area contains numerous historic mine workings for silver, lead, zinc and nickel. No production has recently occurred from this field.

## 5.6 Mining Operations

The January 2007 feasibility study for Avebury was based on a production rate of 0.9 Mtpa. Before suspension of mining, the actual production rate had peaked in December 2008 at an annualised rate of 0.69 Mtpa. At the end of December 2008, the mine had produced a total of approximately 0.39 Mt of ore at 0.97% nickel.

Mining methods were transverse and longitudinal long-hole open stoping. Transverse stopes were used in areas where the orebody width exceeded 8m. Longitudinal bench stoping occurred in areas less than 8m wide. Prior to the suspension of operations, rock and cemented rock backfill was used. A proposed paste backfill plant had not been constructed.

## 5.7 Processing and Concentrate Handling

The Avebury treatment flowsheet incorporates crushing and grinding of the ore followed by a flotation circuit that incorporates magnetic separation and regrinding on the flotation tailings. Although the magnetic separation and regrind equipment had been installed and commissioned, these units had only been utilised on an intermittent basis during the latter stages of the plant operation prior to the shut-down. Initial commissioning of the plant commenced in July 2008. Typical of flotation process plant commissioning, the production statistics indicate that the ore throughput rate progressively improved over time but improvements in concentrate grade and metallurgical recovery lagged behind. As at December 2008, the annualised ore milling rate had reached 93% of target (0.9 Mtpa). However contained metal production rate was only 62% of the design output. Materials handling difficulties had been encountered and the ore throughput rate had been achieved primarily by allowing the grind size to coarsen, a consideration that adversely impacted on the flotation performance. Apart from the low nickel recoveries, problems had been experienced in controlling the arsenic level in concentrate. The arsenic occurs in various nickel sulphide minerals which are recovered into the concentrate during the flotation process.

AMC anticipates that the design throughput rate would be achieved some nine months after resumption of operations provided that modifications to overcome the materials handling difficulties are implemented in the crushing circuit, including time to recruit and train operators together with some capital refurbishment of the plant. Target metallurgical performance might not be consistently attained for some considerable time thereafter however, particularly in relation to resolving the arsenic issue. It is likely that a hydrometallurgical leach process will be required to remove the arsenic from the flotation concentrate and although scout leach testwork has been carried out as a first step in identifying an appropriate process technique, it will take considerable time and effort to progress a testwork programme in sufficient detail to take any selected hydrometallurgical process route through to a design-construct phase.

It is estimated that a cost of circa A\$5M could well be required to rectify the materials handling and processing constraints that presently exist in the treatment plant while a further A\$10M could be needed for installation of the arsenic leach process. It is anticipated that a 17% nickel concentrate could be produced at 79% recovery of nickel and with arsenic levels below the penalty threshold if an effective arsenic leach process was installed.

AMC anticipates that some capital refurbishment would also be required to re-commission the existing processing operation. Although most of the plant is located in an enclosed building, crushing and conveying equipment as well as the concentrate thickener are exposed to the elements and some deterioration of the plant is expected over time even though the plant is being serviced on a care and maintenance programme. In addition, it is anticipated that most of the first fill commodities such as reagents and lubricants would have to be replaced prior to recommissioning. Operating personnel would have to be recruited and trained.

## 5.8 Environment

Acid mine drainage and associated water management are significant issues at Avebury, because treated drainage water reports ultimately to the nearby Comstock Creek. Contaminated water is mixed with relatively-alkaline mine water and directed to the TSF, settling pond, a wetland and a water storage dam before discharge. Some drains have been lined with limestone to assist removal of soluble metals, and flocculants added to remove suspended particles.

There is a history of exceedances of water-quality thresholds established by the environmental permit for the operation, but a significant number of these have properly been shown to result from poor quality upstream water, rather than from Avebury discharges *per se*. Negotiations with the environmental regulator have resulted in refinement of the monitoring and reporting systems to reflect upstream water quality, and there is no apparent current or imminent threat of coercive action by the regulator.

Closure costs were estimated by an external and experienced consultant in late 2009 at approximately A\$1.0M (net of demolition costs, and unchanged from 2008). Given that the strategic plan is to use acid-forming mine waste to backfill underground voids created during mining, this estimate is considered by AMC to be reasonable for current assessment purposes. However, it may require thorough review once long term plans for mining, waste management and water management are firmly established.

## 5.9 Operating and Capital Costs

In order to re-establish the operation at Avebury, AMC has estimated that a capital allocation of approximately A\$5M would be required to refurbish the process equipment and re-commission the plant and a further A\$10M could be needed for installation of the arsenic leach process. The costs of re-establishing the mining would depend upon decisions relating to equipment purchases and capitalised mine rehabilitation and development.

AMC's has revised MMG's estimates of the range of future operating costs as listed below:

Mining: A\$60.00/t to A\$65.00/t.
Milling: A\$26.50/t to A\$31.50/t.
Site overheads, administration and sustaining capital: A\$12.00/t to A\$13.00/t.

MMG notes that the mining and milling costs are unlikely to be further reduced, and it is AMC's opinion that the mining costs are overly optimistic, for example compared with the nearby Rosebery mining operations.

#### 5.10 AMC Modelling Scenarios

AMC has prepared two modelling scenarios for the Avebury operation based on MMG's feasibility study. As there are no reported reserves for Avebury, only the Planning Case 1 and Planning Case 2 have been prepared. Key aspects of the modelling scenarios are:

## Planning Case 1

The main points are:

- Based on the scheduled portion of the reported mining inventory at full production.
- The total tonnage and feed grade presented in the plan is underpinned by a feasibility mining plan that
  has been adopted without modification to the production plan, based on a planned production rate of
  about 900 ktpa. Forecast mining costs have however been substantially increased by AMC to be more
  in line with industry experience.
- Metallurgical performances assumed by AMC have in some cases been moderated slightly to reflect recent historical performance. Operating costs as presented by MMG in its plan have been adopted without modification.
- Capital expenditure on upgrades about the processing facility is included.

Refer Table 5.2.

Table 5.2 Avebury Planning Case 1

Item	Units	Total/Av.	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Ore Mined	000 t	5,400.0				900.0	900.0	900.0	900.0	900.0	900.0		-
Ore mined grade													
Ni Head grade	%	1.13	-	-	-	1.19	1.09	1.04	1.18	1.18	1.08	-	-
Co Head grade	%	0.03	-	-	-	0.03	0.03	0.03	0.03	0.03	0.03	-	-
Total Recovered Metal													
Ni	000 t	43.2	-	-	-	7.6	7.0	6.6	7.5	7.5	6.9	-	-
Co	000 t	1.1	-	-	-	0.2	0.2	0.2	0.2	0.2	0.2	-	-
Total Unit Costs													
Mining & Milling													
Mining Underground	A\$M	324.0	-	-	-	54.0	54.0	54.0	54.0	54.0	54.0	-	-
Ore (external source)	A\$M	-	-	-	-	-	-	-	-	-	-	-	-
Processing - all ore	A\$M	143.1	-	-	-	23.9	23.9	23.9	23.9	23.9	23.9	-	-
G & A	A\$M	70.2	-	-	-	11.7	11.7	11.7	11.7	11.7	11.7	-	-
Transport	A\$M	6.2	-	-	-	1.1	1.0	1.0	1.1	1.1	1.0	-	-
Total Operating Costs	A\$M	542.1		-		90.4	90.3	90.2	90.4	90.4	90.3		-
Capital Expenditure													
Resource Development													
Exploration Infill drilling	A\$M	10.0	-	-	-	2.0	2.0	2.0	2.0	2.0	-	-	-
Sustaining													
Plant & Infrastructure	A\$M	2.8	-	-	-	0.5	0.5	0.5	0.5	0.5	0.3	-	-
Mine Development	A\$M	14.1	-	-	-	4.5	5.0	3.1	1.4	0.0	0.1	-	-
Underground Mine	A\$M	6.2	-	-	-	1.2	1.2	1.2	1.2	1.2	-	-	-
Expansion													
CE - expansion plant and infrastructure	A\$M	14.0	-	1.0	7.0	2.5	2.5	1.0	-	-	-	-	-
CE - expansion underground	A\$M	24.8	-	6.8	14.4	1.9	1.7	-	-	-	-	-	-
CE - rehabilitation	A\$M	1.0	-	-	-	-	-	-	-	-	-	1.0	-
Total Capital Costs	A\$M	72.9		7.8	21.4	12.6	12.9	7.8	5.1	3.8	0.4	1.0	-

## Planning Case 2

The main features of Planning Case 2 are:

- The mining plan is extended by one full year at the average grade, based on the assumption that there
  is no longer any constraint to mining due to the arsenic content of the ore.
- Metallurgical performances assumed by AMC are increased to reflect the performance of the hydro metallurgical plant. Operating costs as presented by MMG in its plan have been increased nominally for the operation of the hydro metallurgical plant.
- Capital expenditure on the inclusion of an arsenic leaching plant is included.

Refer Table 5.3.

Table 5.3 Avebury Planning Case 2

Item	Units	Total/Av.	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Ore Mined	000 t	6,300.0	-	-		900.0	900.0	900.0	900.0	900.0	900.0	900	-
Ore mined grade													
Ni Head grade	%	1.11	-	-	-	1.2	1.1	1.0	1.2	1.2	1.1	1.0	-
Co Head grade	%	0.03	-	-	-	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-
Total Recovered Metal													
Ni	000 t	55.2	-	-	-	8.5	7.7	7.4	8.4	8.4	7.7	7.1	-
Co		1.2	-	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-
Total Unit Costs													
Mining & Milling													
Mining Underground	A\$M	378.0	-	-	-	54.0	54.0	54.0	54.0	54.0	54.0	54.0	-
Ore (external source)	A\$M	0.0	-	-	-	-	-	-	-	-	-	-	-
Processing - all ore	A\$M	198.5	-	-	-	28.4	28.4	28.4	28.4	28.4	28.4	28.4	-
G & A	A\$M	81.9	-	-	-	11.7	11.7	11.7	11.7	11.7	11.7	11.7	-
Transport	A\$M	7.1	-	-	-	1.1	1.0	1.0	1.1	1.1	1.0	0.9	-
Total Operating Costs	A\$M	665.5	-	-		95.1	95.1	95.0	95.1	95.1	95.0	95.0	-
Capital Expenditure													
Resource Development													
Exploration Infill drilling	A\$M	12.0	-	-	-	2.0	2.0	2.0	2.0	2.0	2.0	-	-
Sustaining													
Plant & Infrastructure	A\$M	3.3	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	0.3	-
Mine Development	A\$M	14.1	-	-	-	4.5	5.0	3.1	1.4	0.0	0.0	0.1	-
Underground Mine	A\$M	7.4	-	-	-	1.2	1.2	1.2	1.2	1.2	1.2	-	-
Expansion													1
CE - expansion plant and infrastructure	A\$M	24.0	-	1.0	17.0	2.5	2.5	1.0	-	-	-	-	-
CE - expansion underground	A\$M	24.8	-	6.8	14.4	1.9	1.7	-	-	-	-	-	-
CE - rehabilitation	A\$M	1.0	-	-	-	-	-	-	-	-	-	-	1.0
Total Capital Costs	A\$M	86.6		7.8	31.4	12.6	12.9	7.8	5.1	3.8	0.4	0.4	1.0

## 5.11 Technical Risks and Opportunities

Current risks related to the Avebury mine are related principally to the management of arsenic in the production stream. Lesser risks would be related to the ability to achieve the production schedule, and the constraints on production that would occur if the mining system reverts to a predominantly uncemented or waste rock type of backfill.

Assuming the care and maintenance regime is sufficient, it should be straightforward to reopen the mine once nickel prices improve. The tenements also have significant exploration potential.

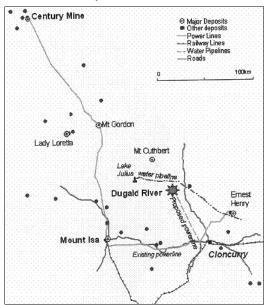
As the process plant has not yet achieved design capacity metal output, it has not yet proven that the planned metallurgical recoveries can be achieved. The planned performance of the proposed leach plant is based on limited test work and requires further investigation.

## **6 DUGALD RIVER PROJECT**

## 6.1 Introduction

The Dugald River Project is a zinc-lead-silver deposit located in Queensland, Australia, approximately 65 km north-west of Cloncurry, and approximately 85 km north-east of Mount Isa (Figure 6.1). The general region is host to a number of significant base metal mining operations. The project is owned 100% by MMG.

Figure 6.1 Dugald River – Location Map



In 2008 a feasibility study was completed for the Dugald River Project (2008 Feasibility Study). The study identified positive improvements on previous studies, particularly in regard to the impact of manganese on concentrate sales, with potential markets identified in Asia. MMG envisages that the mine could be in production within three years following a decision to proceed.

## 6.2 Geological Setting

The Dugald River deposit is located west of the Mount Roseby Fault in the Eastern Fold Belt, which is a part of the Precambrian province of north-western Queensland, within a restricted black shale-carbonate sequence of the Corella Formation.

The Dugald River Shale Member hosts the zinc-lead deposit and consists of black slates which are commonly carbonaceous, but may be chloritic or micaceous. The member is a relatively thin unit with a strike length of about 8 km. The member has five distinct informal units with the lower unit being 6m to 60m thick. The sediments dip predominately west with local reversals associated with small synclines. Poorly defined faults with a north-east trend mark the end of the Dugald River Shale Member.

The mineralised Dugald Lode which overlies the lower unit is a fine grained black slate with abundant sulphides. The main sulphide minerals are pyrrhotite, sphalerite, pyrite and galena. It is commonly brecciated, especially where it is highly mineralised. The hangingwall of the lode is marked in part by a hangingwall shear which consists of highly carbonaceous slate and spotted slate, with potassium feldspar rich beds near the contact with the lode.

The deposit is tabular with a strike length of approximately 2,200m and down dip extent of 1,100m. Its thickness varies from 5m to 21m with a gradual increase from north to south and with depth. The deposit dip varies from near vertical at the northern end to  $40^{\circ}$ west at depth in the central and southern areas.

AMC considers that there is the potential at Dugald River for the mineralisation to continue at depth. Copper mineralisation has been identified in the hangingwall of the deposit and in numerous surface outcrops, though a copper mineral resource estimate has not been prepared. MMG is of the opinion that there is the potential for supplementary copper resources to be identified and potentially mined and processed in conjunction with the zinc-lead-silver resource. AMC has not considered this copper mineralisation in its modelling scenarios as studies on its economic viability are not sufficiently advanced.

## 6.3 Mineral Resources and Ore Reserves

The Feasibility Resource (Table 6.1) and Reserve was based on drillholes that were spaced around 50m apart in the centre and near the top of the deposit expanding to 200m apart near the ends and at depth. A total of 428 holes (including redrills) were drilled within the area. Of these holes, 291 intersected the lode and were used in the resource modelling and estimation. Fifteen holes that intersected the lode did not contain mineralisation and therefore, were not included in the drillhole database used to estimate the metal grades.

Table 6.1 August 2008 Feasibility Study Mineral Resource at a 6% Zinc Cut-Off

Classification	Tonnes (Mt)	Zinc (%)	Lead (%)	Silver (g/t)	Iron (%)	Manganese (%)
Measured	20.7	13.3	2.0	56	11.7	0.71
Indicated	24.2	12.6	2.0	33	11.6	0.88
Subtotal	44.9	12.9	2.0	43	11.7	0.80
Inferred	8.9	11.6	1.8	15	11.2	0.93
Total	53.8	12.7	2.0	39	11.6	0.82

Since preparing the resource estimate, MMG has drilled a further 49 holes of which 39 intersected the lode. On average, these holes return the same grades as the blocks intersected in the resource block model, but there are some significant differences in the position, grade and lode thickness of individual holes. AMC's review of these holes has ascertained that the affect on the mineral resource is unlikely to be material over the life of the project.

The updated Dugald River database contains the 459 holes (178,970m). Holes outside the resource area (92 holes), or with unknown survey accuracy or assay reliability (37 holes) were not included within the resource estimate. In all 329 holes were used in the updated resource estimate, and contain 4890.6m of raw assay data within the mineralised zone.

Table 6.2 summarises the Dugald River Mineral Resources reported by MMG as at 30 June 2009. The resources are reported at a 6% Zn cut-off grade. MMG has not publicly reported ore reserves for the project.

Table 6.2 Dugald River – Mineral Resources as at 30 June 2009

Classification	Tonnes (Mt)	Zinc (%)	Lead (%)	Silver (g/t)
Measured	20.6	13.1	1.9	56
Indicated	23.0	12.6	2.0	28
Inferred	9.4	10.7	1.4	14
Total	53.0	12.5	1.9	36

AMC has reviewed the information relating to the estimation of mineral resources and has satisfied itself as to the quality and reasonableness of the inputs and methodology and that the June 2009 Mineral Resources are reported in accordance with the JORC Code.

#### 6.4 Mining

Prior to the 2008 Feasibility Study, a range of mining studies were undertaken to establish the optimal mining method and project scale. Consideration of open pit operations transitioning to underground mining were evaluated, but not preferred. Of the underground mining options considered, a combination of down-hole benching and long-hole open stoping (LHOS) utilising rock and paste backfill at a combined rate of 2.0 Mtpa was selected.

The lode geometry lends itself to establishing two separate mining areas, the North Mine and the South Mine, accessed by two separate declines.It is envisaged that the bulk of the wider LHOS stopes will be mined from the South Mine (1.4 Mtpa) and 0.6 Mtpa from the North Mine. Levels will be mined on 25m vertical intervals to a depth of 1,100m below surface.

Based on the 2009 Mineral Resource estimate, the preferred mining method and expected mining recovery and dilution factors, MMG estimated a mining inventory which AMC has used as the basis for its valuation modelling scenarios. The mining inventory was estimated using a nett smelter return cut-off of A\$125/t, which equates to 10.8% ZnEq<sup>4</sup>. AMC has examined the block model and concludes that the application of this relatively high cut-off to the resource (cut-off of 6% Zn) does not affect the continuity of the mineralisation included in the mining inventory; in fact it may be possible to increase the cut-off further without adversely affecting resource continuity.

#### 6.5 Processing and Concentrate Handling

The predominant ore zone in the Dugald River deposit is a slate breccia with lesser proportions of banded breccia and massive breccia with galena and sphalerite constituting the value sulphide mineralisation. The dominant sulphide gangue mineral is pyrite, although pyrrhotite also occurs in varying proportions.

Mineralogical investigations have confirmed that manganese is present both in solid solution in the sphalerite as well as being associated with pyrrhotite. Although rejection of pyrrhotite could potentially minimise the manganese content of the final zinc concentrate, it will not be possible to alter the inherent manganese assay in the sphalerite mineral ensuing from the solid solution component.

Considerable metallurgical testwork has been undertaken on the Dugald River ore over the past 20 years with improvements in the process response being generated over time. Because of the fine grain size of the galena mineralisation in particular, it is only since the advent of commercial ultra-fine grinding mills that the major metallurgical advances have been made. Notable improvements in the lead metallurgy have ensued in recent years.

In relation to the zinc flotation response, a significant part of this work has been directed towards the high levels of manganese that can occur in the zinc concentrate. In the past, it was considered that the presence of manganese in the zinc concentrate would adversely impact downstream smelting processes.

MMG is of the opinion however that contemporary smelting and refining technologies and the development of facilities utilising these processing techniques have advanced in a way that will make it feasible to market high manganese zinc concentrates. MMG has received letters of intent from four smelters covering the total envisaged concentrate production, albeit with certain penalties for excess manganese content, supporting its opinion as to the saleability of the concentrate.

The Dugald River mineralisation requires fine grinding to achieve high metallurgical recoveries as is typical of the complex carbonaceous zinc/lead ores in the Mount Isa region. MMG has developed a process flowsheet (Figure 6.2) as part of the 2008 Feasibility Study which is based on the testwork results. The flowsheet however is typical for zinc/lead ores in the region. The process plant is envisaged to have a capacity of 2.0 Mtpa, consistent with the planned mine production rate.

-

<sup>&</sup>lt;sup>4</sup> ZnEq is defined on the basis of contribution to the nett smelter return as Zn% + Pb% ÷ 2 + Ag g/t ÷ 53

Although the process flowsheet is of a design typical of contemporary lead-zinc process plants in the Mount Isa Inlier, it is nevertheless relatively complex with a carbon preflotation sequence followed by lead rougher and cleaner flotation with an intermediate fine regrind stage, with the lead circuit tailings being processed through a zinc rougher-cleaner circuit. Because of this circuit complexity, laboratory testwork procedures required for its evaluation in turn become quite complex as a result of which some variability has been experienced in the laboratory testwork outcomes.

Average open circuit flotation testwork results for each breccia type are summarised in Table 6.3. The weighted average results have been determined on an assumed distribution of 65% slate breccia, 20% banded breccia and 15% massive breccia. AMC has assumed that circa 5% additional lead and zinc recovery would be generated in the operating environment as a consequence of recycling internal process streams within the cleaner flotation circuit. Hence a recovery of lead recovery in excess of 70% and a zinc recovery of circa 82.5% would be anticipated in the relevant concentrates.

It is usual in a feasibility evaluation to carry out locked cycle laboratory flotation tests to simulate the effect of recycling internal process streams and to provide an estimation of the anticipated flotation response for the operating environment. Although a series of locked cycle flotation tests was carried out, the results were highly variable as the tests had not achieved stability at the end of the allocated test cycles. Hence, recourse had to be made to the use of the open circuit test results presented in Table 6.4 to estimate the anticipated operating outcome. It is noted that in the recent locked cycle testwork, lead recoveries had exceeded 80% although it remains uncertain as to whether such high recovery levels can be maintained because the locked cycle tests had not achieved stability.

Although the variability noted in the metallurgical testwork results potentially reflects a difficulty in stabilising the flotation response of the ore with this complex treatment flowsheet, AMC acknowledges that an upside exists whereby improved zinc recovery levels could ensue over time as experience is gained in controlling the circuit in the operating environment and as the process response is optimised.

AMC has reviewed the metallurgical testwork results and considers it reasonable for the purposes of preparing its advice to Grant Samuel to assume the following average plant performance as a base case:

## Zinc Concentrate

Zinc recovery to zinc concentrate of 83% Silver recovery to zinc concentrate of 34.4% Concentrate grade of 51% zinc

## **Lead Concentrate**

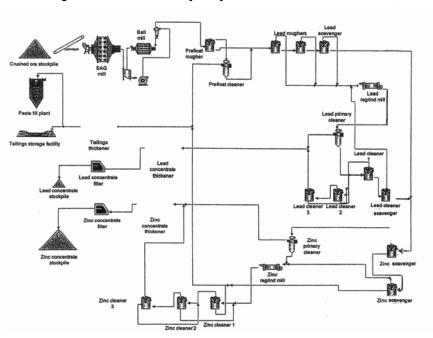
Lead recovery to lead concentrate of 70% Silver recovery to lead concentrate of 35.1% Concentrate grade of 70% lead

Manganese (Mn) will report to the zinc concentrate in elevated levels dependent upon the manganese assay of the feed.

Table 6.3 Dugald River – Average Open Circuit Flotation Testwork Results

Breccia Zone		Feed Grad	le	Lead Conc Grade			Lead	Ziı	nc Conc G	rade	Zinc
	Pb (%)	Zn (%)	Mn (%)	Pb (%)	Zn (%)	Ag (g/t)	Rec (%)	Pb (%)	Zn (%)	Mn (%)	Rec (%)
Slate	2.3	13.9	1.0	69.5	2.9	1,344	66.0	0.9	50.6	2.3	82.3
Branded	2.0	17.5	1.0	70.7	7.4	758	64.9	8.0	51.6	2.2	76.4
Massive	6.1	21.4	1.2	71.3	8.6	1,124	60.1	2.5	53.7	2.2	58.1
Weighted Average	2.8	15.7	1.0	69.7	3.6	1,256	65.9	1.1	51.2	2.2	77.5

Figure 6.2 Dugald River – 2008 Feasibility Study Process Flowsheet



## 6.6 Infrastructure

Access to the site is proposed via a connecting road to the Burke Development Road which runs north from Cloncurry and passes 10 km to the east of the project area. This road has recently been upgraded to a two lane sealed road.

The current preferred option for concentrate handling is for it to be transported approximately 100 km to Yurbi, where BHP Billiton operates a rail loop and loading facility for concentrates from the Cannington Mine. The rail connects to port facilities at Townsville, approximately 650 km to the east.

Power could be supplied via a 220 kV 60 km line from the Chumvale substation. It is proposed that water will be supplied from the Lake Julius to Ernest Henry water pipeline which passes 6 km to the north of the project.

It is envisaged that the mine will operate on a fly-in fly-out basis via Cloncurry Airport to towns on Queensland's eastern seaboard.

MMG's mining leases are surrounded by Universal Resources Limited (URL) exploration and mining leases to the north and south. On the western side, the Knapdale Ranges form a physical constraint. Combined they restrict some infrastructure placement options which may be alleviated though agreement with URL.

Infrastructure and tenement layout is shown in Figure 6.3.

### 6.7 Environment

Under the Mineral Resources Act 1989, the mining project proponent must obtain a Mining Lease (ML) in order to proceed with a mining project. A condition of all MLs is that the mining operation be undertaken in a safe and professional manner with an approved mining and rehabilitation programme. Leases will also be required to cover related infrastructure such as the project's power transmission corridor, TSF and associated pipelines, and the water pipeline.

The project area consists of 33 current MLs, one Mineral Development Licence (which only permits exploration and activities supporting the feasibility study) and one Exploration Permit – Minerals. The Environmental Protection Act 1994 (EP Act 1994) provides the framework for the Environmental Impact Statement (EIS) process required for approval of mining activities.

Currently the requisite baseline studies are being finalised and the draft EIS is being developed. MMG expects that the draft EIS will be submitted to the Queensland Environmental Protection Authority (QEPA) in the second half of 2010 and that final approval of the project should occur within around 18 months of submission.

Acid mine drainage is the major environmental risk, with both mine waste and tailings being potentially acid-forming (PAF). However, the availability of inert and acid-consuming waste, has allowed development of closure plans which include impermeable clay cover designs for above-ground PAF waste, using well-established and proven methods. Note that the weather conditions are very seasonal with high rainfall in summer months.

MMG has estimated a closure cost of A\$35M for the project, which AMC considers realistic.

### 6.8 Capital and Operating Costs

MMG has estimated the cost of establishing and operating the mine as part of the 2008 Feasibility Study. These costs are summarised in Table 6.4 and Table 6.5 and exclude port, freight and shipping charges. AMC believes that the costs have been estimated in a manner which it considers reasonable for a feasibility study.

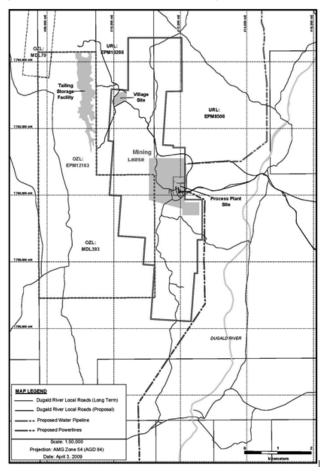
Table 6.4 Dugald River – Operating Cost Projections

Site Operating Costs	A\$/t Ore
Mining	40.00
Processing	30.75
Administration	7.30
Contingency	-
Site Unit Operating Cost	78.05

Table 6.5 Dugald River – Capital Cost Projections

Capital Costs	Pre-Production (A\$M)	LOM (A\$M)
Expansion/New	680	712
Closure	-	35
Sustaining/G & A	-	488
General & Administration	91	-
Total Capital	771	1,235

Figure 6.3 Dugald River – Infrastructure and Tenement Layout



### 6.9 AMC Modelling Scenarios

AMC has prepared two production scenarios for Dugald River, which are set out in Table 6.6 and Table 6.7.

### Planning Case 1

Planning Case 1 excludes Inferred Mineral Resource from the mineral inventory and envisages that 39 Mt of ore at 12.3% Zn, 1.9% Pb and 42 g/t Ag will be mined. The production rate has been set at a maximum of 2.0 Mtpa. Costs in Planning Case 1 have been escalated by 5% from the estimates prepared in the 2008 feasibility study.

### Planning Case 2

Planning Case 2 includes the Inferred Mineral Resource in the mineral inventory and envisages that 43.5 Mt of ore at 12.2% Zn, 2% Pb and 40 g/t Ag will be mined. The production rate has been set at a maximum production of 2.2 Mtpa. Zinc metallurgical recovery has been increased from 83% to 86% over the first five

years of operation to reflect possible opportunities in this regard. Costs have not been escalated from the 2008 estimates.

In both cases AMC has based its capital and operating cost estimates on those developed by MMG in the 2008 Feasibility Study. In Planning Case 1, AMC has reduced sustaining capital in line with the exclusion of Inferred Mineral Resource. AMC has increased the capital cost in Planning Case 2 to reflect the higher mined tonnage. In both cases, project approval has been assumed to occur in early 2011 with production commencing in 2014.

### 6.10 Technical Risks and Opportunities

The project status is feasibility study complete (2008), investment decision pending.

Although an ore reserve estimate is yet to be reported, the mining inventory estimate in the 2008 Feasibility Study has been prepared in accordance with good industry practice. Confidence in the reserve and mining inventory will be further improved once the 2009 Resource model is incorporated into the reserve model.

MMG has received letters of intent from four smelters covering the total envisaged concentrate production albeit with certain penalties for excess manganese content. There is a risk that manganese content will be higher than envisaged resulting in increased penalties.

From a technical and permitting perspective, AMC believes it reasonable to assume that production could commence within three years of the project being approved by MMG.

There is potential for the mineralisation to continue with depth. Also copper mineralisation has been identified in the hangingwall and throughout the tenements. The potential for the copper mineralisation to constitute a mineral resource is being investigated, although AMC has not included it in its production scenarios.

Table 6.6 Dugald River – Planning Case 1

Item	Units	Total	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Production Parameters																											
Ore Mined	Mt	39.0	-	-	-	-	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.4	
Ore Processed	Mt	39.0	-	-	-	-	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.4	
Zn Recovered	kt	4,029.6	-	-	-	-	151	191	200	200	207	201	205	201	202	211	212	213	218	220	212	208	207	207	211	152	
Pb Recovered	kt	592.9	-	-	-	-	23	23	30	35	32	29	30	30	26	32	33	34	36	35	34	28	27	27	29	21	
Ag Recovered	koz	35,357.1	-	-	-	-	1,922	1,954	2,218	2,583	2,348	2,367	2,077	2,094	2,087	2,368	2,052	1,823	1,921	1,798	1,547	1,014	901	869	818	595	
Cash Operating Cost																											
Mining	A\$M	1,640.7	-	-	-	-	54.2	67.6	71.9	79.9	80.1	79.8	90.1	87.3	82.2	81.6	85.3	85.5	86.1	85.9	90.7	94.2	91.1	90.8	90.8	65.4	
Processing	A\$M	1,250.3	-	-	-	-	48.5	60.6	60.8	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	46.5	
Administration	A\$M	298.9	-	-	-	-	12.7	14.6	15.0	15.0	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	
Concentrate Transport	A\$M	467.5	-	-	-	-	17.6	21.9	23.2	23.6	24.1	23.2	23.8	23.4	23.2	24.6	24.7	24.9	25.5	25.7	24.7	24.0	23.8	23.8	24.3	17.5	
Total Site Cash Cost	A\$M	3,657.3			-		133.1	164.7	170.8	183.2	183.9	182.8	193.6	190.4	185.1	185.9	189.7	190.1	191.3	191.4	195.2	197.9	194.6	194.3	194.9	144.6	
Capital Costs																											
Sustaining	A\$M	444	-	3	36	48	34	25	20	32	24	21	23	11	12	13	19	14	19	21	- 11	18	9	13	14	5	-
Expansion	A\$M	755	8	20	282	413	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
Closure and Rehabilitation	A\$M	37	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37
Total Capital Cost	A\$M	1,236	8	23	317	461	67	25	20	32	24	21	23	11	12	13	19	14	19	21	11	18	9	13	14	5	37

Table 6.7 Dugald River – Planning Case 2

ltem	Units	Total	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Production Parameters																												
Ore Mined	Mt	43.5	-	-	-	-	1.6	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.3	-
Ore Processed	Mt	43.5					1.6	2.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.3	
Zn Recovered	kt	4,597.1					151	191	222	225	236	229	234	229	231	241	241	243	248	251	242	237	235	228	225	224	34	
Pb Recovered	kt	696.2	-	-	-	-	23	23	33	39	35	31	33	33	29	35	36	38	40	38	37	37	37	38	38	39	6	-
Ag Recovered	koz	37,531.1					1,922	1,954	2,440	2,841	2,583	2,604	2,285	2,303	2,295	2,605	2,257	2,006	2,113	1,719	1,002	948	991	843	844	853	123	
Cash Operating Cost																												
Mning	A\$M	1,836.0	-	-	-	-	54.2	67.6	79.1	87.9	88.2	87.8	99.1	96.0	90.4	89.8	93.8	94.0	94.7	94.5	99.8	103.6	100.2	99.8	99.9	99.9	15.4	-
Processing	A\$M	1,395.3	-	-	-	-	48.5	60.6	66.9	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	11.0	-
Administration	A\$M	298.9	-	-	-	-	12.7	14.6	15.0	15.0	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	-	-
Concentrate Transport	A\$M	534.7	-	-	-	-	17.6	21.9	25.8	26.5	27.4	26.4	27.1	26.5	26.4	27.9	28.0	28.3	29.0	29.2	28.1	27.6	27.5	26.7	26.4	26.4	4.0	-
Total Site Cash Cost	A\$M	4,064.9					133.1	164.7	186.7	200.5	201.7	200.4	212.4	208.8	203.0	203.9	208.0	208.5	209.9	209.9	214.1	217.4	213.9	212.7	212.5	212.5	30.4	
Capital Costs																												
Sustaining	A\$M	513	-	3	39	54	51	27	19	31	24	23	25	12	18	19	28	17	22	25	- 11	18	9	13	14	5	5	-
Expansion	A\$M	755	8	20	282	413	33		-												-			-				
Closure and Rehabilitation	A\$M	37		-	-				-							-					-		-	-				37
Total Capital Cost	A\$M	1,305	8	23	321	467	85	27	19	31	24	23	25	12	18	19	28	17	22	25	11	18	9	13	14	5	5	37

### 7 EXPLORATION

### 7.1 Introduction

MMG has interests in a number of regional exploration projects in Australia, Asia and Canada as well as exploration projects associated with, or close to its existing mining projects (near mine exploration). In addition MMG has established Commodity Task-Force Project Generation Teams, one each for copper, zinc and nickel, which are dedicated to defining the best mineral belts for specific target styles and target sizes in their respective commodities with the aim of discovering significant growth projects for MMG.

This section reviews the regional exploration projects and the near mine exploration, the potential results of which have not been taken into account in AMC's modelling scenarios.

MMG's current revised exploration budget is A\$38M compared to a FY 2009 budget of A\$24M and an actual expenditure in that year of approximately A\$23M. The revised budget does not include planned expenditure of approximately US\$4M to US\$7M sourced from Business Development for the Izok Lake Canada update feasibility study, nor the availability of additional contingency funds for promising projects if the expenditure can be justified. MMG internal reports note a 15% reduction of the 2010 overall exploration budget across all regions to fund this contingency/strategic reserve. The budget is, in AMC's opinion, a budget which allows progression of a number of projects from the conceptual stage through to advanced and is likely to significantly progress geological knowledge of the tenements.

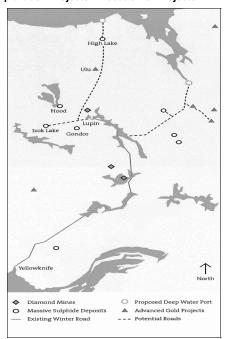
### 7.2 Canadian Exploration Projects

In March 2007, through its acquisition of Wolfden Resources Inc. (Wolfden), Zinifex Limited acquired a portfolio of polymetallic exploration properties in northern Canada (Figure 7.1). These properties were transferred to OZ Minerals Limited (OZL) and are now held by MMG. Potential production from two of the properties, Izok Lake and High Lake, was previously included in OZL's strategic plan from 2014 onwards to potentially contribute 50% of conceptual zinc concentrate production from 2016. However in 2009 OZL wrote down the carrying value of these projects from A\$395M, the full acquisition and previously capitalised exploration expenditure, to zero.

AMC has undertaken a brief review of documents provided by MMG and held discussions with MMG management relating to these exploration properties but has not visited any of the sites.

Beyond the exploration and mineral resources definition requirements of these projects, their development will require advanced consideration of transport and services infrastructure, logistics, environmental constraints and permitting typical to Arctic and Sub-Arctic projects and studies are underway to upgrade understanding of the infrastructure requirements and synergies with other projects.

Figure 7.1 Canadian Exploration Projects – Location of Projects



A summary of each of the projects which are located in Nunavut Province follows.

### 7.2.1 Izok Lake

Izok Lake is claimed to be one of the highest grade undeveloped copper-zinc deposits in the world. It is located approximately 360 km north of Yellowknife, Northwest Territories (NWT), Canada. Izok Lake is a massive sulphide deposit occurring within Archaean volcanic rocks in the Slave Craton of the Canadian Shield. The deposit occurs as four separate lenses within the Central, North, North-west and Inukshuk deposits. MMG preliminary studies indicate that the first three lenses could be mined by open pit methods while Inukshuk could be an underground mining proposition.

An independent mineral resource estimate has been prepared in 2006, and was incorporated into OZL's public reports (Table 7.1).

Table 7.1 Canadian Exploration Projects – Izok Lake Mineral Resources

Classification	Tonnes (Mt)	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)
Measured	-	-	-	-	-
Indicated	14.4	12.9	2.5	1.3	71
Inferred	0.4	6.4	3.8	0.3	54
Total	14.8	12.8	2.5	1.3	71

The resources are reported at a cut-off of 2.0% zinc equivalent, based on recovery factors and conservative long term metal prices. In AMC's opinion, the resource estimate was likely to be realistic at the time it was prepared in 2006, the price inputs are still reasonable but that the cut-off might now be too low with changing economics.

AMC understands that environmental baseline studies and infrastructure studies have commenced as has an updated feasibility study. This study is reviewing the project and the project logistics including the most suitable means of access and the relationship with other MMG and third party projects. At the same time exploration is underway with the aim of significantly expanding the mineral resource base at Izok Lake particularly searching for deeper mineralisation beneath the main ore zone and extensions to the massive sulphide systems. An earlier preliminary economic assessment has been based on the production of 1.4 Mt of ore annually producing 140 kt of zinc concentrate and 30 kt of copper concentrate annually.

### 7.2.2 High Lake

The High Lake deposit is a volcanogenic massive sulphide deposit located 550 km north-north-east of Yellowknife, NWT. The property is about 45 km south of the Coronation Gulf, a potential deepwater Arctic Ocean port. The deposit consists of three zones of mineralisation, the West Zone and the AB and D Zones.

A Mineral Resource estimate prepared in 2006 (Table 7.2) and preliminary economic assessment has been conducted by an independent mineral resource estimator. The preliminary assessment envisages an open pit and underground operation with a mine life in excess of 12 years.

Table 7.2 Canadian Exploration Projects – High Lake Mineral Resources

Classification	Tonnes (Mt)	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)	Gold (g/t)
Measured	-	-	-	-	-	-
Indicated	17.2	3.4	2.3	0.3	70	1.0
Inferred	0.04	2.4	0.5	0.4	122	0.2
Total	17.2	3.4	2.3	0.3	70	1.0

The resources are reported at a cut-off of 2.0% copper equivalent, based on recovery factors and conservative long term metal prices. In AMC's opinion the mineral resource estimate was likely to be realistic at the time it was prepared in 2006 and the metal prices used are still reasonable.

MMG has reported additional promising exploration results from the High Lake area, particularly High Lake East as a result of limited but active exploration over the last 12 months. The area remains prospective for the discovery of additional mineral resources.

### 7.2.3 Nunavut Gold Project

The Nunavut Gold Project consists of the Lupin Gold Mine and the Ulu Gold Project. The Lupin mine closed in early 2005 having produced 3,360 koz of gold at an average grade of 9.3 g/t gold. Infrastructure at the mine, including underground access remains in place. The previous owners have estimated the remaining mineral resources but these have not been publicly reported. However, there is an indication that there is still mineralisation which might add to mineral resources.

At the Ulu deposit, located 50 km to the south of High Lake and about 530 km north-north-east of Yellowknife, NWT, and 125 km north of Lupin, MMG report the potential for shear hosted high grade mineralisation that might feed the Lupin mill.

AMC is of the opinion that while these gold properties are prospective, there is still considerable evaluation work required to create value for MMG.

### 7.2.4 Nunavut Regional Exploration

MMG holds 2,600 km² of exploration tenements and mining leases in the Slave Region of Nunavut, which contains the massive sulphide deposits Gondor and Hood, with the potential to provide additional feed to a mill at Izok Lake. The tenements are also prospective for nickel, base metals and gold as well as diamonds. MMG (and earlier OZL) expenditure to date is limited, although past expenditure by others is assumed by AMC to be significant.

### 7.2.5 Ontario Nickel Copper PGE Exploration

In Ontario MMG is exploring for nickel-copper-platinum group elements (PGE) mineralisation in an alliance with Newgenco, a small private company with considerable global expertise in nickel sulphide exploration. Three areas (Sumach Lake, Valora Penassi and Savant Lake) totalling approximately 170 km² have been staked to date in Ontario province, each with indications of prospective mafic-ultramafic intrusions with disseminated or trace nickel and copper sulphides. Expenditure is approximately A\$0.4M to date.

### 7.2.6 Pelly Bay Nickel Project

MMG is currently negotiating the terms of the detailed joint venture agreement, based on a Letter of Intent on tenements at Pelly Bay in Nunavut, Canada on the Amaruk nickel project. This project is based on a highly prospective but unexplored district with occurrences of massive nickel sulphides. AMC notes limited expenditure by MMG to date and the early stage of the documentation.

### 7.3 Golden Grove Regional

The Golden Grove tenements cover an area of approximately 125 km² and include 25 km strike length of favourable base metal greenstone stratigraphy. South of the "in mine area", previous geological mapping and past and current drilling has identified mineralisation which is being actively tested. AMC has considered a contribution from this Gossan Valley area in one of the modelling scenarios so it is not considered further here, however the inclusion of this exploration area into one of AMC's modelling scenarios emphasises the prospectivity of the Golden Grove tenements.

To the north of the "in mine" area, the favourable stratigraphy is known to extend approximately 2 km north of Scuddles mine with some minor sulphide intersections recorded. Further north, the stratigraphy appears to change but supports a 7 km long copper-zinc-lead anomaly found in the results of rotary air blast (RAB) holes which has not yet been adequately explained. Several massive pyrite-pyrrhotite intersections of uncertain stratigraphic affiliation have been made in this area.

Targets exist for a gold deposit, which may support a small open pit and a potential oxide copper open pit. There are also targets for remnant sulphide copper mineralisation, but these are considered low priority.

### 7.3.1 Wiluna Project

The Wiluna Project was acquired as part of Oxiana's acquisition of Agincourt Resources (Agincourt) in 2007. The Wiluna Project region has been explored and mined primarily for gold. Tenements containing the long operating Wiluna gold mine were sold by Oxiana to Apex Minerals in 2006. Uranium rights for some selected tenements at the southern end of the project area have been transferred to Toro Energy Limited.

Within the remaining Wiluna Project area there are a number of generally low grade gold mineral resources. The ultramafic sequences are also prospective for nickel sulphide, and there have been historical narrow intersections of possible economic significance. Early work identified one small pod of high grade haematite and other indications of haematite rich lithology within two of the project ELs.

MMG has advised AMC that there is an environmental liability attached to the remaining tenements of A\$5.3M. MMG has taken the decision to divest that part of the remaining 950 km² of the Wiluna Project related to gold. Discussions with other stakeholders on tenures and calls for expressions of interest for the gold tenements and other commodities did not produce significant interest. MMG intends to exit the project.

### 7.4 Sepon

The Sepon Project covers an area of about 1,250 km² over a sequence of Palaeozoic sediments and volcanic rocks in the Truong Son fold belt, a mobile belt between the cratons of Indo China and South China. The project geology is described in Section 2.1.2 of this report.

In addition to the oxide gold and supergene copper resources considered in AMC's modelling scenarios, Sepon also hosts significant primary copper and both partially oxidised and primary gold mineral resources that are not currently amenable to treatment through the existing processing plant facilities. These resources have not been considered in the modelling scenarios.

### 7.4.1 Regional Exploration

The priority for MMG is the discovery of additional resources of oxide gold and supergene copper mineralisation amenable to processing in the existing process plants. Primary gold mineralisation is a second tier target, followed by primary copper mineralisation. Molybdenum and base metals anomalies have also been detected and represent low priority exploration targets.

MMG has a coherent model of the near mine area and the mineralisation controls with numerous targets for gold (oxide and primary) and copper (supergene, exotic and primary) mineralisation.

To the west of the mine there are numerous gold pathfinder geochemical anomalies over 20 km of strike length. Some encouraging drill intersections have been recorded but overall results indicate a lack of continuity on the prospects tested to date. Several recently identified geochemical (soil and rock-chip) targets remain to be drill tested. To the east of the mine along some 10 km of strike, exploration has identified several fairly large areas in which gold occurs in association with jasperoid and quartz veining. Rock chip samples of up to 50 g/t gold have been recorded and trenching has identified zones 2m to 3m wide containing mainly 1 g/t gold to 5 g/t gold. Wide spaced shallow drilling over some 3 km strike length have recorded gold intersections mainly in the range 1m to 10m of 1 g/t gold to 10 g/t gold. Further drilling is required to evaluate the resource potential of these areas.

Copper potential is indicated by extensive areas of un-tested geochemical anomalism and early stage prospects extending west, east and south-east of the mining areas. Follow up exploration is being carried out.

The tenements are prospective for molybdenum within the core of the igneous complex, with a number of significant intersections having been identified but follow up work is required to establish the potential of the mineralization.

Geochemically anomalous zinc (lead-silver) mineralisation has been located in the Din Daeng valley about 8 km north of the main Sepon mine area. Limited shallow drilling over some 500m across strike has recorded generally low grades of zinc with a little lead over intervals of 1m to 3m, but has failed to identify potentially economic mineralisation.

### 7.5 Other Asian Exploration

Outside of Sepon MMG has several programmes of generative and early stage exploration in Laos (initial generative projects) The future of these projects is dependent on a change of attitude of the Government of Laos towards MMG from its attitude to OZ Minerals Limited (one company one project). In Indonesia testing of targets generated on granted tenements has commenced.

### 7.5.1 Indonesia

MMG is actively engaged in exploration for porphyry copper and copper-gold systems throughout the prospective geological belts of the Indonesian archipelago. Several projects have been subject to intense exploration. While some of this exploration could be regarded as successful, the mineral resources identified, at Wia Wia, lateritic nickel, south eastern Sulawesi to be relinquished, or the target systems confirmed at Wonogiri, epithermal porphyry related gold, Java now seeking a joint venture with small gold-focussed junior companies, did not meet MMGs project requirements.

There are four projects on current tenements in northern Sulawesi. Three granted tenements under the new Mining Act (IUPs) include Tapadaa, Toluludu and Biyonga while Tahele, also in Sulawesi, is still under the old KP title with transfer to an IUP pending. MMG holds 100% interest in all these tenements. Surface exploration and scout drilling completed to date has outlined strong copper and gold geochemical anomalism associated with porphyry alteration, but no further work is planned within the Tapadaa IUP until the areas of further interest within a National Park are available.

### 7.5.2 Australia Regional

Outside of its extensive land holdings around existing operations MMG is involved in active exploration projects in the Cobar basin on the Wagga Tank and other tenements and planned at Kadungle near Parkes in NSW. The Menninnie Dam and Nymagee projects are currently planned for divestment.

In the Cobar Basin in New South Wales, MMG has acquired an extensive package of tenements between Wagga Tank and Nymagee known as the Kidman Project with an area in excess of 1,000 km² prospective for a range of target styles including CSA-style Cu-Zn-Pb type deposits. Review of previous data is in progress and drilling is planned.

The Kadungle project near Parkes is at an early stage in the process of ground acquisition in the region.

### 8 SOURCES OF INFORMATION

The assessments reported herein are based on numerous documents, reports, correspondence, plans and sections and other information provided to AMC by MMG, mainly in the form of electronic copies. Printed material, not easily transmitted electronically, was reviewed by AMC in MMG's offices in Melbourne and at the sites visited. Information was also obtained via site inspections and communications with MMG's management personnel.

A list of material references used by AMC is presented in Appendix B. This list is not exhaustive.

Diagrams included in this report have been sourced from MMG, as have mineral resource and ore reserve estimates and past performance data.

### 9 QUALIFICATIONS

AMC is a firm of mineral industry consultants whose activities include the preparation of due diligence reports and reviews on mining and exploration projects for equity and debt funding and for public reports.

AMC has completed assignments of a similar nature for Grant Samuel. AMC and its sub-consultants have also carried out technical consulting assignments for MMG and MMR and for many of its operations and projects. In all the assignments, AMC and its sub-consultants have acted as independent parties.

The contributors to this report are listed in Appendix C. Neither AMC nor its sub-consultants have any business relationship with Grant Samuel or MMG other than the carrying out of individual consulting assignments as engaged.

While some employees of AMC and its sub-consultants may have small direct or beneficial shareholdings in MMR, neither AMC nor the contributors to this report nor members of their immediate families have any interests in MMR that could be reasonably construed to affect their independence. AMC has no pecuniary interest, association or employment relationship with MMR or with Grant Samuel.

AMC is being paid a fee according to its normal per diem rates and out-of-pocket expenses in the preparation of this report. AMC's fee is not contingent upon the outcome of the transaction subject to this report.

This report and the conclusions in it are effective at 1 July 2010. Those conclusions may change in the future with changes in relevant metal prices, exploration and other technical developments in regard to the projects and the market for mineral properties.

MMR has provided AMC with indemnities in regard to damages, losses and liabilities related to or arising out of AMC's engagement other than those arising from illegal acts, bad faith or negligence on our part or our reliance on unauthorised statements from third parties.

This report has been provided to Grant Samuel for the purposes of performing its valuation in relation to the Transaction described in the covering letter to this report. AMC has given its consent for this report to be appended to a circular to share holders and has not withdrawn that consent before their lodgement with the HKEx. Neither the report nor any part of it may be used for any other purpose without AMC's written consent.

The signatories to the report are corporate members of the AusIMM and bound by its Code of Ethics.

A M Chuk M AuslMM

**Principal Consultant** 

L J Gillett M AusIMM (CP), MMICA

Director

# APPENDIX A ABBREVIATIONS

A\$ Australian dollar percent Ag silver AMC AMC Consultants Pty Ltd Au gold BIF banded iron formations C centigrade CBX carbonate breccia CIL carbon in leach Cu copper CY Calendar Year ELs exploration licences EPA Environmental Protection Agency FY financial year g gram g/t grams per tonne Grant Samuel HPM high precious metal IGO Integrated Tool Carrier km kilometres km² square kilometres koz thousand tonnes per annum Lao PDR Lao People's Democratic Republic Legend Legend Mining Limited LHD load, haul, dump LOMP life-of-mine LOMP life-of-mine plan LXML Lane Xang Minerals Ltd M million m metres m² square metre m³ cubic metres m² square metre ma millimetres MMG Minerals and Metals Group MMR Minerals and Metals Group MMR Minerals Resources Limited modelling production and production agreement mm millimetres MMG Minerals and Metals Group MMR Minerals Resources Limited modelling production and capital and scenarios operating cost projections as provided by AMC to Grant Samuel reduced level Mt million tonnes Mtpa million tonnes OEM original equipment manufacturer Oxiana Limited
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oz ounce
, ,
Pb lead
PEM prospectivity enhancement
multiplier
pH measure of acidity or alkalinity
ppm parts per million

QA/QC	quality assurance/quality control
RAB	rotary air blast
RC	reverse circulation
RDP	rhyodacite porphyry
ROM	run of mine
SA	South Australia
SAG	semi-autogenous grinding
SLOS	sub-level open stoping
t	tonnes
TMU	total metal unit
tpa	tonnes per annum
tph	tonnes per hour
TSF	tailings storage facility
URL	Universal Resources Limited
US\$	United States dollar
VHMS	volcanic hosted massive sulphide
w/o	Waste to Ore Ratio
Wolfden	Wolfden Resources Inc
Zinifex	Zinifex Limited
Zn	zinc

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Appendix A

### APPENDIX B

SOURCES OF INFORMATION
02.04.02445 05 MMG Exploration - Monthly Report - May 2010

### 1 CORPORATE

### 1.1 Accounting Financial

01.01.00004 MMG Annual Report 2009 FINAL

01.01.00005 MMG\_Commodity 2014 20100326 FINAL Price Assumptions 2010-

01.01.02346 MMG\_Generic Valuation Model\_Consolidation\_20100531

### 1.2 Closure Provisions

01.02.00006 URS Provision Avebury and GG 9 Feb 09

01.02.00007 URS Provision GG, Sepon and PH 2 Feb 09

01.02.00008 URS Provision Rosebery and Hercules 22 Jan 09 01.02.02347 CEA Environmental Restoration Rehabilitation - 2010.ppt

### 01.02.02348 Closure Provisions Final Report 12 Feb 2010

1.5 Corporate Overview

01.05.00011 20100616MMG\_Business\_Review\_Final\_WEB

01.05.00012 AMC Specialist Technical Report 30 April 2009 Final 01.05.00014 Microsoft PowerPoint - Project Opal - MMG Business

01.05.00015 Oxiana Zinifex Merger Scheme Book - Supplement 1

01.05.00016 Oxiana Zinifex Merger Scheme Book - Supplement 2

01.05.00017 Oxiana Zinifex Merger Scheme Book

01.05.00018 OZExplanatoryBooklet

01.05.02349 09June Final Mineral Resource Statements

01.05.02350 09June Final Ore Reserve Statements

01.05.02351 09June Mineral Resource & Ore Reserve Statement Executive Summary Rev A

01.05.02433 MMG Business Review Final WEB

### 1.11 Reports-Monthly

01.11.00324 April 2010 Monthly Report

01.11.00325 August 2009 Monthly Report - MMGFINAL 01.11.00326 December 2009 Monthly Report FINAL

01.11.00327 February 2010 Monthly Report

01.11.00328 January 2010 Monthly Report V2 01.11.00329 July 2009 Monthly Report - MMG FINAL

01.11.00330 March 2010 Monthly Report V2

01.11.00331 MMG Monthly Report - June 2009 FINAL 01.11.00332 November 2009 Monthly Report - V1

01.11.00333 October 2009 Monthly Report - FINAL

01.11.00334 September 2009 Monthly Report - FINAL

### 1.12 Reports-Quarterly

01.12.00335 091026\_MMG\_Sept\_Quarterly\_Report

01.12.00336 100128\_MMG\_Dec\_Quarterly\_Report\_09(1) 01.12.00337 100503\_MMG\_March\_Quarter\_Production\_Report

### 2 EXPLORATION

### 2.1 Canada

02.01.00379 HighLake\_NTI\_Agreement\_1001

02.01.00380 HighLake\_NTI\_AmendingAgreement\_0802

02.01.00381 OZ Canada Letter of Credit Details

02.01.00382 OZ\_Nu\_NWT\_PropertySummary\_042309 02.01.00383 OZ\_ON\_PropertySummary\_0409

02.01.02436 LupinAssessment20100507

### 2.4 Exploration Management

02.04.00374 1Q 2010 QBR Exploration Report

02.04.00375 2010 Exploration Plan Text

02.04.00376 AMC Exploration update

02.04.00377 Feb 2010 Quarterly Business Review Report(Finance

02.04.00378 FW Assets

02.04.02437 01 June 2009

02.04.02438 01 MMG Exploration - Monthly Report - January 2010

02.04.02439 02 July 2009

02.04.02440 02 MMG Exploration - Monthly Report - February 2010

02.04.02441 03 August 2009

02.04.02442 03 MMG Exploration - Monthly Report - March 2010

02.04.02443 04 MMG Exploration - Monthly Report - April 2010 02.04.02444 04 September 2009

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02.04.02446 05 October 2009

02.04.02447 06 MMG Exploration - Monthly Report - June 2010

02.04.02448 06 November 2009

02.04.02449 07 December 2009

02.04.02450 Exploration Report August 2009

02.04.02451 Exploration Report July 2009

02.04.02452 Exploration Report November 2009

02.04.02453 Exploration Report October 2009

02.04.02454 Exploration Report September 2009

02.04.02455 Exploration Summary Report

02.04.02456 Exploration Variance Analysis May 2010

02.04.02457 Q1 2010 Exploration Quarterly Business Review

02.04.02458 Q4 2009 Exploration Quarterly Business Review

02.04.02459 SR - Exploration Analysis

#### 3 OPERATIONS-AVEBURY

#### 3.1 Oveview

03.01.00486 Avebury map

#### 3.2 Business Plan

03.02.00487 2008 costs various

03.02.00488 2009 PLAN AVEBURY FINAL 26 Nov 08v2

03.02.00489 Avebury Capex Budget 2009 - 2011

03.02.00490 Budgets 09-11

03.02.00491 december\_quarter\_op\_costs

03.02.00492 inventory\_avebury\_dec2008

### 3.3 Geology

03.03.00493 2009 Avebury Geology and Exploration

03.03.00494 Avebury EL C and M

03.03.00495 Blockmodels

03.03.00496 Drilling database 03.03.00497 Mine openings

03.03.02470 Datamine

03.03.02471 Drill Plan2010 \_with track

03.03.02472 Drill Sections 2010

03.03.02473 Drilling Priority List June 2010

03.03.02505 Avebury Drill Plan

### 3.3.1 Reports

03 03 01 00498 Annual Report SEL42 2007 2008

03.03.01.00499 AVEBURY DIAMOND DRILLHOLE A236

03.03.01.00500 MINEX annual reports 03.03.01.00501 Monthly Geology Reports 2008

### 3.3.2 Reserves and Resources

03.03.02.00502 BDA Review Avebury Resource Reserve Estimate

2008 Rev3\_TC Comments

03.03.02.00503 Resource and reserve documents

3.3.3 Reconciliation

03.03.03.00504 a1925 474 partial stope reconciliation 03.03.03.00505 Avebury Production Reconciliation Data 2008 03.03.03.00506 Avebury Production Reconciliation Data 2008

03.03.03.00507 feed vs grade control

03.03.03.00508 stope\_reconciliation 03.03.03.00509 V1975 447 stope reconciliation

### 3.4 Mining

03.04.00510 Production Performance

03.04.00511 Stockpile Report

3.4.1 Monthly Reports 03.04.01.00512 EOM Mining Reports 2007

03.04.01.00513 EOM Mining Reports 2008

03.04.01.00514 OZ Minerals Management Report - Avebury - Nov 08 03.04.01.00515 OZ Minerals Management Report - Avebury - Nov 08 03.04.01.00515 OZ Minerals Management Report - Avebury - Oct 08 FINAL

03.04.01.00516 OZ Minerals Management Report - Avebury - Sep 08

3.4.2 Geotech

Appendix B - 1

03.04.02.00517 Geotech memo Polberro UG visit 24.1.08 4.1.1 COO Reports - Monthly Reports 2007 03.04.02.00518 Ground Control Management Plan 2008 04.01.01.00630 12 Dec 07 COO report 4.1.2 COO Reports - Monthly Reports 2008 3.5 Processing 04.01.02.00642 12 December 2008 COO report - Final 03.05.00519 SAP\_Equipment\_List\_2009\_01\_15 3.5.1 Monthly Reports 4.1.3 COO Reports - Monthly Reports 2009 03.05.01.00520 Processing Department Monthly Reports Aug-Dec 04.01.03.00643 August 2009 COO Report - Final 04.01.03.00644 Century COO Report - Sept 2009 2008 3.5.2 Process Overview 04.01.03.00645 December 2009 COO Report - Final 03.05.02.00521 Drawings 04.01.03.00646 February 2009 COO Report Version 1 04.01.03.00647 January 2009 COO Report v1[1].0 03.05.02.00522 Electrical Load List 03.05.02.00523 grinding circuit redesign 04.01.03.00648 July 2009 COO Report (USD Jun start) V4 03.05.02.00524 Plant Process flow diagram 04.01.03.00649 June 2009 COO Reportv2 04.01.03.00650 November 2009 COO Report 03.05.02.00525 SCADA Screens 3.5.3 Met Test Work 04.01.03.00651 October 2009 COO Report - FINAL 03.05.03.00526 Avebury\_Mineralogy\_ORC\_final\_I 4.1.4 COO Reports - Monthly Reports 2010 03.05.03.00527 Avebury\_Mineralogy\_ORC\_final\_II 04.01.04.00652 April 2010 COO Report V1.2 03.05.03.00528 Issues and options\_R1 arthur dunstan Arsenic paper 04.01.04.00653 February 2010 COO Report\_V1.0 03.05.03.00529 Metallurgical Info 04.01.04.00654 January 2010 COO Report 03.05.03.00530 Outokumpu-Avebury flotation test mineralogy 300605 04.01.04.00655 March 2010 COO Report V1 3 03.05.03.00531 Review of the Avebury Nickel Comminution Circuit 04.01.04.00656 May 2010 COO Report FINAL 3.6 Projects and Studies 4.2 Business Plan 3.6.1 Care and Maintenance 04.02.00657 Cost Info 8.2.09 03.06.01.00532 Care and Maintenance Meeting 20090113 04.02.00658 LOM Physicals Schedule - Mine Physicals 03.06.01.00533 Care and Maintenance Plan (4 Feb) 04.02.00659 MMG Century Plan Presentation\_Final Pack\_12.10.09 03.06.01.00534 CB 20090113 04.02.00660 MMG\_Generic Valuation Model\_Century\_Apr2010\_FINAL 03.06.01.00535 Overview File 4.3 Geology 03.06.01.00536 Risk Register1 04.03.00661 Century Geology - Silver 3.6.2 Feasibility Study 04.03.00662 Century Mine Geology Summary
4.3.1 Exploration Monthly Reports 03.06.02.00537 Feas Study April Model 03.06.02.00538 Feas Study Vol 1 - Summary 04.03.01.00663 06 Century June 2008 03.06.02.00539 Feas Study Vol 2 - Geological Resource 04.03.01.00664 07 Century July 2008 03.06.02.00540 Feas Study Vol 3 - Mining 04.03.01.00665 08 Century August 2008 03.06.02.00541 Feas Study Vol 4 - Processing 04.03.01.00666 09 Century September 2008 03.06.02.00542 Feas Study Vol 5 - Infrastructure 04.03.01.00667 10 Century October 2008 03.06.02.00543 Feas Study Vol 6 - Environmental 04.03.01.00668 11 Century November 2008 03.06.02.00544 Feas Study Vol 7 - Project Development and Financials 04.03.01.00669 12 Century December 2008 03.06.02.00545 Feasibility study 4.3.2 Resource and Reserve - 2008 3.6.3 Reopening 04.03.02.00670 Internal - 0308 Reserve Report March 08 03.06.03.00546 10April Avebury Review of Metallurgy& Initial Plant 04.03.02.00671 Internal - 0308 Resource Report March 08 04.03.02.00672 Internal - 0608 Reserve Report June 08\_cog361 03.06.03.00547 Avebury Reopening Study - 100225 Avebury Studies 04.03.02.00673 Internal - 0608 Resource Report June 08 04.03.02.00674 Snowden Report 080205 Century\_Resource\_R 03.06.03.00548 AVEBURY REVIEW MEETING MAY 20TH 2010 notes 04.03.02.00675 Snowden Report 080506 OreReserve2008\_R3 4.3.3 Resource and Reserve - 2009 03.06.03.00549 Hydrometallurgy testing review - Richmond May 29, 04.03.03.00676 2009\_reserve\_vulcan\_files 03.06.03.00550 IRC Progress Report - 10May MMG Avebury final 04.03.03.00677 Cut off grade option \_ LH4 (3) 04.03.03.00678 MMG\_Century\_Reserve\_December2009 04.03.03.00679 MMG\_Century\_Resource\_December2009 03.06.03.02475 09Oct Options Study - Re-Opening Rev B - MASTER 03.06.03.02476 2009 Budget Splits ver2 03.06.03.02477 2010 SOT Analysis 04.03.03.02361 reserve changes 30062009\_v2 03.06.03.02478 Avebury Model\_ver6\_COG0.9Ni\_900ktpa 03.06.03.02479 Minwid\_Output Scheduling\_V2\_Rev11\_900ktpa\_0.9Ni 4.3.4 Reconciliation 04.03.04.00680 aastage9v4 04.03.04.00681 cenapr2008\_reconciliation\_1month\_31stDecember2009 03.07.00551 0709 Avebury Environmental - Jul 07 - Sep 07 04.03.04.00682 cenapr2009\_reconciliation\_1month\_31stDecember2009 03.07.00552 0712 Avebury Environmental - Oct 07 - Dec 07 03.07.00553 0803 Avebury Environmental - Jan 08 - Mar 08 04.03.04.00683 End of Month Mine Physical Reconciliation Reports 03.07.00554 0806 Avebury Environmental - Apr 08 - Jun 08 04.03.04.00684 EOM April 09 Mine Physicals Reconciliation Sign off 03.07.00555 Allegiance Environmental Policy 03.07.00556 Avebury Annual EMP Progress Report 2007 04.03.04.00685 EOM April 10 Mine Physicals Reconciliation\_sign off 03.07.00557 Avebury Annual EMP Progress Report 2008 03.07.00558 Avebury EHS Care and Maintenance Plan 04.03.04.00686 EOM August 09 Mine Physicals Reconciliation\_sign off 03.07.00559 Avebury Land Use Permit 04.03.04.00687 EOM December 09 Mine Physicals Reconciliation\_sign off copy 03.07.00560 Compliance 03.07.00561 Environmental Management Plan Progress Report 04.03.04.00688 EOM February 09 Mine Physicals Reconciliation 03.07.00562 Environmental Setting 04.03.04.00689 EOM February 10 Mine Physicals Reconciliation\_sign off copy\_Crushed Tonnes Amend
04.03.04.00690 EOM January 09 Reconciliation\_Authorised for

### 4 OPERATIONS-CENTURY

### 4.1 Overview

04.01.00617 Century Overview 04.01.00618 Century Strategy

AMC210063-10rpt\_1 101122

Appendix B - 2

04.03.04.00691 EOM January 10 Mine Physicals Reconciliation\_sign

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04.03.04.00692 EOM July 09 Mine Physicals Reconciliation sign off
                                                                             04.04.02.02363 Top 10 AE Critical Equipment with Known Defects -
                                                                             4.4.3 Pit Design
04.03.04.00693 EOM June 09 Mine Physicals Reconciliation_sign off
                                                                             04.04.03.00748 MINENHIL00030AB RE01 V01A Stage6 Modelling
04.03.04.00694 EOM March 09 Mine Physicals Reconciliation_Sign off Copy
                                                                             04.04.03.00749 MINENHIL00041AA_RE01_V01A_Stage 7 Buttress
                                                                             04.04.03.00750
MINENHIL00041AA_RE02_V02A_WestWall_Drainage&Support
04.03.04.00695 EOM March 10 Mine Physicals Reconciliation sign off
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04.03.04.00696 EOM May 09 Mine Physicals Reconciliation_Sign off
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Copy_Amended
                                                                             04.04.03.00753 Mining One Report 1894
04.03.04.00697
                   EOM
                            May
                                    2010
                                               Mine
                                                                             04.04.03.00754 stage7
Reconciliation sign off copy
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04.03.04.00698 EOM November 09 Mine Physicals Reconciliation_sign
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off copy
04.03.04.00699 EOM October 09 Mine Physicals Reconciliation_sign off copy2
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                                                                             04.04.03.00758 stage9 8cb
04.03.04.00700 EOM
Reconciliation_sign off copy
                          September 09 Mine
                                                                             04.04.03.00759 stage9_8cb
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04.03.04.00701 Mining Cost Info for Minproc - provided to J.Botha
                                                                             04.04.04.00760 Mill Feed Schedule_lom09_cutback_v12
7.2.09
                                                                             04.04.04.00761 Mill Feed Schedule PostPipeline LOM V3.9
04.03.04.00702 Reserve Reconciliation post March 2008
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04.03.04.00703 stage8
                                                                             04.04.04.00763 Mine Schedule PostPipeline LOMV 3.9 bench draw
04.03.04.02362 Reserve_Reconciliation_Cenapr2009_June09_May10
4.3.6 Geotech
                                                                             04.04.04.02364 First Principles - Equipment and Manning Plan v3.9
04.03.06.00704 996-795_Blast Risk Analysis Full Sign Off
20081221 Final
                                                                             04.04.04.02365 PPLOM-V3.9
04.03.06.00705 After_Blast_Exclusion_Zones_for_2008_12_28
                                                                             4.4.5 Waste Dumps
04.03.06.00706 After Blast Exclusion Zones for 2008 12 31
                                                                             04.04.05.00764 DRAFT_Waste Rock Management 04.04.05.00765 Waste Dump Schedule
04.03.06.00707
Century Mine Geotechical Review May 2008 Mining One
                                                                             04.04.05.00766 Waste Dump Strategy
04.03.06.00708 Crackmeter Response Plan
                                                                             04.04.05.00767 West Dump Design and Construction Profile
04.03.06.00709 Geotechnical - risk assessment - September 2008
                                                                             4.5 Processing 04.05.02366 Reagents - Budget & Actual 2010
04 03 06 00710 Geotechnical F 054
04.03.06.00711 Geotechnical F 057
                                                                             4.5.1 Process Overview
04.03.06.00712 Geotechnical Hazard Plan_2008_10_12
                                                                             04 05 01 00768 PCS description
04.03.06.00713 Geotechnical Hazard Plan 2008 12 21
                                                                             04.05.01.00769 Process Overview
04.03.06.00714 Geotechnical Record GR337
                                                                             04.05.01.00770 Visio-Karumba Simplified Network Drawing
04.03.06.00715 Geotechnical Record GR338
                                                                             04.05.01.00771 Visio-Lawnhill IA Network April 2008
04.03.06.00716\ JSA - drilling and loading of the 1008-755,1008-756,996-796ps,996-797ps Stage7 Nth Wall
                                                                             4.5.2 Monthly Reports
                                                                             04.05.02.00772 Metallurgy Weekly Report 100611
04.03.06.00717 JSA - RESPONSE TO CRACK ALARMS 20081110
04.03.06.00718 MMG_Century_Geotech
                                                                             4.5.3 Met Projects
                                                                             04.05.03.00773 07290 Century High Shear Stator Gas Dispersion
04.03.06.00719 Wall Hazard Plan SW 20081204
                                                                             04.05.03.00774 Century Debottlenecking Study - Johnson and Munro 12-09-2008
04.03.06.00720 Wall Monitoring Review diagram - November 2008
04.03.06.00721 Wall Monitoring Review diagram - October 2008
4.4 Mining
                                                                             04.05.03.00775 Century DEBOTTLENECKING STUDY SUMMARY
04.04.00722 Century Pit Wall Cultural Clearance
                                                                             04.05.03.00776 Century Flotation Circuit Sized - 06 Model Development 06431
4.4.1 Drilling and Blasting
04.04.01.00723 165mm_Stg_8_Cutback_May10
                                                                             04.05.03.00777 Concentrate Pipeline - Current Operation
04.04.01.00724 20100527_Pattern Expansion
                                                                             04.05.03.00778 Dextrin Trial - Final Report
04.04.01.00725 251mm_Stg_8_Cutback_May10
                                                                             04.05.03.00779 Jameson Cell Close Out Report
04.04.01.00726 Case Study_165mm Shale Pattern Expansion, Century
                                                                             04.05.03.00780 ML003 Cyclones - Effect of changing vortex finders and
                                                                              spigots on ML003 cyclo
04.04.01.00727 Case Study_251mm Limestone Pattern Optimisation, Century Mine
                                                                             04.05.03.00781 ML003 Cyclones - Effect of ML003 on Zinc Rougher
04.04.01.00728 Century Presplit Optimisation Stage 7 8 interface
                                                                             04.05.03.00782 ML003 Cyclones - Evaluation of ML003 Grinding
04.04.01.00729 Century165mm Waste Pattern Expansion and subdrill
                                                                             04.05.03.00783 ML003 Cyclones - Primary Zn Simulations Report Dec 2008 DRAFT
04.04.01.00730 EOM Drill Blast Report May 2010
04.04.01.00731 Example 
_After_Blast_Exclusion_Zones_for_2008_12_31
                                                                             04.05.03.00784 ML003 Cyclones Optimisation & Operating Strategy
                                                                             04.05.03.00785 Progress Report - High Shear Stators Phase 1 v4
04.04.01.00732 Explosives Budget Blast ParametersCY09Final
04.04.01.00734 Explosives Budget CY10-CY12_Blast Paramaters
                                                                             04.05.03.00786 Project Definition - Jameson cell Tail Modification
04.04.01.00735 Explosives Budget CY10-CY12_Drilling Metres
                                                                             04.05.03.00787 Project Definition - Maximum Power Demand
                                                                             04.04.01.00736 Explosives Budget CY10-CY12_Drilling Schedule
04.04.01.00737 Explosives Budget CY10-CY12_Unitronics
                                                                             04.05.03.00789 Recovery Taskforce Report
04.04.01.00744 Trial for reduced batter and buffer B&S in cutback
                                                                             04.05.03.02367 Metallurgy Operations 3 Year Plan - CY 2010-14 - TA 090904 - Plant Avail YTD
4.4.2 Equipment
                                                                             4.6 Projects and Studies
04.04.02.00745 Equipment Component Age
04.04.02.00746 Equipment Schedule - CY09-CY15
                                                                             04.06.02368 1 Ball Mill v 2 Ball Mills Revenue
                                                                             04.06.02369 J-Cell Project Status Report
04.04.02.00747 Mobile Maintenance Equipment Plan V12 20091209
                                                                             04.06.02370 Project Definition - Froth Viscosity Database
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AMC210063-10rpt\_1 101122

Appendix B - 3

4.6.1 Century Phosphate

05.02.02386 GG LOM Scuddles

05.02.02387 GH Stats LOM 05.02.02388 Sc Stats LOM

### MINMETALS RESOURCES LIMITED Competent Person's Report on Minerals and Metals Group

04.06.01.00790 20080926 Century Phosphate Project Concept

04.06.01.00791 20081001 Century Phosphate Concept paper

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05.02.02486 AIP Plan Budget 2010 to 2013
4.6.2 Silver King
04.06.02.00792 Appendices_JORC_Report
                                                                                   05.02.02487 Scuddles_10_LOM_submitted_170909
04.06.02.00793 Silver King Concept Study v1 ADG 04.06.02.00794 SILVER KING SUMMARY
                                                                                   05.02.02488 Scuddles_EPS Dump Conversion Sheet 2009 BUdget
                                                                                   LOM Nov (3)
                                                                                   5.3 Geology
04.06.02.00795 Zinifex JORC Report - Jan 2008
                                                                                   05.03.00966 Golden Grove Due Diligence Study - Executive Summary
4.6.3 Improving Froth Performance in Zn Cleaners
04.06.03.02371 Improving Froth Performance in Zn Cleaners - Stage 1
                                                                                   05.03.00967 Gossan Hill Amity Gold
                                                                                   05.03.00968 Gossan Hill Area Cross Section
04.06.03.02372 Proposal - Improving Froth Performance in Zn Cleaners
                                                                                   05.03.00969 Hougo Zn and Cu Variography
4.6.4 Improving Froth Pumping
                                                                                   05.03.00970 Introduction to GG
                                                                                   05.03.00971 OLGG_08_038-Exploration-Southern Leases
04.06.04.02373 MMG AFE Form - Froth Pumping
04.06.04.02374 Project Definition - Improving Froth Pumping - Sump
                                                                                   05.03.00972 QCopper_Copper Plots
                                                                                   .....ооргет_copper_Hots
05.03.00973 Resource Expansion Potential Report - Hellman and Schofield
4.7 SHEC
04.07.00796 Century Group Env Audit Report 2008
                                                                                   05.03.00974 scudcvt_jul08
04.07.00797 Century Rehabilitation Bank Undertaking
                                                                                   05.03.00975 TG Curve pictures
04.07.00798 EMP Century Mine Nov 2008
                                                                                   05.03.00976 Xantho_AFE_2008
04.07.00799 Injury & Rehab Active Cases
                                                                                   05.03.00977 Xantho drill meters
04.07.00800 Lawn Hill Mine Plan of Operations 2007-2010
                                                                                   5.3.1 Monthly Reports
04.07.00801 MMG Century Plan of Operations 2010-2012
                                                                                   05.03.01.02389 Monthly Report 0901
04.07.00802 Response to RFI re Karumba
04.07.00803 SDR07_Century
                                                                                   05.03.01.02390 Monthly Report 0902
                                                                                   05.03.01.02391 Monthly Report 0903
04.07.00804 Tailings Audit Report 2006
                                                                                   05.03.01.02392 Monthly_Report_0110
04.07.00805 Tailings Audit Report 2007
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                                                                                   05.03.01.02394 Monthly_Report_0310 05.03.01.02395 Monthly_Report_0410
04.07.00806 Water Monitoring Program Review April 2008
4.7.1 Mine closure
04.07.01.00807 Century closure 27 Oct 08
                                                                                   05.03.01.02396 Monthly_Report_0510
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05.03.01.02398 Monthly_Report_0905
04.07.01.00808 Century Mine Water Management Plan
04.07.01.00809 DRAFT Century Closure Plan 2008
04.07.01.00810 DRAFT Century Rehabilitation Plan 2008
                                                                                   05.03.01.02399 Monthly_Report_0906
04.07.01.00811 Mine Management Plan - Environment 04.07.01.00812 Mine Rehabilitation Schedule and Costs
                                                                                   05.03.01.02400 Monthly_Report_0907
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04.07.01.00813 MMG Century Century closure plan June 2010
                                                                                   05.03.01.02402 Monthly_Report_0909
04.07.01.00814 Rehabilitation Plan
                                                                                   05.03.01.02403 Monthly_Report_1009_final
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04.07.01.00815 Revegetation Costs - Waste Rock Dumps
04.07.01.00816 URS closure provision review_Century_051208
                                                                                   5.3.2 Resource and Reserve
04.07.01.00817 _V1__Mine Rehabilitation Plan 4.7.2 Stream sediment Values Report
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05.03.02.01041 091130 Release memo_houg_nov09.bmf
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04.07.02.00818 Limnology Report Page Creek - ACTFR 2005
04.07.02.00819 Limnology Report Page Creek - ACTFR 2006
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04.07.02.00820 Mg Trigger levels letter
04.07.02.00821 OZCM Magnesium Trigger Values Report
04.07.02.00822 Stream sediment values lette
                                                                                   05.03.02.01046
100112_Release_memo_am_dec09_dac41modified.bmf
5 OPERATIONS-GOLDEN GROVE
                                                                                   05.03.02.01047 ghres_apr09_after_Stope_evaluation
                                                                                   05.03.02.01048 Golden Grove Resource-Reserve Review Final Oct
05.01.00959 Golden Grove Overview 060109
05.01.00960 OGGH Constitution
                                                                                   05.03.02.01049 Golden Grove Resources 2009
5.1.1 1.B.c.0001 Golden Grove Information Memorandum -
                                                                                   05.03.02.01050 gossABCDzn_may09_nov09NSR
                                                                                   05.03.02.01051 gossACu_211c66
05.01.01.00961 a. Golden Grove Information Memorandum - Newmont
                                                                                  05.03.02.01052 gossam_dec09_dac41modified
05.01.01.00962 b. Information Memorandum Appendices
                                                                                   05.03.02.01053 gosscateth_jul09_nov09NSR
5.1.2 COO Reports
                                                                                   05.03.02.01054 gosscateth_nov09_z11
05.01.02.00963 2009
                                                                                  05.03.02.01055 gossGG4_jan10
05.01.02.00964 2010
                                                                                   05.03.02.01056 gosshoug_nov09
5.2 Business Plan
                                                                                   05.03.02.01057 gossnorth_jun08_newNSR
05.02.00965 MMG_Generic
Model_GoldenGrove_Apr2010_FINAL
                                                              Valuation
                                                                                  05.03.02.01058 gossXT jun09 nov09NSR
                                                                                   05.03.02.01059 MMG GG Preliminary Reserve Statement as at 30
05.02.02377 GG LOM Model 21Dec09
05.02.02378 GG LOM cashflow
                                                                                   05.03.02.01060 MMG Primary Zinc and Copper Mineral Resource Statement_v2
05.02.02379 GG_LOM_cash_spend
05.02.02380 GG_LOM_Geology
                                                                                   05.03.02.01061 Net Smelter Return Block Model Script
05.02.02381 GG LOM GM KPI's
                                                                                   05.03.02.01062 OZ Resource Statement
05.02.02382 GG_LOM_GossanHill
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05.02.02383 GG_LOM_KPI's
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05.02.02384 GG LOM Mill
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05.02.02385 GG_LOM_P&L
                                                                                   05.03.02.02405 ghres_apr10_b4_Stope_evaluation
AMC210063-10rpt_1 101122
                                                                                                                                         Appendix B - 4
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05.03.02.02406 Release\_memo\_Scudtotal\_jun10\_block model 5.5.1 Monthly Reports 05.03.02.02407 scudres\_jun10\_byArea 05.05.01.01167 Golden Grove Production Stats 2006-08 5.3.3 Reconciliation 5.6 Projects and Studies 05.06.01168 1005 TSF3 Project Summary Report 05.03.03.01066 Monthly Reconciliations 5.3.5 Exploration 05.06.01169 2008 Strategic Plan Update Memo 05.03.05.01067 ASX Announcement - Exploration Success at Golden 05.06.01170 Flotation Concentration Material 05.06.01171 Flotation Testing of Golden Grove Oxide Blends 05.03.05.01068 GG\_SURFACE\_EXPLORATION 05.06.01172 Golden Grove April Presentation 05.03.05.01069 OZ\_GG\_Diamond Drilling Costs\_2010&2011 05.06.01173 Golden Grove Haulage Study **5.4 Mining** 05.04.01070 Due Diligence Reports 05.06.01174 McSweeney Partners 05.06.01175 Metallurgical Test Works\_G and T 05.04.01071 Fixed\_Asset\_Register\_Nov 05.06.01176 Metallurgical Test Works\_Pre Oxiana 05.06.01177 MOA at Golden GroveRevC 05.04.01072 Gossan Hill 05.06.01178 Orway Report 05.04.01073 Optiro 05.04.01074 OZ\_GG\_Scuddles\_Longsection\_charles1B 05.06.01179 Oxide Gold Processing Options Study Report 5.4.1 Monthly Reports 05.06.01180 Port, Bounty Winder Report (Part 1)b 05.04.01.01075 01. January 2010 Monthly Report 05.06.01181 Port. Bounty Winder Report (Part 2)b 05.04.01.01076 02. Feb 2010 Monthly Report 05.06.01182 Processing Options Study Report 05.04.01.01077 03. March 2010 Montly Report 05.06.01183 Scoping Review of Processing Options for Gossan Hill 05.04.01.01078 04. April 2010 Monthly Report 05.06.01184 Scuddles Feasibility 2006 05.04.01.01079 06 June 2009 Monthly Report 05.06.01185 Scuddles mining study combined 05.04.01.01080 07 July 2009 Monthly Report 05.06.01186 Strategic Memo April 2007 05.04.01.01081 08 August 2009 Monthly Report 05.04.01.01082 10 October 2009 Monthly Report 05.06.01187 Summary - Port of Geraldton 05.06.01188 Underground Materials Handling Systems Concept Study 05.04.01.01083 11 November Monthly Report 05.06.01189 Updated Project Overview Cuox Flotation and Sulphide 05.04.01.01084 12 December Monthly Report 05.04.01.01085 GM Monthly Report Dec 2008 05.06.01190 Xantho Extended 05.04.01.01086 Gossan Hill Stats Monthly 2009 as at end Feb.xls 5.6.1 GG Open Pit 05.04.01.01087 Monthly Report July 2007 05.06.01.01191 22a pit shells 05.04.01.01088 Monthly Reports 05.06.01.01192 Directors presentation July 08 05.04.01.01089 OZ\_GG\_01 January 2009 - Monthly Report V2 05.06.01.01193 gh22a 05.04.01.01090 OZ\_GG\_12 December 2008 - Monthly Report 05.06.01.01194 gh25b 05.04.01.02408 05. May 2010 Monthly Report 05.06.01.01195 OGGO Open Pit Preso 5.4.2 Geotech 05.06.01.01196 Open Pit Studies 05.06.01.01197 OZ\_GG\_CuO\_Openpit\_DATABASE VALIDATION REPORT A 05.04.02.01091 GeotechMonthly\_2009\_10 05.04.02.01092 GeotechMonthly\_2009\_11 05.06.01.01198 OZ\_GG\_Open Pit Summary Jan2009 05.06.01.01199 QA GH22a 05.04.02.01093 GeotechMonthly\_2009\_6 05.04.02.01094 GeotechMonthly\_2009\_7 05.06.01.01200 QA GH25b 05.04.02.01095 GeotechMonthly 2009 8 05.04.02.01096 GeotechMonthly\_2009\_9 05.06.01.01201 Sep 10 OZ\_GG\_GH25\_Economic Summary - Corp 05.04.02.01097 GeotechMonthly\_2010\_01 82% Con 21 5% 05.04.02.01098 GeotechMonthly 2010 02 5.6.2 Mining Proposals 05.04.02.01099 GeotechMonthly\_2010\_03 05.06.02.01202 Mining Proposal - Borrow Pit for Development and Closure Projects - Oct 2008 05.04.02.01100 GeotechMonthly\_2010\_04 05.04.02.01101 GeotechMonthly\_2010\_05 5.5 Processing 05.06.02.01203 Mining Proposal - Existing Tailings Storage Facility - October 2007 05.05.01146 108417.02R01revA\_draft 05.06.02.01204 Mining Proposal - Expansion and Upgrade of Village -05.05.01147 Appendix B 05.05.01148 Copper Flotation Circuit Spreadsheet 05.06.02.01205 Mining Proposal - Tailings Storage Facility - October 05.05.01149 Cu Ore G and T KM2324 Report 5.7 SHEC 05.05.01150 OZ\_GG Flotation Flowsheet Jan 2009 05.07.01206 070102-OXGG-CM-2008 Incident Report Detail 05.05.01151 OZ GG\_Flotation Modelling UpdateV2\_July\_2008 05.05.01152 OZ\_GG\_08109 Golden Grove Draft Float Circuit Report 05.07.01207 070519-OXXGG-JB-Form 1 CS Act cover letter (4) 05.07.01208 070524-OXGG-EKS-Part A Suspected Contamination 05.05.01153 OZ\_GG\_Closing \_Concentrate at 280109 05.07.01209 070524-OXGG-EKS-Part B Known Contamination Site 05.05.01154 OZ\_GG\_Data management of stocks\_mod 05.05.01155 OZ\_GG\_Float\_Cell\_Details 05.07.01210 080402-OZGG-BD&JB-SS-Integrated Risk Register 05.05.01156 OZ\_GG\_Float\_Survey 2 - Baseline survey V3+water 05.07.01211 080517-OXGG-LT-DOIR Response to Site Inspection 05.07.01212 080624-OXGG-Golden Grove Ghse Inventory Revised 05.05.01157 OZ\_GG\_Float\_Survey 3 V2+water\_Mar2008 Validation 05.07.01213 081121-OZGG-CM-ECR Management System Mapped 05.05.01158 OZ GG Mill Physicals December 2008 05.05.01159 OZ GG Monthly Concentrate Comp Comparisons - for 05.07.01214 081220-OZGG-JB-Let Incident Cd exceedance of LDP 05.07.01215 100304-MMGGG-SY-NCSI Surveillance Audit Report 1-4 05.05.01160 OZ\_GG\_Physical Sept 08 05.05.01161 OZ\_GG\_Power\_Usage & Electricity Trending 2008adj Dec 05.07.01216 100330-MMGGG-Annual Audit Complaince Report 2009 05.05.01162 OZ GG Process Plant Fact Book 55.07.01217 100331-MMGGG-CT-2009 Annual Environmental Report FINAL 05.05.01163 OZ\_GG\_SMCC\_Mill\_Throughput\_Report\_June2007 05.05.01164 Processing Stats Monthly 2009 at end Feb.xls 05.07.01218 8931\_GoldenGrove\_SurvAuditReport0809 \_6\_ 05.05.01165 Zn Ore Quantitative Mineralogy MODA 05.07.01219 a. Due Diligence Report (Draft) - Environmental - Enesar 05.05.01166 Zn&Cu Ore G andT KM2316 Report 05.07.01220 Audit report - April 2008 GG minor edits

05.07.01221 b. Due Diligence - Enironmental - Plates 06.01.01.01488 Rosebery COO Mar 09v2 05.07.01222 DEC inspection -Tuesday 23rd September 06.01.01.01489 Rosebery COO Mar10 06.01.01.01490 Rosebery COO May 09 05.07.01223 EPA referral GG Open Pit Project 06.01.01.01491 Rosebery COO May10 05.07.01224 GGOzMinerals URS model 220109 cashflow only updated 06.01.01.01492 Rosebery COO Nov09 05.07.01225 Golden Grove conditions of DoE Licence 06.01.01.01493 Rosebery COO Oct 09V1 05.07.01226 Inspection Report - Environmental Licence 5175-7 06.01.01.01494 Rosebery COO Sep 09 05.07.01227 Mining Proposal - Borrow Pit for Development and Closure Projects - Oct 2008 6.2 Business Plan 06.02.01495 asset register 31 Jan 09 05.07.01228 Mining Proposal - Existing Tailings Storage Facility -06.02.01496 Cost Booklet ROM CY2010 06.02.01497 Cost Booklet ROM CY2010V1 05.07.01229 Mining Proposal - Expansion and Upgrade of Village - Apr 06.02.01498 CY2010 MMG Rosebery Departmental Summary Costs 05.07.01230 MMG Ltd \_Golden Grove\_ Final SIA 16 October 06.02.01499 Information for G Coster 05.07.01231 Oxiana GG Annual Environment Report 2007 06.02.01500 Mill Operation CY2010 budget updated 040909 05.07.01232 OZ\_GGO TSF Closure Works Detailed Design - Stage 2 Report - Sept 07 DRAFT 06.02.01501 Mill Physicals 2010 06.02.01502 MMG Rosebery 2010 Plan Presentation V6 05.07.01233 OZ\_GG\_42906354 609-W0038 1a Golden Grove Op Strat 06.02.01503 MMG Rosebery Capital Projects CY2010 Sep08 Water 05.07.01234 OZ\_GG\_DEC Licence 5175-8 06.02.01504 MMG Rosebery COA CY2010 06.02.01505 MMG Rosebery Concentrate CY2010 05.07.01235 Risk Register 05.07.01236 Social Impact Assessment and Management Plan 06.02.01506 MMG Rosebery CY2010 Cashflow Budget A\$AUD 06.02.01507 MMG Rosebery CY2010 P&L Budget A\$AUD 05.07.01237 Vegetation Clearance Permit 1678-1 06.02.01508 MMG Rosebery CY2010 05.07.01238 Vegetation Clearance Permit 812-1 06.02.01509 MMG Rosebery People CY2010 5.7.1 Annual Environ Review 2005 06.02.01510 MMG Rosebery Revenue CY2010 05.07.01.01239 Annual Environ Review 2005 Section 1 05.07.01.01240 Annual Environ Review 2005 Section 2 06.02.01511 MMG Rosebery SHE CY2010 05.07.01.01241 Annual Environ Review 2005 Section 3 06.02.01512 MMG\_Generic Model Rosebery May2010 FINAL capex reduction Valuation 05.07.01.01242 Annual Environ Review 2005 Section 4 06.02.01513 OZ Rosebery 2009 Budget 5.7.2 Closure 06.02.01514 ROM YTD Costs 2007-08 Jun 05.07.02.01243 08-11-17 2008 C&R liability estimate - Golden Grove 05.07.02.01244 08-11-17 Golden Grove Closure and Reclamation Plan 06.02.01515 ROM YTD Costs December 2008 12.01.2009 06.02.01516 Rosebery Key consumable items and trends 05.07.02.01245 091107-MMGGG-SY 2009 C&R liability estimate Golden Grove1 06.02.01517 Sustaining Capital Forecast to 2030 (2)  $05.07.02.01246\ 091107\text{-MMGGG-SY-Golden}$  Grove Closure and Reclamation PlanV2 **6.3 Geology**06.03.01518 Exploration presentation Lorrigan Jan09 05.07.02.01247 9 Feb GG and Ave CandM 06.03.01519 Feb08\_tenure\_draped\_on\_MRV 05.07.02.01248 Attachment - Summary of Change 06.03.01520 long section 0809 05.07.02.01249 GoldenGve21dec09 06.03.01521 Long Section Jan 09 05.07.02.01250 Life of Mine Working Closure Plan - 2005 06.03.01522 tenement summary 05.07.02.01251 URS closure provision review\_Golden Grove\_051208 **6.3.1 Exploration Monthly Reports** 06.03.01.01523 0308 Rosebery Exp 5.7.3 ISO11001 Audits 06.03.01.01524 0408\_Rosebery\_Exp 06.03.01.01525 0508\_Rosebery\_Exp 05.07.03.01253 080704-OXGG-CM-ISO14001 Corrective Action 06.03.01.01526 0608 Rosebery Exp 06.03.01.01527 0708\_Rosebery\_Exp\_OZ 05.07.03.01254 8391\_08 Apr\_RES\_EMS\_Report\_Oxiana Golden Grove 06.03.01.01528 0808\_Rosebery\_Exp\_OZ 06.03.01.01529 0908 Rosebery Exp OZ 06.03.01.01530 1008\_Rosebery\_Exp\_OZ 6 OPERATIONS-ROSEBERY 06.03.01.01531 1108\_Rosebery\_Exp\_OZ 6.1 Overview 06.01.01468 2009 OZ Rosebery Plan 20.01.09 06.03.01.01532 1208\_Rosebery\_Exp\_OZ 6.3.2 Resource and Reserve 06.01.01469 2009 OZ Rosebery Plan NOTE Disregard Capex nos 06.03.02.01533 2008 Reserve Resource Statement 06.01.01470 554 Oz Minerals BBS 20081125 06.01.01471 578 MMG BBP FY 10 V2 100503 06.03.02.01534 2008\_ressummary\_fixed 06.03.02.01535 ASX Announcement - 2008 Resources Reserve 06.01.01472 578 MMG BBS CY 14 V2 100503 06.01.01473 MMG Exploration Forum 2010 (PPTminimizer) 06.03.02.01536 Estimated Economic Reserves December 2008 06.01.01474 Rosebery Strategy Board Summary\_Oct08 06.03.02.01537 Estimated Economic Reserves March 2008 06.01.01475 Rosebery Tenement Map 06.03.02.01538 Memo\_mining\_inventory\_Dec08 06.03.02.01539 Oz Rosebery RESOURCE STATEMENT\_july2008 06.01.01476 Visitors Presentation OZ Minerals 1 6.1.1 COO Reports 06.03.02.01540 resourcebalanceapr-jun2008 06.01.01.01477 90B03000 06.03.02.01541 Resource june2008ORM 06.01.01.01478 Rosebery COO Apr 09 06.03.02.01542 Review of Ore Reserves 06.01.01.01479 Rosebery COO Apr10 06.03.02.01543 Rosebery\_09June MROR Report\_Master 06.01.01.01480 Rosebery COO Aug 09 06.03.02.01544 Rosebery\_09June MROR Report\_Master 06.01.01.01481 Rosebery COO Dec09 06.03.02.01545 SRK Leapfrog studies 06.01.01.01482 Rosebery COO Feb 09 06.03.02.01546 Survey Data Void Model Declines 06.01.01.01483 Rosebery COO Feb10 06.03.02.01547 Upper levels resource above14L 06.03.02.02495 depleted models 06.01.01.01484 Rosebery COO Jan 09 06.01.01.01485 Rosebery COO Jan10 06.03.02.02496 depletion wireframes 06.01.01.01486 Rosebery COO July 09 A\$US 06.03.02.02497 holes3d 06.01.01.01487 Rosebery COO June 09

Appendix B - 6

06.03.02.02498 wireframes 06.05.01.01753 January 09 Treatment Report - Final **6.3.3 Reconciliations** 06.03.03.01548 monthrec07\_08 06.05.01.01754 January 10 Treatment Report - FINAL 06.05.01.01755 July 09 Treatment Report - FINAL 06.05.01.01756 June 09 Treatment Report FINAL 06.03.03.01549 reconciliation 06.03.03.01550 reconciliation\_07\_08 06.05.01.01757 Mar 09 Treatment Report - FINAL 06.03.03.01551 Reconcilliation monthly 08\_09 06.05.01.01758 March 10 Treatment Report - FINAL 06.05.01.01759 May 09 Treatment Report - FINAL revised 6.4 Mining 06.04.01691 307053 Rosebery Ventilation Review FINAL A 06.05.01.01760 May 10 Treatment Report - FINAL 06.04.01692 December schedule rates 2008 06.04.01693 Historical Electricity Consumption & Unit Price 06.05.01.01761 November 09 Treatment Report - FINAL 06.05.01.01762 October 09 Treatment Report - FINAL 06.04.01694 planned ug development 06.05.01.01763 September 09 Treatment Report - FINAL 06.04.01695 Prod by lens jul08-dec08 06.04.01696 Resource Rosebery pit (NSRPT gt 60) 06.05.01.01764 Treatment Report Apr 09 V2 6.5.2 Monthly Reports 06.04.01697 Revised Mine Budget DRAFT 06.05.02.01765 Monthly Report April 09 06.04.01698 surface\_topo 06.04.01699 UG PLANT EQUIPMENT REGISTER 06.05.02.01766 Monthly Report April 10 06.05.02.01767 Monthly Report August 09 6.4.1 Monthly Reports 06.05.02.01768 Monthly Report December 09 06.04.01.01700 1.January Rosebery period report 2009 (Corrected 1) 06.04.01.01701 Mine Technical Service Monthly Reports 06.05.02.01769 Monthly Report February 10 06.05.02.01770 Monthly Report January 10 06.04.01.01702 Monthly reports 2006 -07 06.05.02.01771 Monthly Report July 09 06.04.01.01703 Monthly reports 2007 - 08 06.05.02.01772 Monthly Report June 09 06.04.01.01704 Monthly reports 2008 - 09 06.05.02.01773 Monthly Report March 09 06.04.01.01705 Rosebery Monthly report April 2010 06.05.02.01774 Monthly Report March 10 06.04.01.01706 Rosebery Monthly report Dec 2009 06.05.02.01775 Monthly Report May 09 06.05.02.01776 Monthly Report May 10 06.04.01.01707 Rosebery Monthly report Feb 2010 06.04.01.01708 Rosebery Monthly report Jan 2010 with plan figs 3 06.05.02.01777 Monthly Report November 09 06.04.01.01709 Rosebery Monthly report Mar 2010 06.05.02.01778 Monthly Report October 09 06.04.01.01710 Rosebery Monthly report Nov 2009 06.05.02.01779 Monthly Report September 09 06.04.01.01711 Rosebery Monthly Reports 6.5.3 Plant Upgrade Documents 06.04.01.01712 Rosebery period report April 2009 new 06.05.03.01780 Plant Upgrade Draft Report Complete PDF\_A Vol 1 06.05.03.01781 Plant Upgrade Draft Report Complete PDF\_A Vol 2 06.05.03.01782 Plant Upgrade Draft Report Complete PDF\_A Vol 3 06.04.01.01713 Rosebery period report Aug 2009 06.04.01.01714 Rosebery period report Feb 2009 Final 06.04.01.01715 Rosebery period report July 2009 (A 06.05.03.01783 Plant Upgrade Draft Report Complete PDF\_A Vol 4 06.04.01.01716 Rosebery period report June 2009 06.05.03.01784 ZRM Prefeasibility Study FINAL 06.04.01.01717 Rosebery period report March 2009 new 6.5.4 Tailings Waste Dump and Stock Pile 06.04.01.01718 Rosebery period report May 2009 new sat 11 06.05.04.01785 ATC Report Dry Stacking of Tailings 06.04.01.01719 Rosebery period report Oct 2009 06.05.04.01786 Rosebery Tailings Dam Studies 06.05.04.01787 Rosebery Tailings Geochem 28Nov2008 06.04.01.01720 Rosebery period report Sep 2009 06.05.04.01788 TSF Resources 1986 Report 6.4.2 Geotech 06.04.02.01721 4622 ESMP Audit Memo 240609 6.6 Projects and Studies 06.04.02.01722 Bobadil & 2-5 Dam Report 06.06.01789 200901 Rosebery Plant Upgrade Studies 06.04.02.01723 Bobadil Wall lift 09 06.06.01790 Rosebery Risk Review and Mitigation Report \_Distilled 06.04.02.01724 Final Audit Report 06.06.01791 Rosebery UG BM Study Debrief 06.06.01792 Rosebery Upgrade Strategy 06.06.01793 Worley Parsons Prefeasibility Study FINAL Dec 07 06.04.02.01725 Geotech Bobadil 0809 06.04.02.01726 Geotech Reports 06.04.02.01727 53KLENS\_OPTIONS\_DRAFT\_V1\_2003 06.06.01794 ZRM Strategy PFS Outcomes Board Feb 2008 rev3 ROSEBERYOCT20\_47-6.6.1 Geotech 06.04.02.01728 Seismic event register Aug 1 08 to Feb 10 09(excl blasts) 06.06.01.01795 Acoustic Emisions -Rosebery-Nov06 06.06.01.01796 Acoustic Emissions Study Stage 2-Rosebery-Oct07 06.04.02.01729 Seismic Monitoring System at Oz Minerals 06.06.01.01797 Coffeys LOM AUDIT2006\_7 06.06.01.01798 GS2006JUL30 ROSEBERY LOM SEQUENCE 6.5 Processing 06.05.01737 Historical Mill Performance 06.06.01.01799 Report on Cemented Rock Fill Review STUDY08 Draft 06.05.01738 Mill Physicals 06.06.01.01800 ZRM Early-age Test Report 06.05.01739 Mine Physicals 6.6.2 Haulage Study 06.05.01740 MTS Metres CY2010 06.06.02.01801 Appendix 1 - Haulage Optimisation Checklist Draft.doc 06.05.01741 Que River Physicals CY2010 06.06.02.01802 Appendix 2 - Haulage Optimisation Matrix Draft.doc 06.05.01742 Report on Marcy SAG Mill Mechanical Inspection Rev A 06.06.02.01803 Appendix 3 - Mining Method Optimisation Checklist Issued 23-6-08 06.05.01743 Rosebery Comminution Asset Review Report GR 06.06.02.01804 Appendix 4 - Mining Method Optimisation Matrix Engineering 06.05.01744 Rosebery Concentrate Specifications 06.06.02.01805 Appendix 5 Haulage Optimisation Cost Summaries 06.05.01745 Rosebery CY2010 metal production 06.05.01746 Rosebery Refurbishment Study - Rev B Schedule update 080516.beh 06.05.01747 Rosebery refurbishment Works Summary Appendix A 06.06.02.01806 Zinifex Study Report - Draft.doc 6.5.1 EOM Metbalance 6.6.3 LOM Mining Studies 06.05.01.01748 April 10 Treatment Report - FINAL 06.06.03.01807 080328 Item 8.7 Rosebery Ventilation Upgrade 06.05.01.01749 August 09 Treatment Report - FINAL 06.06.03.01808 ZRM ROMP Hill of Value Modelling 20080808 06.05.01.01750 December 09 Treatment Report - FINAL 06.06.03.01809 ZRM Vent Presentation COO FINAL (2) 06.05.01.01751 Feb 09 Treatment Report FINAL 06.05.01.01752 February 10 Treatment Report - FINAL 06.06.04.01810 080808-4601-002 PB to GN Open Pit Assessment

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Appendix B - 7

06.06.04.01811 Other open pit Whittle results 06.07.04.01886 Hercules update - signed 06.06.04.01812 Resource Rosebery pit (NSRPT gt 60) 06.07.04.01887 Mine Closure Plan App A EPN 7153\_1 06.06.04.01813 Whittle Results Rose Pit Run1 v2 06.07.04.01888 Mine Closure Plan App B Land Use Class Descriptions 06.07.04.01889 Mine Closure Plan App C Risk Management Procedure 06.06.04.01814 Whittle Results Rose Pit Run1 v3 06.06.04.01815 Whittle Results Rose Pit Run4 v2 06.07.04.01890 Mine Closure Plan App D Risk Register Final 06.06.04.01816 Whittle Results Rose Pit Run4 06.07.04.01891 Mine Closure Plan App E Major Infrastructure Decommissioning Matrix 6.6.5 Rsoebery Vent Shaft Project Report 06.07.04.01892 Mine Closure Plan Main Report 06.06.05.01817 10Project Progress Summary NDC Report-October 09 06.07.04.01893 Mine Closure Plan v2 06.06.05.01818 11Project Progress Summary NDC Report-November 06.07.04.01894 MMG Rosebery Closure Liability Estimate 30 June 06.06.05.01819 12Project Progress Summary NDC Report-December 09 06.07.04.01895 Rosebery update - signed 06.06.05.01820 1Project Progress Summary NDC Report-January 10 06.07.04.01896 Zinifex\_Rosebery\_Mine\_Closure\_Volume\_2 (Update 06.06.05.01821 2Project Progress Summary NDC Report-February 10 2009) 6.7.5 Safety 06.06.05.01822 3Project Progress Summary NDC Report-March 10 06.06.05.01823 4 Project Progress Summary NDC Report-April 10 06.07.05.01897 Events Incidents Summary 2004 2005 06.06.05.01824 5 Project Progress Summary NDC Report-may10 06.07.05.01898 Events Incidents Summary 2006 2007 06.07.05.01899 Events-Incidents Summary 2008 06.06.05.01825 6NDCProgress Report29-june2009 06.06.05.01826 7NDCProgress Report29-jul2009 06.07.05.01900 Injury Frequency Rate Graphs 2004-5 06.06.05.01827 8Project Progress Summary NDC Report-August 09 06.07.05.01901 Injury Frequency Rate Graphs 2006-7 06.07.05.01902 Injury Frequency Rate Graphs 2008 06.06.05.01828 9Project Progress Summary NDC Report-September 06.07.05.01903 Significant Safety Incident Statistics 2004 2008 6.6.6 South Hercules 06.07.05.01904 Workers Comp Data 2004 2008 06.06.06.01829 Appendix 2.Location and Previous Work 06.06.06.01830 Appendix 3.Geological and Resource Appendices 7 OPERATIONS-SEPON 06.06.06.01831 Appendix 4.Geotechnical App 06.06.06.01832 Appendix 5.Environmental appendices **7.1 Overview** 07.01.02020 Ambassadors Visit November 2008 06.06.06.01833 Appendix 6.Metalurgical Appendices 07.01.02021 LXML Performance Reporting Jan09 06.06.06.01834 Appendix 7.Mine Design and Optimisation Appendix 07.01.02022 Reconciliation data 2008 9 06.06.06.01835 Appendix 8.Costing 07.01.02023 Sepon Update 06.06.06.01836 Appendix 9.Financial and legal appendices 7.1.1 COO Reports 06.06.06.01837 Development of South Hercules Mine 07.01.01.02024 COO Report May 10 06.06.06.01838 DRAFT Final Review South Hercules Mining Study 07.01.01.02410 COO Report Apr09 07.01.01.02411 COO Report Apr10 06.06.06.01839 South Hercules Mining Study Worksheets D Barrell 07.01.01.02412 COO Report August09 Aua 2008 07.01.01.02413 COO Report Dec09 06.06.06.01840 Sth Herculese 07.01.01.02414 COO Report Feb10 6.7 SHEC 07.01.01.02415 COO Report Jan10 06.07.01841 2006 site photo 07.01.01.02416 COO Report July09 06.07.01842 20080820 OZ Minerals Asbestos audit report 07.01.01.02417 COO Report June09 06.07.01843 210047755\_2\_Rosebery OHS Compliance Obligations 07.01.01.02418 COO Report Mar10 Register (two indexes) 07.01.01.02419 COO Report May 10 06.07.01844 27. Annual Dam Surv Report 06.07.01845 August 2008 ISO14001-AS4801 Audit 07.01.01.02420 COO Report May09 07.01.01.02421 COO Report Nov09 06.07.01846 Copy of Data review 2008 & 2009 for EPA 07.01.01.02422 COO Report Oct09-Final-181109 07.01.01.02423 COO Report Sept09-Final 06.07.01847 Copy of SR09\_2\_Environment\_Workbook 06.07.01848 Data Request AMC 160610 7.2 Business Plan 06.07.01849 EMP Review FY 2009 07.02.02025 LXML Budget Report 2010 06.07.01850 Environmental Management System Roadmap 06.07.01851 FY 2009 Review Addendum\_Final to EPA 07.02.02026 MMG\_Generic Valuation Model\_LXML\_Apr2010\_FINAL 07.02.02499 LXML 2010 Budget V1 06.07.01852 GHD Lead Health Risk Assessment Report May 08 07.02.02500 LXML PReporting 2010 BudgetV1 06.07.01853 MMG Rosebery WCLs 300610 (final) **7.3 Geology** 07.03.02027 Sepon Copper Projects Dec 08m 06.07.01854 Rosebery Open Cut - 27-7-09 06.07.01855 Rosebery Open Cut Inspection - 3-6-09 07.03.02028 Sepon MEPA History Slides 20050900 06.07.01856 Water licence 07.03.02029 Sterilisation Program Reports 6.7.3 Environment 07.03.02030 THK Draft General Layout Mar08 A3 Land 12000 06.07.03.01872 Environmental Managment Plan Review Sept 08 07.03.02031 TKH Copper Project Pit Names 15000 06.07.03.01873 Environmental Managmentt Roadmap 07.03.02032 TKN P1 Proposed drill sites\_mapping points\_grids 06 07 03 01874 Environmental Protection Notice 7.3.2 Resource and Reserve 07.03.02.02033 200907 MMG LXML SEP - Au Release Notes - Jun09 V3 06.07.03.01875 Final EPN 7153.1 06.07.03.01876 Group Environmental Audit 06.07.03.01877 Rosebery Environmental Issues Memo 07.03.02.02034 200907 MMG LXML SEP - Cu Release Notes - Jun<br/>09  $\ensuremath{\text{V2}}$ 06.07.03.01878 URS Report 06.07.03.01879 URS Update Letter 07.03.02.02035 2009 DKY 6.7.4 Mine Closure 07.03.02.02036 2009\_TKS\_whole 06.07.04.01880 2009 Summary of Change-Avebery 07.03.02.02037 2009\_VAT 06.07.04.01881 2009 Summary of Change-Hercules 07.03.02.02038 BDA Review Sepon Resource-Reserve Estimate November 2008 Rev6 06.07.04.01882 2009 Summary of Change-RoseberyV2 06.07.04.01883 Addendum to Rosebery MCP 08 07.03.02.02039 BDA Review Sepon Resource-Reserve Estimate 06.07.04.01884 Hercules Closure Priorities and Costs 07.03.02.02040 Houay Yeng - 2008 Gold Resource Report - FINAL 06.07.04.01885 Hercules Decommissoining Plan

Appendix B - 8

Appendix B - 9

### MINMETALS RESOURCES LIMITED Competent Person's Report on Minerals and Metals Group

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07.03.02.02041 JORC Summary Sheets
                                                                               07.04.02098 Technical mining reports
07.03.02.02042 Khanong 2008
                                                                              07.04.02099 WTSF Stage 1 and 2 Construction Report
07.03.02.02043 Khanong_Resource_Report_2008 - Draft - with
                                                                               7.4.1 Reports
Appendices
07.03.02.02044 MMG LXML SEP - Au Compilation - Jun09 v2
                                                                               07.04.01.02100 2007 Annual Operations Report
                                                                               07.04.01.02101 Business Analysis Report Dec 06
07.03.02.02045 MMG LXML SEP - CuOx Compilation - Jun09 v1
                                                                               07.04.01.02102 Business Analysis Reports Additional
07.03.02.02046 OZ LXML SEP - Au Release Notes - Jun08 07.03.02.02047 OZ LXML SEP - Cu Release Notes - Jun08
                                                                              07.04.01.02103 Business Analysis Reports
                                                                               07.04.01.02104 Capital Reports and Budgets
07.03.02.02048 Phavat North 2008 Resource complete report
                                                                              07.04.01.02105 Monthly Operations Reports
07.04.01.02106 Operations Monthly Report Apr 2010
07.03.02.02049 PHB - 2008 Copper Resource Statement - DRAFT
07.03.02.02050 Primary Gold Resource modeling Report 290308v1-
                                                                               07.04.01.02107 Operations Monthly Report April 2009
                                                                               07.04.01.02108 Operations Monthly Report December 2009
07.03.02.02051 Proposed KHN Reserve Statement dated 10 Dec 2007
                                                                              07.04.01.02109 Operations Monthly Report Feb 2009 Edit
07.03.02.02052 Resource and Reserve data - 17062010
                                                                               07.04.01.02110 Operations Monthly Report Feb 2010
07 03 02 02053 Resource breakdown
                                                                               07.04.01.02111 Operations Monthly Report Jan 2010
07.03.02.02054 Resource Notes and Statements
                                                                              07.04.01.02112 Operations Monthly Report January 2009
07.03.02.02055 Sepon 2008 Resource Statement
                                                                               07.04.01.02113 Operations Monthly Report July 2009
07.03.02.02056 Sepon KHN and TKN Cu Reserve June 2007
                                                                               07.04.01.02114 Operations Monthly Report June 2009
07.03.02.02057 Sepon Reserve Statement as at June 2007
                                                                              07.04.01.02115 Operations Monthly Report Mar 2010
07.03.02.02058 Thengkham Area Pit Inventories
                                                                               07.04.01.02116 Operations Monthly Report May 2009
07.03.02.02059 Thengkham North 2007
                                                                               07.04.01.02117 Operations Monthly Report May 2010
07.03.02.02060 Thengkham North Reserves - Orebody Model
                                                                              07.04.01.02118 Operations Monthly Report November 2007
07.03.02.02501 Sepon Reserves and Inventory Status at End Dec 2009
                                                                               07.04.01.02119 Operations Monthly Report November 2009
7.3.3 Reconciliations
                                                                               07.04.01.02120 Operations Monthly Report October 2009
07.03.03.02061 End of Month Geology Reconciliation Procedure -
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                                                                               07.04.01.02122 Sepon Annual Report 2009
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                                                                               07.04.01.02123 Sepon Monthly Report August 2009
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                                                                              07.04.01.02124 Sepon Operations Monthly Report March 2009
07.03.04.02063 Khanong Acid Rock Management and Geotech Group
                                                                               07.04.01.02503 Operations Monthly Report June 2010
Studies
Executive Summary v1
                                                                              07.05.02125 Further Testwork on Copper Ores from Pha Bing
07.03.04.02064 Khanong OP Geotechnical Review Report Oct 2008
                                                                               07.05.02126 Leaching of Copper from Exploratory Drill Core Samples
07.03.04.02065 Khanong Pit Operability Study Dec 08
                                                                               07.05.02127 Process Deign Criteria Sepon
07.03.04.02066 Khanong Pit Slope geotech Review Com
                                                                              07.05.02128 Schemtaic Flow Diagram - Sepon Copper Project Overall
07.03.04.02067 Pit Geotechnical Design Issues
07.03.04.02068 THK Nth Geotech Drill Collar Locations KG
                                                                               07.05.02129 Schemtaic Flow Diagram - Sepon Gold Project Overall
07.03.04.02069 THK Nth Pit A Pits 1st Geotech Drill Sites
07.03.04.02070 THK Nth Pit A Pits Tracks Mapping Proposed Geotech Drill Sites A3 Land 2500
                                                                              07.05.02130 Sepon Process Flowsheet Overview GoL
                                                                               07.05.02424 100507 GRichmond to RHooper
PhabingThengkham testwork
7.3.5 Exploration
07.03.05.02071 Analysis of a Mo Bearing Sample May 2008
                                                                               07.05.02425 Processing Presentation Jun10
07.03.05.02072 Assessment of Primary Copper
                                                                               7.6 Projects and Studies
07.03.05.02073 Drill Section Diagrams - Thengkham South
                                                                               07.06.02131 Aurifex Report - Review of Preliminary Primary Ore
07.03.05.02074 Khanong Pacrim 99 paper by Stef Loader
07.03.05.02075 Nevada Paper Smith Olberg, Manini
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07.03.05.02076 Pacrim Sepon Cu deposits 20081113
                                                                               07.06.02132 Copper Expansion Prefeasibility Study
07.03.05.02077 RJH Sepon Structural framework Presentation
                                                                               07.06.02133 Definitive Feasibility Report - Sepon Copper Project -
                                                                               Bateman Metals
07.03.05.02078 Strat column revised by mark and mike - A3
                                                                              07.06.02134 DFS (Oct 2001) - Drawings
07.03.05.02079 The Sepon Gold Deposits Paper
                                                                               07.06.02135 DFS (Oct 2001) - Section 1 - 3
7.4 Mining
07.04.02080 Asset Register LXML
                                                                               07.06.02136 DFS (Oct 2001) - Section 4 - 13
                                                                              07.06.02137 Diagram - Direct Cyanidation
07.04.02081 Capital Budget 2009 TM2
                                                                              07.06.02138 G. Hookey Nov 2007 Sediment Characterisation and Transport Study
07.04.02082 Cut Off Grades
07.04.02083 Hauling distance
                                                                               07.06.02139 Golder Sept 2008 Factual Hydrogeological Report for Copper Expansion Project
07.04.02084 Hydrogeology
07.04.02085 Khanong Ore Type Explanation
                                                                              07.06.02140 Independent Technical Advisor Completion Test
07.04.02086 Lane Xang Minerals Limited Sepon Mine Khanong Copper
                                                                               07.06.02141 Operational Summary - September 2007 - BDA
07.04.02087 LXML Budget 2009
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                                                                              07.06.02143 Sepon Copper and Gold Expansion Projects Mid Project Review
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07.04.02092 ROM layout
                                                                               07.06.02146 Sepon Gold Project Monthly Report - KDG - December
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                                                                               2004
07.04.02094 Sepon_lay_out_A0_081209
                                                                               07.06.02147 Sepon Monthly reports
07.04.02095 Stages Khanong diagram
                                                                              07.06.02148 Sepon Primary Gold Ore Testwork Report - J MacIntrye
07.04.02096 Stockpile Management
                                                                              07.06.02149 Sepon Project Development Group 3 Year Plan
07.04.02097 Tailings Storage Facility No. 1 Stage 4 (Final) Construction Report
                                                                              07.06.02150 Sterilisation Program Reports
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**8.1 Overview** 08.01.02274 100304 Dugald River Project Memo

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### 8.1.1 Feasibility Study

08.01.01.02278 Vol 1 Executive Summary Rev 0 08.01.01.02279 Vol 2 Sect 1-4

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08.01.01.02285 Vol 3 Financial Analysis Rev B

### 8.2 Business Plan

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8.3 Geology 08.03.02287 00 Geology Index

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08.03.02294 07 Lithology 20090108 08.03.02295 08 Current Gelogical Sections

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08.04.02298 Design Wireframe Animation Files

08.04.02299 Dewatering Study - CRE

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08.05.02313 Vol\_2\_Sect\_7\_Process\_Plant

#### 8.6 Infrastructure

08.06.02314 Powerline

08.06.02315 TSF

AMC210063-10rpt\_1 101122

Appendix B - 10

# APPENDIX C CONTRIBUTORS TO THE REPORT

The contributors to this report include the following:

Name	Qualifications	Affiliations	Involvement
Project Managemer	nt & Peer Review		
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Pat Stephenson	BSc (Hons) (Geology)	AMC Director/Principal Geologist	Peer reviewer.
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Brad Watson	BEng (Hons) (Mining Engineering), BComm (Finance)	AMC Senior Mining Engineer	Mining and Modelling scenarios.
Mark Berry		AMC Principal Geologist	Geology and Resources.
Tony Showell	B App Sc (Metallurgy)	Tony Showell & Associates, Metallurgist	Metallurgy
Chris John	BSc (Agric) (Hons) PhD	John Consulting Service, Director	Environment.
Century			
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Rod Webster	BSc (Applied Geology)	AMC Principal Geologist	Geology and Resources.
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Chris John	BSc (Agric) (Hons) PhD	John Consulting Service, Director	Environment.
Rosebery		.I	1
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Golden Grove	Ш	II.	1
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Avebury			
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Tracie Burrows	B App Sc (App. Geol)	AMC Principal Geologist	Geology and Resources.

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Dugald River			1
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Chris John	BSc (Agric) (Hons) PhD	John Consulting Service, Director	Environment.
Exploration Prop	erties	•	
Peter Stoker	BSc, Dip Ed	AMC Principal Geologist	Exploration.

### **VALUATION REPORT**

The following is the text of a report from Grant Samuel & Associates, the Competent Evaluator, prepared in compliance with Chapter 18 of the Listing Rules and for the sole purpose of incorporation in this circular.

### GRANT SAMUEL

GRANT SAMUEL & ASSOCIATES

LEVEL 6

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22 November 2010

The Directors
Minmetals Resources Limited
Twelfth Floor, China Minmetals Tower
79 Chatham Road South
Tsimshatsui
KOWLOON
Hong Kong

Dear Directors

### Valuation Report

### 1 Introduction

Minerals and Metals Group ("MMG") consists of a portfolio of mining assets and exploration interests, acquired from OZ Minerals Limited in June 2009. These assets and interests are owned, indirectly, by a holding company named Album Resources Private Limited ("Album Resources"). China Minmetals Corporation ("CMN") is the ultimate sole shareholder of Album Resources.

The major assets of Album Resources ("Mineral Assets") are:

- the Sepon copper/gold project in Laos;
- the Century zinc/lead mine in Queensland;
- the Golden Grove copper/zinc mine in Western Australia;
- the Rosebery lead/zinc mine in Tasmania;
- the Avebury nickel mine in Tasmania (currently on care and maintenance);
- the Dugald River zinc project in Queensland; and
- the Izok Lake and High Lake prospects in the Nunavut territories of northern Canada.

Minmetals Resources Limited (the "Company") is a Hong Kong-incorporated company, listed on the main board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange"). The Company's principal activities are trading in non-ferrous metals, production of alumina and the manufacture and distribution of aluminium and copper products. The Company is majority-controlled by CMN. CMN and the Company are contemplating a transaction whereby the Company, through a wholly-owned special purpose vehicle, All Glorious Limited, will acquire Album Resources from Album Enterprises Limited, a wholly owned subsidiary of CMN ("Acquisition").

The Directors of the Company have appointed Grant Samuel & Associates ("Grant Samuel") as the Competent Evaluator to prepare a report ("Valuation Report") in connection with the Acquisition. The Valuation Report is to set out a valuation of Album Resources, including a valuation of the Mineral Assets, that complies Chapter 18 of the Rules Governing the Listing of Securities on the Stock Exchange (the "Listing Rules"), including, but not limited to, Rules 18.24 and 18.34 of the Listing Rules ("Chapter 18 Valuation"). The Chapter 18 Valuation is as at 30 June 2010 but is based on assumptions, such as forecast commodity prices and exchange rates, as at the date of the Valuation Report.

AMC Consultants Pty Ltd ("AMC") was appointed by the Company as the Competent Person and to provide specialist technical advice on the Mineral Assets to the Company and to prepare a Competent

GRANT SAMUEL & ASSOCIATES PTY LIMITED ABN 28 050 036 372 AFS LICENCE NO 240985

. . .

Person's Report in relation to the valuation of MMG. AMC's review included a review of the reserves, production schedules and operating and capital costs.

### 2 Chapter 18 Valuation

For the purposes of the Chapter 18 Valuation, Grant Samuel has valued MMG in the range US\$1,533-1,741 million. The Chapter 18 Valuation is summarised below:

MMG – Chapter 18 Valuation Summa	ary (US\$ million)	
	Value l	Range
	Low	High
Sepon (MMG's 90% interest)	918	972
Century	1,000	1,100
Rosebery	195	215
Golden Grove	195	215
Other mineral assets	-	-
Other assets	144	148
Corporate costs	(150)	(140)
Enterprise value	2,302	2,510
Net debt	(769)	(769)
Chapter 18 Valuation	1,533	1,741

The Chapter 18 Valuation can in effect only reflect the estimated value of the reserves associated with Mineral Assets, adjusted for non mineral assets and liabilities. There are currently no reserves attributable to Avebury, Dugald River or MMG's exploration assets. Accordingly, no value has been attributed to these assets for the purposes of the Chapter 18 Valuation. Similarly, MMG's life of mine plans for, in particular, Rosebery and Golden Grove contemplate the mining of substantial mineralisation beyond current reserves and AMC has concluded that it is reasonable to expect that operations at these mines will continue well beyond the exhaustion of current reserves. However, the valuations set out above are limited to estimates of the value attributable to reserves as at 30 June 2010, estimated by AMC on the basis of reserves stated as at 30 June 2009 adjusted for depletion from subsequent production. As a result, the Chapter 18 Valuation of MMG does not in any way represent an estimate of the market value of MMG.

The mineral assets for the Chapter 18 Valuation have been valued based on a discounted cash flow analysis. The production rates and operating and capital costs were reviewed in detail by AMC. The discounted cash flow models project cash flows from 1 July 2010 until the end of the mines' lives (which are assumed to end with the depletion of current reserves).

### 3 Other Matters

This report is general financial product advice only and has been prepared without taking into account the objectives, financial situation or needs of individual shareholders of the Company.

The Valuation Report has been prepared for the benefit of the Directors and shareholders of the Company and is to be appended and form part of the shareholder circular to be issued in connection with the Acquisition.

Grant Samuel makes no opinion on the Acquisition, in particular whether the Directors should recommend the Acquisition to shareholders or the shareholders should vote in favour of the Acquisition. In compliance with the Listing Rules, an Independent Financial Adviser ("IFA") has been appointed to provide a recommendation to the independent board committee of the Company and independent shareholders of the Company as to whether or not the terms of the Acquisition are fair and reasonable and whether the Acquisition is in the interests of the Company and its shareholders as a whole and advising shareholders on how to vote.

This letter is a summary of the Valuation Report. The full Valuation Report from which this summary has been extracted is attached and should be read in conjunction with this summary.

The valuation is made as at the date of this letter and reflects circumstances and conditions as at that date.

Yours faithfully GRANT SAMUEL & ASSOCIATES PTY LIMITED

Great Samel & Associates



# Valuation Report in relation to the Proposal to Acquire Minerals and Metals Group

Grant Samuel & Associates Pty Limited (ABN 28 050 036 372)

November 2010

GRANT SAMUEL & ASSOCIATE

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### **Financial Services Guide**

This FSG is provided for the purposes of the Corporations Act 2001 (Cth) governing the provision of financial product advice in Australia

Grant Samuel & Associates Pty Limited ("Grant Samuel") holds Australian Financial Services Licence No. 240985 authorising it to provide financial product advice on securities and interests in managed investments schemes to wholesale and retail clients.

The Corporations Act, 2001 requires Grant Samuel to provide this Financial Services Guide ("FSG") in connection with its provision of an independent expert report which is included in a document ("Disclosure Document") provided to members by the company or other entity ("Entity") for which Grant Samuel prepares the report. In the present circumstance, the report is a competent evaluator's report ("Report") which is to be released on the main board of The Stock Exchange of Hong Kong Limited.

Grant Samuel does not accept instructions from retail clients. Grant Samuel provides no financial services directly to retail clients and receives no remuneration from retail clients for financial services. Grant Samuel does not provide any personal retail financial product advice to retail investors nor does it provide market-related advice to retail investors.

When providing Reports, Grant Samuel's client is the Entity to which it provides the Report. Grant Samuel receives its remuneration from the Entity. In respect of the Report for Minmetals Resources Limited (the "Company") in relation to the proposal to acquire Album Resources Limited ("Album Resources") (the "Valuation Report"), Grant Samuel will receive a fixed fee of US\$900,000 plus reimbursement of out-of-pocket expenses for the preparation of the Report (as stated in Section 7.3 of the Valuation Report).

No related body corporate of Grant Samuel, or any of the directors or employees of Grant Samuel or of any of those related bodies or any associate receives any remuneration or other benefit attributable to the preparation and provision of a Report.

Grant Samuel is required to be independent of the Entity in order to provide a Report. The guidelines for independence in the preparation of Reports are set out in Regulatory Guide 112 issued by the Australian Securities & Investments Commission on 30 October 2007. The following information in relation to the independence of Grant Samuel is stated in Section 7.3 of the Valuation Report:

"Grant Samuel believes it is independent for the purposes of preparing the report.

Grant Samuel, and each of Stephen Cooper, Sarah Morgan and Cameron Stewart, comply with the independence requirement under Rule 18.22 of the Listing Rules. Specifically, Grant Samuel and each of Stephen Cooper, Sarah Morgan and Cameron Stewart is independent of the Company, its directors, senior management and advisers and:

- do not have any economic or beneficial interest (present or contingent) in any of the assets being reported on;
- will not be remunerated with a fee dependent on the findings of this Valuation Report or the report dated 27 September 2010 setting out the market valuation of MMG;
- in the case of each of Stephen Cooper, Sarah Morgan and Cameron Stewart, is not an officer, employee or proposed officer of the Company or any group, holding or associated company of the Company; and
- in the case of Grant Samuel, is not a group, holding or associated company of the Company. None of Grant Samuel's officers is an officer or proposed officer of any group, holding or associated company of the Company.

Grant Samuel had no part in the formulation of the Acquisition. Its only role has been the preparation of this report.

Grant Samuel will receive a fixed fee of US\$900,000 for the preparation of this report. This fee is not contingent on the outcome of the Acquisition. Grant Samuel's out of pocket expenses in relation to the preparation of the report will be reimbursed. Grant Samuel will receive no other benefit for the preparation of this report."

Grant Samuel has internal complaints-handling mechanisms and is a member of the Financial Ombudsman Service, No. 11929. If you have any concerns regarding the Valuation Report, please contact the Compliance Officer in writing at Level 19, Governor Macquarie Tower, 1 Farrer Place, Sydney NSW 2000. If you are not satisfied with how we respond, you may contact the Financial Ombudsman Service at GPO Box 3 Melbourne VIC 3001 or 1300 780 808. This service is provided free of charge.

Grant Samuel holds professional indemnity insurance which satisfies the compensation requirements of the Corporations Act, 2001.

Grant Samuel is only responsible for the Valuation Report and this FSG. Complaints or questions about the Disclosure Document should not be directed to Grant Samuel which is not responsible for that document. Grant Samuel will not respond in any way that might involve any provision of financial product advice to any retail investor.

GRANT SAMUEL & ASSOCIATES PTY LIMITED ABN 28 050 036 372 AFS LICENCE NO 240985

### **Table of Contents**

1	Bacl	kground	1
2	Scor	oe of the Valuation Report	2
	2.1	Purpose of the Valuation Report	
	2.2	Basis of Evaluation	
	2.3	Sources of the Information	3
	2.4	Limitations and Reliance on Information	3
3	Drof	ile of MMG	6
3	3.1	Overview	
	3.2	Resources, Reserves and Production	
	3.3	Financial Performance	
	3.4	Financial Position	
	3.5	Commodity Hedging	
	3.6	Taxation Position	
			4.0
4		ile of MMG Assets	
	4.1	Sepon	
	4.2	Century	
	4.3	Rosebery	
	4.4	Golden Grove	
	4.5	Avebury	
	4.6	Projects and Exploration	37
5	Valu	ation Methodology	
	5.1	Overview	
	5.2	Valuation Assumptions	
	5.3	Resources Projects and Optionality	44
6	Cha	pter 18 Valuation of MMG	46
-	6.1	Summary	
	6.2	Sepon	
	6.3	Century	
	6.4	Rosebery	
	6.5	Golden Grove	
	6.6	Other Mineral Assets	
	6.7	Other Assets	
	6.8	Corporate Costs	
	6.9	Net Debt	
7	Oue	lifications, Declarations and Consents	55
,	7.1	Oualifications	
	7.2	Disclaimers	
	7.3	Independence	
	7.3 7.4	Declarations	
	7.5	Consents	
	7.6	Other	

Appendix 1 - Discount Rates Appendix 2 - Overview of the Zinc and Copper Markets

### 1 Background

Minmetals Resources Limited (the "Company") is a Hong Kong-incorporated company, listed on the main board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange"). The Company's principal activities are trading in non-ferrous metals, producing alumina and the manufacture and distribution of aluminium and copper products. The Company is majority-controlled by China Minmetals Non-Ferrous Metals Company Limited ("CMN").

CMN and the Company are contemplating a transaction whereby the Company, through a wholly-owned special purpose vehicle, All Glorious Limited, will acquire Album Resources Private Limited ("Album Resources"), an indirect wholly owned subsidiary of CMN, from Album Enterprises Limited, a wholly owned subsidiary of CMN ("Acquisition").

Album Resources owns a portfolio of mining assets and exploration interests, acquired from OZ Minerals Limited ("OZL") in June 2009. This portfolio of assets is referred to as the Minerals and Metals Group ("MMG").

The major assets of Album Resources ("Mineral Assets") are:

- the Sepon copper/gold project in Laos;
- the Century zinc/lead mine in Queensland;
- the Golden Grove copper/zinc mine in Western Australia;
- the Rosebery lead/zinc mine in Tasmania;
- the Avebury nickel mine in Tasmania (currently on care and maintenance);
- the Dugald River zinc project in Queensland; and
- the Izok Lake and High Lake prospects in the Nunavut territories of northern Canada.

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### 2 Scope of the Valuation Report

### 2.1 Purpose of the Valuation Report

Under the Rules Governing the Listing of Securities on the Stock Exchange (the "Listing Rules"), specifically Listing Rule 18.09, a mineral company proposing to enter into a Relevant Notifiable Transaction in which the assets are solely or mainly mineral assets must include a valuation report which must be distributed to shareholders as part of the relevant circular. The valuation report is defined as a public valuation report prepared by a Competent Evaluator on mineral assets in compliance with Chapter 18 and the applicable Reporting Standards.

A Relevant Notifiable Transaction is defined as:

- major transaction a transaction or a series of transactions (aggregated under rules 14.22 and 14.23) by a listed issuer where any percentage ratio is 25% or more, but less than 100% for an acquisition or 75% for a disposal;
- very substantial disposal a disposal or a series of disposals (aggregated under rules 14.22 and 14.23) of assets (including deemed disposals referred to in rule 14.29) by a listed issuer where any percentage ratio is 75% or more;
- very substantial acquisition an acquisition or a series of acquisitions (aggregated under rules 14.22 and 14.23) of assets by a listed issuer where any percentage ratio is 100% or more; and
- reverse takeover an acquisition or a series of acquisitions of assets by a listed issuer which, in the opinion of the Exchange, constitutes, or is part of a transaction or arrangement or series of transactions or arrangements which constitute, an attempt to achieve a listing of the assets to be acquired and a means to circumvent the requirements for new applicants set out in Chapter 8 of the Exchange Listing

The Company expects that the Acquisition will constitute a very substantial acquisition by the Company. Therefore, a valuation report prepared by a Competent Evaluator will be required.

The Directors of the Company have appointed Grant Samuel & Associates ("Grant Samuel") as the Competent Evaluator to prepare a report ("Valuation Report") in connection with the Acquisition. The Valuation Report is to set out a valuation of Album Resources, including a valuation of the Mineral Assets, that complies with Chapter 18 of the Listing Rules, including, but not limited to, Rules 18.24 and 18.34 of the Listing Rules ("Chapter 18 Valuation").

The Valuation Report has been prepared for the benefit of the Directors and shareholders of the Company and is to be appended and form part of the shareholder circular to be issued to the shareholders of the Company in connection with the Acquisition.

This report is general financial product advice only and has been prepared without taking into account the objectives, financial situation or needs of individual shareholders of the Company.

Grant Samuel makes no opinion on the Acquisition, in particular whether the Directors should recommend the Acquisition to shareholders or the shareholders should vote in favour of the Acquisition. In compliance with the Listing Rules, an Independent Financial Adviser ("IFA") has been appointed to provide a recommendation to the independent board committee of the Company and independent shareholders of the Company as to whether or not the terms of the Acquisition are fair and reasonable and whether the Acquisition is in the interests of the Company and its shareholders as a whole and advising shareholders on how to vote.

### 2.2 Basis of Evaluation

The Chapter 18 Valuation has been prepared in compliance with Chapter 18 of the Listing Rules. In particular, Listing Rule 18.34 states that:

- any valuation of mineral assets must be prepared under the VALMIN Code<sup>1</sup>, SAMVAL Code<sup>2</sup>, CIMVAL<sup>3</sup> or such other code approved by the Exchange from time to time;
- the basis of the valuation, relevant assumptions and the reason why a particular method of valuation is considered most appropriate having regard to the nature of the valuation and the development status of the asset must be clearly stated; and
- if more than one valuation method is used and different valuations result, how the valuations compare and the reason for selecting the value adopted must be explained.

In addition, Listing Rule 18.30(3) states that measured and indicated resources are only included in economic analyses if the basis on which they are considered to be economically extractable is explained and that valuations for inferred resources are not permitted.

### 2.3 Sources of the Information

The following information was utilised and relied upon, without independent verification, in preparing this report:

### **Publicly Available Information**

- MMG Business Review for the year ended 31 December 2009;
- press releases, public announcements, media and analyst presentation material and other public filings by MMG including information available on its website;
- brokers' reports and recent press articles on the copper, zinc and nickel industries; and
- sharemarket data and related information on Australian and international listed companies engaged in the copper, zinc and nickel industries.

### Non Public Information provided by MMG

- copper, zinc and nickel industry reports;
- Album Resources financial report for the period from 8 April 2009 to 31 December 2009;
- management accounts for Album Resources for the six months ended 30 June 2010;
- detailed cash flow models for MMG including projections for MMG and the Mineral Assets;
   and
- other confidential documents, presentations and working papers.

Grant Samuel's representatives have previously visited Sepon, Century and Golden Grove. Grant Samuel has also held discussions with, and obtained information from, senior management of MMG.

### 2.4 Limitations and Reliance on Information

Grant Samuel believes that its opinion must be considered as a whole and that selecting portions of the analysis or factors considered by it, without considering all factors and analyses together, could

VALMIN Code represents the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (2005 edition), as prepared by the VALMIN Committee, a joint committee of The Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Mineral Industry Consultants Association as amended from time to time.

SAMVAL Code represents the South African Code for the Reporting of Mineral Asset Valuation (2008 edition) as amended from time to time.

CIMVAL represents the Standards and Guidelines for Valuation of Mineral Properties endorsed by the Canadian Institute of Mining, Metallurgy and Petroleum, February 2003 (final version) as amended from time to time.

create a misleading view of the process underlying the opinion. The preparation of an opinion is a complex process and is not necessarily susceptible to partial analysis or summary.

Grant Samuel's opinion is based on economic, sharemarket, business trading, financial and other conditions and expectations prevailing at the date of this report. These conditions can change significantly over relatively short periods of time. If they did change materially, subsequent to the date of this report, the opinion could be different in these changed circumstances.

This report is also based upon financial and other information provided by MMG and the Company. Grant Samuel has considered and relied upon this information. MMG and the Company represented in writing to Grant Samuel that to its knowledge the information provided by it was complete and not incorrect or misleading in any material aspect. Grant Samuel has no reason to believe that any material facts have been withheld.

The information provided to Grant Samuel has been evaluated through analysis, inquiry and review to the extent that it considers necessary or appropriate for the purposes of forming an opinion as to the value of MMG. However, Grant Samuel does not warrant that its inquiries have identified or verified all of the matters that an audit, extensive examination or "due diligence" investigation might disclose. While Grant Samuel has made what it considers to be appropriate inquiries for the purposes of forming its opinion, "due diligence" of the type undertaken by companies and their advisers in relation to, for example, prospectuses or profit forecasts, is beyond the scope of a Competent Evaluator. In this context, Grant Samuel advises that it is not in a position nor is it practicable to undertake its own "due diligence" investigation of the type undertaken by accountants, lawyers or other advisers.

Accordingly, this report and the opinions expressed in it should be considered more in the nature of an overall review of the anticipated commercial and financial implications rather than a comprehensive audit or investigation of detailed matters.

An important part of the information used in forming an opinion of the kind expressed in this report is comprised of the opinions and judgement of management. This type of information was also evaluated through analysis, inquiry and review to the extent practical. However, such information is often not capable of external verification or validation.

Preparation of this report does not imply that Grant Samuel has audited in any way the management accounts or other records of MMG. It is understood that the accounting information that was provided was prepared in accordance with generally accepted accounting principles and in a manner consistent with the method of accounting in previous years (except where noted).

AMC Consultants Pty Ltd ("AMC") was appointed by the Company as the Competent Person and to provide specialist technical advice on the Mineral Assets to the Company and to prepare a Competent Person's Report in relation to the valuation of MMG. AMC's review included a review of the reserves, production schedules and operating and capital costs. The report prepared by AMC is appended to and forms part of the circular to be sent to shareholders in connection with the Acquisition.

The information provided to Grant Samuel and AMC included mine development plans, forecasts and feasibility studies for MMG's key assets. MMG is responsible for the information contained in the mine development plans, forecasts and feasibility studies ("the forward looking information"). Grant Samuel and AMC have considered and, to the extent deemed appropriate, relied on this information for the purpose of their analysis.

On the basis of the information provided to Grant Samuel and AMC, and the review conducted by Grant Samuel and AMC of such information, Grant Samuel and AMC have concluded that the forward looking information was prepared appropriately and accurately based on the information available to management at the time and within the practical constraints and limitations of such forward looking information. Grant Samuel and AMC have concluded that the forward looking information does not reflect any material bias, either positive or negative. Grant Samuel has no

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reason to believe otherwise. However, the achievability of the forward looking information is not warranted or guaranteed by Grant Samuel. Future profits and cash flows are inherently uncertain. They are predictions by management of future events that cannot be assured and are not necessarily based on assumptions, many of which are beyond the control of the company or its management. Actual results may be significantly more or less favourable. Moreover, the forward looking information provided by MMG was not originally generated for, and may not be appropriate in the context of, a valuation of the Mineral Assets of MMG.

Accordingly, AMC conducted a detailed review of the significant assumptions and technical factors underlying the forward looking information provided by MMG to AMC and Grant Samuel. This review included a review of the basis on which resources and reserves have been estimated, a review of likely future operating and capital costs, a review of likely future recovery rates, a review of environmental factors and such other reviews as AMC deemed appropriate. Having regard to these reviews, AMC made independent judgements regarding the technical assumptions that can reasonably be adopted for the purposes of the valuation of the assets of MMG ("technical valuation assumptions").

As part of its analysis, Grant Samuel has developed cash flow models on the basis of the technical valuation assumptions deemed appropriate by AMC. Grant Samuel has reviewed the sensitivity of net present values to changes in key variables. The sensitivity analysis isolates a limited number of assumptions and shows the impact of the expressed variations to those assumptions. No opinion is expressed as to the probability or otherwise of those expressed variations occurring. Actual variations may be greater or less than those modelled. In addition to not representing best and worst case outcomes, the sensitivity analysis does not, and does not purport to, show all the possible variations to the business model. The actual performance of the business may be negatively or positively impacted by a range of factors including, but not limited to:

- changes to the assumptions other than those considered in the sensitivity analysis;
- greater or lesser variations to the assumptions considered in the sensitivity analysis than those modelled; and
- combinations of different assumptions that may produce outcomes different to those modelled.

In forming its opinion, Grant Samuel has also assumed that:

- matters such as title, compliance with laws and regulations and contracts in place are in good standing and will remain so and that there are no material legal proceedings, other than as publicly disclosed; and
- the publicly available information relied on by Grant Samuel in its analysis was accurate and not misleading.

To the extent that there are legal issues relating to assets, properties, or business interests or issues relating to compliance with applicable laws, regulations, and policies, Grant Samuel assumes no responsibility and offers no legal opinion or interpretation on any issue.

### 3 Profile of MMG

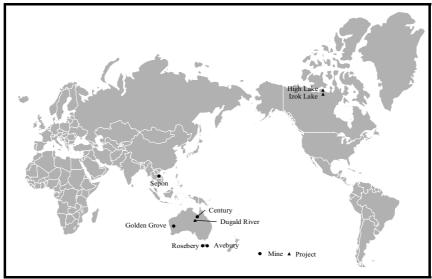
### 3.1 Overview

Album Resources was incorporated on 8 April 2009 by CMN to hold a portfolio of mining assets and companies to be acquired from OZL. On 16 June 2009, Album Resources (through its subsidiary Album Investment Private Limited ("Album Investment")) acquired the relevant companies from OZL, thereby becoming a significant producer of zinc, copper, lead, gold and silver. The portfolio of assets owned by Album Resources is known as MMG.

MMG's portfolio is dominated by two large operations: Century, the world's third largest zinc mine, located in Queensland, and the Sepon copper and gold operations in Laos. Output from these mines is supplemented by production from Golden Grove, a zinc/copper underground mine located in Western Australia, and Rosebery, a polymetallic underground mine located in Tasmania. Avebury, an underground nickel mine, which started production in July 2008, was put on care and maintenance in December 2008. In addition, MMG has a development project in Australia (Dugald River), two other development projects in Canada and a portfolio of exploration interests across Australia, China, Indonesia, and North America. MMG's key assets are summarised in the following table and map:

MMG – Assets				
Mines/projects	Interest	Location	Status	Minerals
Sepon	90%	Laos	Producing	Copper/gold
Century	100%	Australia	Producing	Zinc/lead/silver
Golden Grove	100%	Australia	Producing	Zinc/copper/gold/silver/lead
Rosebery	100%	Australia	Producing	Zinc/lead/copper/gold/silver
Izok Lake	100%	Canada	Project	Zinc/copper
High Lake	100%	Canada	Project	Zinc/copper
Dugald River	100%	Australia	Project	Zinc/lead/silver
Avebury	100%	Canada	Project	Nickel

Source: MMG



Source: MMG

# 3.2 Resources, Reserves and Production

MMG's mineral resources and ore reserves as at 30 June 2009 and its share of production for the seven months ended 31 December 2009 and six months ended 30 June 2010 are set out below:

MMG - Resources, Reserves and Production								
	Mineral		Production	n (000's)				
Metal	Resources <sup>4</sup> (million)	Ore Reserves (million)	Seven months to 31 December 2009	Six months to 30 June 2010 318.2 49.16 25.9 4,025.0 91.5				
Zinc (tonnes)	17.1	4.1	266.6	318.2				
Copper (tonnes)	3.2	0.9	56.4 <sup>5</sup>	$49.1^{6}$				
Lead (tonnes)	2.5	0.5	25.7	25.9				
Silver (ounces)	298.3	40.6	3,010.6	4,025.0				
Gold (ounces)	5.4	0.5	94.6	91.5				
Nickel (tonnes)	0.2	-	-	-				

Source: MMC

Note: Represents 100% of Sepon

### 3.3 Financial Performance

The historical financial performance of MMG for the seven months ended 31 December 2009 and for the six months ended 30 June 2010 is set out below:

MMG - Financial Perform	nance (US\$ million)7	
	Seven months to 31 December 2009 <sup>8</sup> actual	Six months to 30 June 2010 actual
Sales revenue	852.8	844.7
EBITDA9	348.6	403.9
Depreciation and amortisation	(158.3)	(124.0)
EBIT <sup>10</sup>	190.3	279.9
Net interest expense	(22.1)	(16.0)
Net foreign exchange gain / (loss)	1.6	(7.4)
Profit before tax	169.8	256.5
Income tax benefit / (expense)	10.9	(22.5)
Net profit after tax	180.7	234.0
Net profit attributable to non-controlling interests	(8.2)	(11.4)
Net profit after tax attributable to MMG shareholder	172.5	222.6
EBITDA margin	41%	48%
EBIT margin	22%	33%

Source: MMG

Refers to measured, indicated and inferred resources and includes ore reserves.

<sup>&</sup>lt;sup>5</sup> Includes 38,077 tonnes of copper cathode at Sepon.

Includes 34,282 tonnes of copper cathode at Sepon.

Numbers may not add up due to rounding.

Represents the period from 8 April 2009 to 31 December 2009.

EBITDA represents earnings before interest, tax, foreign currency gains, depreciation and amortization.

EBIT represents earnings before interest, tax and foreign currency gains.

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In the seven months ended 31 December 2009, MMG benefited from record copper cathode production at Sepon, increased copper concentrate production at Golden Grove, strong results at Rosebery and strengthening commodity prices. This was partially offset by lower zinc production at Golden Grove due to the focus on copper production and an 11 week production shutdown at Century due a pipeline failure. The financial performance for the period ended 31 December 2009 was adversely impacted by a US\$38.3 million loss after tax relating to the pipeline failure at Century.

In the six months ended 30 June 2010, MMG's performance improved as production problems at Century were rectified. However, zinc production was still lower than budgeted due to an unplanned shutdown at Golden Grove and feed dilution issues at Rosebery. Copper and gold sales volumes increased in comparison to the previous seven months.

MMG's financial performance also benefited from higher average commodity prices. The average copper price realised increased from US\$2.75 per pound for the period 1 June 2009 to 31 December 2009 to US\$3.23 per pound for the six months ended 30 June 2010. Similarly, the average realised zinc price increased from US\$0.87 per pound for the period 1 June 2009 to 31 December 2009 to US\$0.98 per pound for the six months ended 30 June 2010.

#### 3.4 Financial Position

The statement of financial position of MMG as at 31 December 2009 and 30 June 2010 is summarised below:

MMG - Financial Pos	sition (US\$ million) <sup>11</sup>	
	As at 31 December 2009	As at 30 June 2010
Trade and other receivables	90.0	50.8
Inventories	201.0	239.9
Trade and other payables	(143.7)	(139.1)
Net working capital	147.3	151.6
Property, plant and equipment	1,493.7	1,490.3
Net tax assets/(liabilities)	5.9	40.9
Provisions	(266.9)	(266.4)
Net other assets/(liabilities)	22.3	120.7
Net capital employed	1,402.3	1,537.1
Cash and cash equivalents	251.3	334.5
Borrowings	(1,101.9)	(1,100.3)
Net borrowings	(850.6)	(765.8)
Net assets	551.7	771.3
Minority interest	(42.0)	(39.0)
Net assets attributable to MMG shareholder	509.7	723.3
Gearing <sup>12</sup>	60.7%	50.2%

Source: MMG

MMG's balance sheet reflects its acquisition of the MMG assets in June 2009, funded mainly by debt

Provisions relate mainly to mine rehabilitation, restoration and dismantling provisions with the balance consisting of employee provisions.

Numbers may not add up due to rounding.

Gearing is defined as net borrowings divided by net capital employed.

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Gearing as at 31 December 2009 was relatively high at approximately 61% but had reduced to approximately 50% at 30 June 2010. Borrowings at 30 June2010 represented fully drawn loan facilities of US\$1,095 million which mature partly in June 2012 and partly in June 2016. MMG also has finance leases of approximately US\$5 million. Most of MMG's borrowings are secured by guarantees from CMN. MMG currently has no interest hedges in place.

The minority interest reflects the Lao Government's effective 10% economic interest in Sepon.

# 3.5 Commodity Hedging

As at 30 June 2010, MMG had no commodity price hedging in place.

### 3.6 Taxation Position

Under the Australian tax consolidation regime, MMG's wholly owned Australian resident entities have elected to be taxed as a single entity. The MMG Australian tax consolidated group operates on a 31 December year-end.

At 31 December 2009, MMG recognised US\$65.5 million of Deferred Tax Assets ("DTA"), of which US\$13.8 million related to carried forward income tax losses in Australia. In addition, MMG had US\$104.2 million unrecognised DTA relating to deductible temporary differences.

At 30 June 2010, MMG recognised US\$95.1 million of DTA. MMG had US\$55.2 million in unrecognised DTA. All DTA balances at 30 June 2010 relate to deductible temporary differences.

At 30 June 2010, MMG had no Australian franking credits.

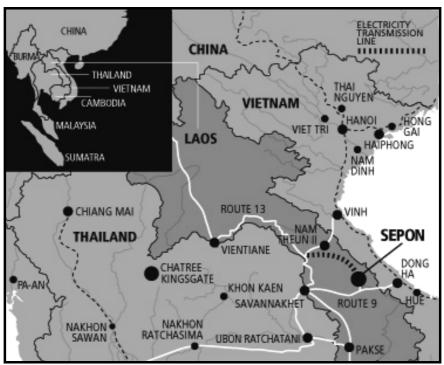
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# 4 Profile of MMG Assets

### 4.1 Sepon

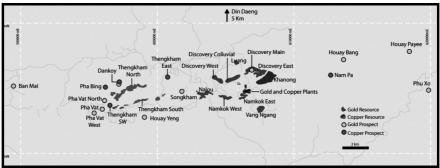
The Sepon copper and gold operations are located 40 kilometres north of Sepon in south-central Laos, within an overall project area of 1,250 square kilometres. Oxiana Limited ("Oxiana"), the company which merged with Zinifex Limited ("Zinifex") to create OZL, acquired 80% of the Sepon project in 2000 and the remaining 20% in early 2004. The gold project was developed first and yielded its first gold and silver doré in December 2002. First production of copper cathode at Sepon Copper occurred in March 2005. The Government of Laos exercised its right to purchase 10% of the projects' holding company Lane Xang Minerals Limited ("LXML") on 30 June 2007. Sepon accounted for approximately 30% of Laos' exports in the year ended 31 December 2009 and currently contributes 15% to 20% to the Government's revenue (including the dividends the Government earns on its 10% stake in the project).

The location of Sepon in Laos is illustrated below.



Source: MMG

The location of the major mineral deposits that support Sepon's current and future gold and copper operations is depicted on the map below:



Source: MMG

#### 4.1.1 Sepon Copper

### Overview

Feasibility studies into the development of the Sepon copper project began in 2002 and construction commenced in 2003. Processing started in February 2005 and the first copper cathodes were produced in mid-March 2005.

Sepon Copper was originally developed on the basis of the Khanong deposit, which is still the main deposit being mined, while the Thengkham and Phabing deposits are expected to enter into production in 2011. Ore is treated through an atmospheric leaching/pressure oxidation and solvent extraction and electro-winning process to produce approximately 70,000 tonnes of high quality copper cathode per annum. The copper cathode is sold principally into Asian countries close to Laos. The combination of the quality of Sepon's copper product, the project's proximity to customers and the reliability of supply typically attracts a premium over the London Metals Exchange ("LME") copper price.

Lower grade supergene copper resources in the Thengkham North, Thengkham South and Phabing deposits, located approximately seven kilometres west of the current plant, and additional resource potential in the Sepon area form the basis of the Sepon Copper expansion project to 80,000 tonnes of copper per annum.

MMG is also exploring for primary copper. While its processing would require a new treatment circuit and significant capital expenditure, existing infrastructure and parts of the existing treatment plant could be utilised.

### Geology and Mineralisation

The Khanong copper deposit is a near surface, high grade, supergene chalcocite and oxide copper body derived from the weathering of a replacement style sulphide deposit developed in shallow dipping, highly sheared carbonate rocks. Copper mineralisation covers a variety of primary and secondary styles. Along the contacts of the intrusive stocks, copper-gold skarns are developed.

The Thengkham system, centered around the east-west trending Thengkham ridge, contains zones of primary copper, gold, silver and molybdenum mineralisation. Weathering has resulted in the formation of secondary supergene copper and gold deposits, mostly found in moderately dipping zones. Chalcocite supergene mineralisation is found next to primary pyrite and chalcopyrite mineralisation. Copper oxide and carbonate mineralisation is also present in the area.

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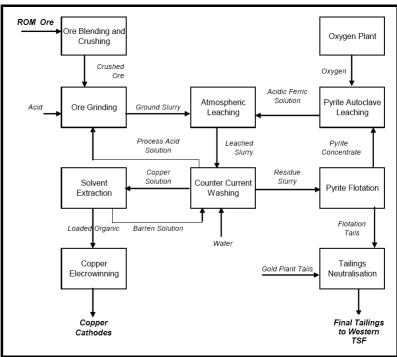
The nearby Phabing deposit contains supergene copper mineralisation, with no associated primary copper, and is believed to have originated from Thengkham North. Large eastwest trending faults control two distinct styles of mineralisation.

### Mining and Processing

The Khanong deposit is mined by conventional open pit truck and excavator methods by a contractor. The Thengkham and Phabing deposits are also expected to be mined using conventional open pit mining methods.

The run-of-mine ore at Sepon is predominantly chalcocite, although a range of copper oxide and carbonate minerals are also present. The majority of the copper minerals is extracted into a slurry by atmospheric leaching in a series of agitated tanks at elevated temperature. The dissolved copper contained in the leached slurry is then separated from the solid residue in a counter-current decantation thickener circuit. The copper solution is treated in a solvent extraction and electrowinning circuit to extract the copper in the form of copper cathodes. Residues from the leaching process are processed by way of flotation to recover any remaining copper sulphide and pyrite. The pyrite concentrate is then subjected to pressure oxidation in an autoclave at elevated temperatures and pressures to produce the acid and ferric sulphate required for the atmospheric leaching process.

The configuration of the plant is illustrated below:



Source: MMG

The initial plant design had a nameplate capacity of 1.35 million tonnes per annum allowing for the production of 65,000 tonnes of copper cathode, although the plant has routinely exceeded nameplate capacity and annual copper production is now 70,000 tonnes. The addition of a second autoclave in March 2009, which was initially planned as part of a

bigger expansion project approved in December 2007 and partially suspended in November 2008 due to capital constraints, increased reliability and copper recoveries and is expected to reduce production downtime. Lower-grade ore mined from the Thengkham deposits is expected to reduce head grade from the current 5.25% copper to 4.3% copper. Sepon, however, will remain one of the world's highest grade copper mines.

### Resources and Reserves

Sepon Copper mineral resources and ore reserves as at 30 June 2009 are illustrated in the table below:

Sepon Coppe	er Mineral	Resource	s and Or	e Reserve	s as at 30	June 200	913
	Tonnes (Mt)	Copper (%)	Gold (g/t)	Silver (g/t)	Copper (000's t)	Gold (Moz) <sup>14</sup>	Silver (Moz) <sup>14</sup>
Mineral Resources15							
Supergene							
Measured	19.7	3.2	-	-	626.5	-	-
Indicated	8.2	3.3	-	-	271.4	-	-
Inferred	30.9	1.7	-	-	509.4	-	-
Sub-total	58.8	2.4	-	-	1,407.2	-	-
Primary							
Measured	2.1	1.7	0.2	7	35.2	0.0	0.5
Indicated	1.2	1.7	0.2	7	19.7	0.0	0.3
Inferred	20.1	0.9	0.3	6	176.5	0.2	3.9
Sub-total	23.3	1.0	0.3	6	231.4	0.2	4.6
Total Resources					1,638.6	0.2	4.6
Ore Reserves <sup>16</sup>							
Supergene							
Proved	13.6	4.1	-	-	557.1	-	-
Probable	5.0	4.1	-	-	206.3	-	-
<b>Total Ore Reserves</b>	18.6	4.1	-	-	763.4	-	-

Source: MMG Note: Represents 100% of Sepon

In late 2008 and the first half of 2009, exploration activities at Sepon were mainly focused on drilling oxide and primary gold targets although drilling at the Thengkham system identified new zones of primary and supergene copper-gold mineralisation. As a consequence, depletion from mining more than offset additions to resources and reserves. Additions to reserves mainly related to the Thengkham and Phabing deposits.

# Expansion and Exploration

In July 2009, MMG recommenced planning work on the Sepon Copper expansion project, which was initially approved by Oxiana in December 2007 and partially suspended by OZL in November 2008. In late October 2009, the MMG board approved revised plans to increase nameplate capacity to 2 million tonnes per annum, lifting the expected annual copper production from 70,000 tonnes to 80,000 tonnes. In addition to the installation of

Significant figures do not imply precision. Figures are rounded according to JORC Code Guidelines. Includes 100% of all mineral resources, which include ore reserves.

<sup>&</sup>quot;oz" refers to troy ounces, which equal to 31.1035 grams per ounce.

Mineral resources have been estimated using a cut-off grade of 0.5% copper.

Ore reserves have been estimated using cut off grades in the range 1.0% to 1.8% copper depending on metallurgical recovery and haulage distance using a US\$2.00 per pound copper price.

the second autoclave commissioned in March 2009, the expansion includes an upgrade of the crushing circuit, the addition of leach tanks and flotation cells and a new countercurrent decantation train. MMG estimates that the remaining capital expenditure will total approximately US\$60 million and expects commissioning to be completed in November 2010. Including the addition of the autoclave mentioned above, the expansion is expected to reduce overall life-of-mine cash operating costs by approximately 10% and will allow Sepon to bring forward the treatment of lower grade ore that would otherwise only be treated towards the end of the project life.

In late 2008, OZL started construction of a second power line and associated infrastructure to address the increased power demand from the proposed plant expansion, mitigate the risks associated with the dependency on a single transmission line and reduce line losses at higher power transmission rates. The capital cost of the project was initially estimated at US\$30.6 million. Work on the project was suspended in November 2008 because of capital constraints but was restarted in August 2009. The project is expected to be commissioned in the third quarter of 2010 at a cost to MMG of approximately US\$12 million.

Recent exploration drilling has identified a number of primary copper targets and the Sepon project area remains prospective. Resource definition drilling is also ongoing at the known deposits.

#### **Operating Performance**

Sepon Copper's operating performance for the five years ended 31 December 2009 and the six months ended 30 June 2010 is summarised below:

Sepon Copper - Operating Statistics (100% basis)								
		Six months ended						
	2005	30 June 2010						
Ore mined (000's tonnes)	908	2,320	1,942	1,551	2,418	1,087		
Ore milled (000's tonnes)	644	1,231	1,225	1,328	1,405	724		
Copper milled grade (%)	5.80	5.56	5.65	5.40	5.35	5.28		
Copper cathode produced (000's tonnes)	30.5	60.8	62.5	64.1	67.6	34.3		
Total cash costs (US¢/lb copper)17	78	78	85	106	89	108		

Source: MMG

The first copper cathodes were produced by the Sepon copper plant on 14 March 2005. By the end of the year, the plant had reached full design capacity and total production marginally exceeded design capacity in 2006, 2007 and 2008.

Cash costs were relatively stable until 2008. Despite an easing of cost pressures later in the year and the deferral of costs related to the Khanong cutback in the December quarter, cash costs were up almost 25% in 2008.

Copper cathode production increased in 2009 following the commissioning of the second autoclave in March 2009. Production also benefited from higher head grades and steady recovery rates. In 2009, cash costs fell as a result of reductions in supply management, maintenance and administration costs, following cost saving initiatives implemented in 2008, and a decrease in fuel costs.

 $<sup>^{\</sup>rm 17}$   $\,$  "lb" refers to pounds. There are 2,204 pounds per tonne.

#### Outlook

In 2010, MMG expects to produce 67,000 to 70,000 tonnes of copper cathode. Preparation for mining has started in the Thengkham and Phabing regions. Mining is currently expected to continue until 2020.

### 4.1.2 Sepon Gold

#### Overview

Exploration by CRA Limited ("CRA"), now Rio Tinto Limited ("Rio Tinto"), between 1993 and 1999 resulted in the delineation of approximately three million ounces of gold resources in various deposits at Sepon. Following further exploration and development, and Oxiana's acquisition of the project, production commenced in December 2002. Since then, the Sepon Gold operation has produced over one million ounces through open pit mining and conventional treatment of oxide gold ore. Based on current oxide reserves, the mine life is not expected to extend much beyond 2012, although it could be extended if MMG delineates additional oxide resources. Studies are ongoing to assess the opportunity to process the larger primary gold resource.

# Geology and Mineralisation

Gold mineralisation is localised in structural and stratigraphic fluid traps. Mineralisation is finely disseminated and closely associated with decalcification and variable silica replacement of calcareous rocks along structures and at lithological contacts. The geometry of the gold ore is controlled by anticlinal structures and shallow dipping stratigraphy, structure and porphyry sills.

# Mining and Processing

The Sepon Gold operation is a conventional open pit oxide mining operation. Ore is mined by a contractor from a number of open pits and is treated in a conventional carbon-in-leach processing plant to produce a gold and silver doré. In 2005, the capacity of the plant was increased to 2.5 million tonnes per annum from the design capacity of 1.25 million tonnes per annum.

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#### Resources and Reserves

Sepon Gold mineral resources and ore reserves as at 30 June 2009 are set out below:

Sepon Gold – N	Sepon Gold – Mineral Resources and Ore Reserves as at 30 June 2009 <sup>18</sup>								
	Tonnes (Mt)	Gold (g/t)	Silver (g/t)	Gold (Moz)	Silver (Moz)				
Mineral Resources19									
Oxide Gold									
Measured	4.2	1.0	3	0.1	0.4				
Indicated	3.3	1.9	5	0.2	0.5				
Inferred	2.9	1.0	5	0.1	0.5				
Sub-total	10.4	1.3	4	0.4	1.4				
Partial Oxide Gold									
Measured	2.4	1.6	9	0.1	0.7				
Indicated	5.9	2.1	8	0.4	1.5				
Inferred	1.8	0.7	6	0.0	0.4				
Sub-total	10.1	0.7	8	0.6	2.6				
Primary Gold									
Measured	5.4	3.0	7	0.5	1.2				
Indicated	13.5	2.6	8	1.1	3.5				
Inferred	5.6	1.8	7	0.3	1.3				
Sub-total	24.4	2.5	8	2.0	5.9				
<b>Total Mineral Resources</b>				3.0	9.9				
Ore Reserves <sup>20</sup>									
Oxide Gold									
Proved	2.4	1.0	1	0.1	0.1				
Probable	1.2	2.1	5	0.1	0.2				
Total Ore Reserves	3.5	1.4	2	0.2	0.3				

Source: MMG

Ore reserves at Sepon have recently been increased through successful exploration at the Houay Yeng and Dankoy deposits.

# Expansion and Exploration

The focus of exploration at Sepon in 2009 was on drilling oxide gold prospects located 5-15 kilometres west of the Sepon operations and primary gold targets close to the mine infrastructure. In particular, there is some prospect that additional oxide mineralisation will be delineated at the Hanong, Phavat and Thengkham Southwest targets.

Primary gold resources have already been delineated and there is substantial upside potential in the area. As the ore is refractory, it would require a treatment process different from that used for the oxide ore. A number of options have been investigated, including pressure oxidation and bacterial oxidation. A scoping study contemplating roasting is due

Significant figures do not imply precision. Figures are rounded according to JORC Code Guidelines. Includes 100% of all mineral resources, which include ore reserves. "oz" refers to troy ounces, which equal to 31.1035 grams per ounce.

Mineral resources have been estimated using a cut-off grade of 0.5g/t for oxide and partial oxide gold and 1.0g/t for primary gold.

Ore reserves have been estimated using cut off grades in the range 0.45g/t to 0.6g/t gold depending on metallurgical recovery and haulage distance using a US\$900/oz gold price.

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to start. It appears that additional mineralisation would need to be delineated to make exploitation of the primary gold resource economic.

#### **Operating Performance**

Sepon Gold's operating performance for the five years ended 31 December 2009 and the six months ended 30 June 2010 is summarised below:

Sepon Gold Operating Statistics – 100% basis								
		Year to 31 December						
	2005 2006 2007 2008 2009 30 June							
Ore mined (000's tonnes)	3,078	2,880	1,510	1,613	2,830	1,310		
Ore milled (000's tonnes)	2,660	2,909	2,161	2,322	2,468	1,085		
Gold milled grade (g/t gold)	2.77	2.25	1.79	1.60	1.66	2.01		
Gold produced (000's ounces)	200	176	102	93	105	55		
Total cash costs (US\$/oz gold)	260	330	445	538	494	503		

Source: MMG

In 2005, Oxiana completed an expansion of the Sepon gold operation that doubled the capacity of the gold processing plant to 2.5 million tonnes per annum. Head grades have been steadily decreasing leading to a declining gold production notwithstanding fluctuations in milled tonnage. Decreasing head grades and increasing unit costs resulted in a doubling of cash costs from 2005 to 2008. In 2009, the easing of external cost pressures and benefits from the company-wide cost reduction program implemented in 2008 contributed to lower cash costs.

### Outlook

In 2010, MMG expects to produce 95,000 to 100,000 ounces of gold. Based on gold oxide reserves, the project has a life of approximately one year.

### 4.2 Century

## Overview

The Century mine is the largest zinc mine in Australia and the third largest open pit zinc mine in the world. It is located in north-west Queensland, approximately 250 kilometres north-west of Mount Isa. While the area around Century has been mined (although not continuously) for zinc and lead for close to 100 years, the Century deposit was only discovered by CRA in 1990. The Century project was later acquired by Pasminco Limited ("Pasminco") in 1997. Development of the mine commenced soon afterwards and concentrate shipments began in late 1999. The mine was operated by administrators between 2001 and 2004, while Pasminco was in voluntary administration, and formed part of the asset base of Zinifex at the time of its listing. The Century mine was subsequently included in the portfolio of assets of OZL, which was formed following the merger of Zinifex with Oxiana in July 2008. In June 2009, MMG acquired Century mine and other assets from OZL.

Century is operated on a fly-in/fly-out roster. Mining at Century is based on open pit extraction using conventional hydraulic excavators and haul trucks. A dedicated and well-equipped treatment plant employs a conventional grinding and froth flotation circuit. The resultant zinc and lead concentrates are pumped as slurry to the port facility at Karumba via a 304 kilometre pipeline. At Karumba, the slurry is dewatered, filtered, stockpiled and transported to bulk carriers moored off-shore.

Since 2003, Century has consistently produced around 500,000 tonnes per annum of zinc in concentrate. While Century is primarily a zinc producer, lead and silver are also recovered. In

response to the steep decline in zinc prices in the second half of 2008, Century's mining plan was revised to exclude approximately 5.5 million tonnes of sub-economic material, with the result that the end of mine life was brought forward to 2014, a year earlier than previously planned. However, at current zinc price levels, there is potential to include a portion of this material in the LOM mining inventory, which would extend the mine life to mid 2015.

### Geology and Mineralisation

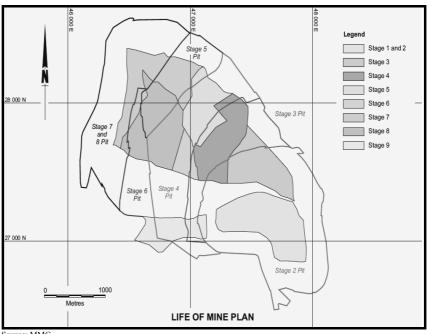
The Century deposit is hosted by mid-Proterozoic rocks of the Mount Isa Inlier, which hosts a number of other major base metal deposits such as those at Mount Isa, Cannington, Dugald River and McArthur River. The Century mineralisation is stratiform, lying within a sequence of siltstones, shales and sandstones, which is overlain by a Cambrian limestone unconformity. The mineral deposit, which extends over an area of 1.2 kilometres by 1.4 kilometres, is generally flat lying (dipping at 5-25 degrees), although it rises more steeply towards the surface at an angle of around 70 degrees along the western flank of the deposit.

The mineralised package is divided into Upper and Lower mineralised zones, divided by a horizon of siltstone waste. Sulphide mineralisation principally consists of sphalerite and galena, with lesser amounts of pyrite. The Lower zone, which contributes approximately 60% of resources, is characterised by higher zinc grades (around 15% zinc) but lower lead and silver grades (1% lead and 20 g/t silver). Lower zone mineralisation is also typically relatively high in organic carbon and silica by comparison with the Upper zone. While the Upper zone has lower zinc grades (around 10% zinc), it has higher lead and silver grades (4% lead and 150 g/t silver) and lower levels of organic carbon and silica.

The deposit is split into southern and northern blocks by the east-west trending Pandora's Fault. Mineralisation is constrained at the southern end of the deposit by the east-west trending Magazine Hill Fault, to the east by the Termite Range Fault and to the north by Nikki's Fault. To the west, as the mineral deposit rises towards the surface, it is constrained by the limestone unconformity and surface erosion. The mineral deposit is well delineated on all four sides and there appears to be little prospect of identifying any significant mineralisation beyond the existing defined resource.

# Mining

Mining commenced in the relatively shallow southern block, where Stages 1 and 2 of the pit were mined. Subsequently, mining moved to Stages 3, 4 and 5 of the pit in the northern block, with the extraction of mineralisation along the eastern and northern flanks of the deposit. Mining of Stage 6 was completed in the December 2008 quarter and Stage 7 is currently being mined. The Stage 8 cutback commenced in late 2009 but progress during the initial few months was hampered by heavy rainfall. Stage 8 will mine to the ultimate pit limit with the northern block providing the majority of the ore for mining over the remaining life of the mine. The deposit deepens to the north and the pit will reach a depth of around 345 metres at its deepest point. Mining operations will conclude with the mining of Stage 9, which will extract the remaining economic ore in the southern block. The diagram below shows a plan view of the pit and the various mining stages.



Source: MMG

A geotechnical review of the planned mining of Stage 7 indicated that the original mine plan involved the risk of failure of the western wall of the pit, as a result of the existence of steeply dipping shears towards the western margin of the pit. To address this risk, it was decided to accelerate the removal of overburden (including the steeply dipping shear zone) up to the ultimate western wall of the pit, where competent material will support the final pit design. The result was a substantial increase in the stripping ratio and waste ore movements for the 2006 to 2008 calendar years. A large portion of the overburden removal was completed in 2007-2008 with waste movements increasing from around 24 million bank cubic metres ("Mbcm") per annum prior to the ramping up in 2006 to in excess of 42 Mbcm per annum during the period. Following the decline in the zinc price during 2008, the pit design was revised to minimise immediate capital spending and operating costs. The revised mining plan incorporated the deferral of approximately 8 Mbcm of waste removal to Stage 8 and consequently a significant reduction in material movements for the 2009 year followed by a more gradual reduction in subsequent years, as opposed to the previous mining schedule which required high levels of material movements in 2009 followed by a very sharp reduction in subsequent years. The material movement for the calendar year 2009 was therefore substantially lower than for 2008, at 27 Mbcm, with all waste placed in-pit. Waste movement is scheduled to be 19 Mbcm for 2010 and 22 Mbcm for 2011. The stripping ratio will fall from around 20 for the 2007-2008 period to around 13 in 2009 and 10 in 2010, with subsequent reductions through to the end of the mine life, which is scheduled for

Run-of-mine ore is trucked to the ROM pad to the south-east of the pit. Ore from the Upper and Lower mineralised zones is stored on separate stockpiles to allow blending for optimal plant operation.

Waste dumps to the east and north of the pit have largely been completed. In-pit waste dumping in the southern block has commenced and future waste will be dumped in pit and on a new waste dump developed to the west of the pit.

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The smoothing of the material movement profile over the mine life and in-pit dumping of waste have allowed a significant reduction in the mining fleet and resulted in substantial cost savings.

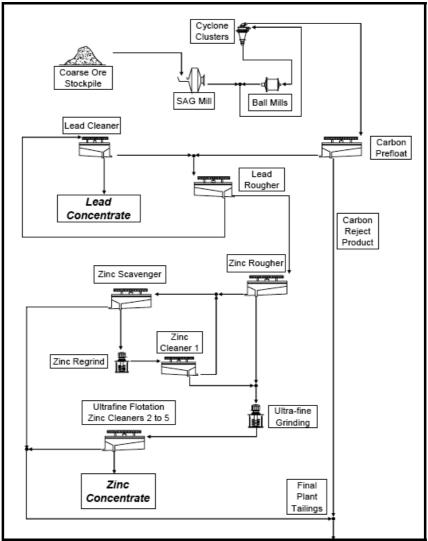
### **Processing**

The concentrator was commissioned in 1999 and the first shipment of concentrate occurred in December 1999. The plant is operated to maximise zinc output. It has consistently treated in excess of 5.6 million tonnes per annum of ore, although milled tonnage was lower in 2009 because of the Karumba pipeline failure.

The plant is in general terms a conventional crush/grind/flotation design, but the flow sheet is fairly complex because of the need to remove organic carbon and silica minerals associated with sphalerite. The ore is crushed in a primary crusher and ground in a SAG mill and two ball mills. The ground ore is then processed in a carbon prefloat circuit to remove a significant portion of the naturally floating carbon. The slurry then undergoes roughing and cleaning to produce a lead concentrate. The tailings from the lead flotation circuit gravitate to the primary zinc circuit, which includes a rougher-scavenger sequence. Concentrates from the rougher and first cleaner stages are fed to the ultra-fine zinc cleaning circuit. The combined product is reground to release silica before being processed through four ultra fine cleaning stages to produce the final zinc concentrate.

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The plant configuration is diagrammatically illustrated below:



Source: MMG

Zinc and lead concentrates are transported by a 304 kilometre long pipeline to the port of Karumba. At Karumba, the concentrates are thickened, filtered and dried, before being barged to bulk carriers moored off-shore.

Power for the Century site is supplied by the gas-fired Mica Creek Power Station, near Mount Isa. Water is sourced from the mine dewatering borefield and a second borefield east of the mine site.

Tailings from the treatment plant are piped to a tailings storage facility approximately 3.8 kilometres from the plant.

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The operating costs of the plant are relatively high because of the high power costs associated with fine re-grinding and the presence of carbon in the ore, which results in high reagent consumption.

### Resources and Reserves

Century mineral resources and ore reserves as at 30 June 2009 are set out in the table below:

Century – Mineral Resources and Ore Reserves as at 30 June 2009 <sup>21</sup>								
	Tonnage (Mt)	Zinc (%)	Lead (%)	Silver (g/t)	Zinc (000's t)	Lead (000's t)	Silver (Moz) <sup>22</sup>	
Mineral Resources <sup>23</sup>								
Measured	32.2	12.3	1.5	34	3,960.6	483.0	35.2	
Indicated	9.6	11.3	1.6	37	1,087.8	152.6	11.5	
Inferred	0.4	11.4	1.1	33	45.6	4.4	0.6	
Total Mineral Resources	42.2	12.1	1.5	35	5,094.0	640.0	47.3	
Ore Reserves <sup>24</sup>								
Proved	20.5	11.6	1.0	18	2,378.0	205.0	11.9	
Probable	9.7	10.5	1.2	24	1,018.5	116.4	7.5	
Total Ore Reserves	30.2	11.2	1.1	20	3,396.5	321.4	19.3	

Source: MMG

The mineral resources reported above includes mineralisation in the Century Eastern Fault Block<sup>25</sup>, which is poorly defined and has now been judged uneconomic.

# **Expansion and Exploration**

MMG has extensive holdings around Century and significant exploration has been conducted (including by OZL and Zinifex) with the objective of identifying satellite ore bodies to extend the life of Century operations. However, these exploration efforts have had limited success, with drilling in the vicinity of the old Silver King mine, located two kilometres south-east of Century, identifying modest quantities of high grade, lead-rich zinc mineralisation. A feasibility study to mine the Silver King deposit as an underground mine is expected to be pursued in the second quarter of 2010. Ore from the deposit could be processed at the Century plant or trucked to Dugald River for processing.

Phosphate deposits have also been identified within the Century exploration licences in the Georgina Basin, approximately 15 kilometres from the Century mine. A 2008 conceptual study to develop these phosphate deposits has confirmed the feasibility of utilising the existing processing facilities (after modifications), the pipeline to port and the port facilities for a phosphate operation following the completion of zinc mining and treatment. MMG intends to review and update the study in 2011.

Significant figures do not imply precision. Figures are rounded according to JORC Code Guidelines. Includes 100% of all mineral resources, which include ore reserves.

<sup>&</sup>quot;oz" refers to troy ounces, which equal to 31.1035 grams per ounce.

Mineral resources have been estimated using a cut-off grade of 3.5% zinc.

Ore reserves have been estimated using a zinc equivalent cut off grade of 4.85%, calculated using a zinc price of US\$0.74 per pound, lead price of US\$0.65 per pound, silver price of US\$12/oz and an exchange rate of 0.73.

Mineral resources at the Eastern Fault Block included 0.4 million tonnes or ore containing approximately 51,000 tonnes of zinc, 4,400 tonnes of lead and 0.7 million ounce of silver.

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### Operating Performance

Century's operating performance for the five years ended 31 December 2009 and the six months ended 30 June 2010 is summarised below:

	Century - Operating Statistics									
		Year	r to 31 Decen	ıber		Six months				
	200526	2006 <sup>27</sup>	2007 <sup>23</sup>	200828	200929	ended 30 June 2010				
Ore mined (Mt)	5.3	5.3.	5.4	5.3	5.1	2.5				
Ore milled (Mt)	5.2	5.4	5.7	5.7	4.2	2.5				
Zinc milled grade (%)	12.1	11.8	11.7	10.5	11.0	11.8				
Lead milled grade (%)	2.0	1.6	1.3	1.6	0.6	1.3				
Silver milled grade (g/t)	59.0	55.0	30.0	40.8	12.0	28.9				
Zinc recovery (%)	79.6	78.3	79.3	79.6	78.2	79.7				
Lead recovery (%)	69.0	65.7	64.2	67.1	49.2	51.0				
Contained Metal										
Zinc (000's tonnes)	500.3	497.4	525.3	513.6	360.0	238.5				
Silver (000's ounces)30	6,781	6,582	3,869	4,179	953	1,793				
Lead (000's tonnes)	73.0	57.0	48.5	56.4	16.0	11.0				
Total cash costs (US¢/lb zinc)31	51	45	42	58	53	45				

Sources: MMG

Between 2005 and 2008 the contained zinc produced at Century was fairly consistent at around or slightly higher than 500,000 tonnes per annum. The zinc head grade declined marginally during this period as the mining transitioned from Stage 6 to Stage 7. However the decline in head grade was offset by modest increase in the treatment plant throughput due to higher mill availability and capacity improvement projects. The contained lead production ranged between 48,500 to 57,000 tonnes with lower production reflecting lower head grade and recovery.

Zinc and lead production declined in 2009 reflecting the combined impact of the planned reduction in mine output (to achieve cost efficiencies in response to low zinc prices in 2008) and the 79-day production shutdown because of the failure of the Karumba pipeline.

The operations are stable and well understood and run to optimise costs.

# Outlook

Production at Century has returned to full capacity and is currently forecast to produce 500,000-510,000 tonnes of contained zinc and 25,000-30,000 tonnes of contained lead for the year ending 31 December 2010.

<sup>&</sup>lt;sup>26</sup> As reported in Zinifex's Explanatory Memorandum in relation to the merger with Oxiana.

As reported in Zinifex's Explanatory Memorandum in relation to the merger with Oxiana.

As reported by OZL.

<sup>29</sup> Century mine was operated by OZL until acquired by MMG in June 2009. The reported operating statistics is based on the full year performance.

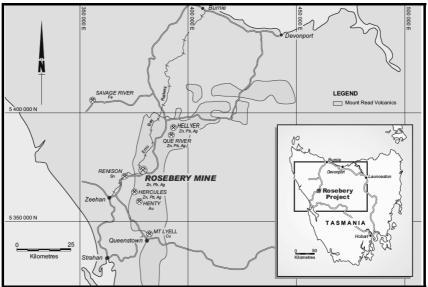
One ounce equals to 31.1035 grams.

<sup>&</sup>quot;lb" refers to pounds. There are 2,204 pounds per tonne.

#### 4.3 Rosebery

#### Overview

The Rosebery Mine is located next to the Rosebery Township in north-west Tasmania, approximately 300 kilometres north-west of Hobart and 100 kilometres south of Burnie. Mineralisation was first discovered at Rosebery in 1893 and mining commenced in 1900. Following the construction of a flotation plant on-site, full scale production of base metal concentrates commenced in 1936. The following map shows the location of the Rosebery mine:



Source: MMG

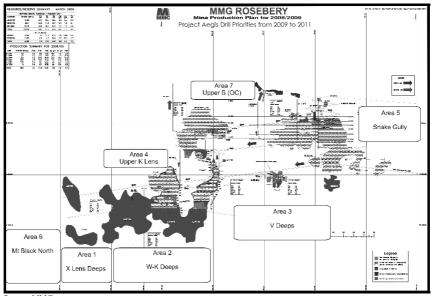
Rosebery was part of the package of assets of Pasminco at the time of its 1989 float on the ASX, and, following the Pasminco administration, was included in the assets of Zinifex when it listed in 2004. The Rosebery mine was subsequently included in the portfolio of assets of OZL which was formed following the merger of Zinifex with Oxiana in July 2008. In June 2009, MMG acquired the Rosebery operation and other assets from OZL.

Rosebery mineralisation is polymetallic, containing zinc, lead, copper, silver and gold. Mining at Rosebery is by underground mining methods. Most mine production is from depths of greater than 900 metres and it is estimated that the mineral deposit extends to 1.5 kilometres underground. The treatment plant produces zinc, lead and copper concentrates, as well as gold doré. Zinc and lead concentrates contribute the bulk of the revenue. Concentrates are transported by rail to Burnie, from where they are shipped to smelters. Over the last five years, zinc production has ranged from 84,200 to 86,800 tonnes per annum and lead production from 21,600 to 28,700 tonnes per annum.

The region around Rosebery mine is highly prospective and although current inventory supports a mine life to 2018/19, there is strong potential for the conversion of inferred resources to reserves and the delineation of additional mineralisation to further extend the mine life. Residual lower grade ore within the old Hercules Mine, where mining has been discontinued, and lower grade mineralisation in the South Hercules deposit, approximately 10 kilometres south-east of the Rosebery Mine, provide potential additional feed for the Rosebery plant.

#### Geology and Mineralisation

Rosebery is a polymetallic massive sulphide mineral deposit, hosted in volcanic and pyroclastic rocks of the Mount Read Volcanics belt, which also hosts the Que River and Hellyer polymetallic deposits, the Mount Lyell copper deposit and the Henty gold deposit. Mineralisation is contained within a series of lenses (more than 15 have been identified), which dip to the east and plunge to the north over a north-south strike length of more than three kilometres. Early mining concentrated on the shallower lenses to the southern end of the deposit, while current and future mining will principally focus on the deeper lenses to the northern end of the deposit. The following chart illustrates the deposit:



Source: MMG

The P, V, K and W Lenses contain the majority of the delineated resources and will be the focus of mining and exploration over the medium term. The high grade K Lens contains a substantial inferred resource and, subject to successful infill drilling, could potentially provide significant additional reserves.

# Mining and Processing

Rosebery is a conventional underground mining operation. Ore is sourced mainly from the deeper lenses to the north of the deposit, at depths of up to 1,000 metres, with a modest contribution from shallower remnant stopes and pillars. Ore is mined using a variety of stoping methods, including bench stoping (for the majority of the ore), transverse open stoping (where ore body widths increase up to 25 metres) and slash mining (to extract ore from pillars). Blasted ore is trucked to the surface. As the mining has concentrated on the deeper ore lenses to the north of the deposit, haul distances have increased and are now typically over six kilometres. With the completion of the V lens in 2011, stoping and development activities have been focussed on the K and W Lenses. The high grade ore from the K Lens will be used for blending to provide a consistent grade feed to the concentrator.

Because of the depth of mining operations, ventilation and geotechnical issues require careful management. Two refrigeration plants and two ventilation shafts maintain the temperature and the air flow rate in the lower levels of the mine. A deep ventilation shaft, which was initiated and then

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suspended by OZL in 2008 has recently been completed by MMG. The new shaft will allow the operation of additional equipment in the mine, thereby increasing the mining rate.

The Rosebery treatment plant has a relatively complex process flow sheet, reflecting the polymetallic nature of the ore. Ore is trucked to the surface where it is crushed in a two stage crushing circuit. High and low grade ores are crushed separately and blended to provide a consistent feed to the plant. The comminution circuit comprises of two parallel lines with generally similar configurations. A Knelson concentrator within the grinding circuit produces a gold and silver concentrate that is processed to recover gold-silver doré. A single flotation feed is produced from the grinding circuit and then subjected to sequential flotation to produce copper, lead and zinc concentrates. Each process stage involves roughing and cleaning sequences. The copper, lead and zinc concentrates are pumped to a filter plant located at a nearby rail siding, where, following thickening and dewatering, they are loaded onto trains for transport to Burnie.

The tailings are currently disposed of in the Bobadil tailings dam, which can support the operations until at least the end of 2012. The South Marion Oak site has been identified as a tailings dam site to cater for the remaining life of operations. Approvals are being sought from the various government departments to commence construction of the new tailings dam.

The geometry of the mineral deposit limits the output of the mine to around 800,000 tonnes per annum. In the past, ore has been purchased from third parties (e.g. the Que River Mine) to provide additional feed for the 850,000 tonnes capacity concentrator. However current production plans are for plant throughput to average around 720,000 tonnes over the medium term.

Power is sourced from the local power grid and water supply is principally from a pump station on the Pieman River.

### Resources and Reserves

Rosebery mineral resources and ore reserves as of 30 June 2009 are summarised as follows:

Rosebery – Mineral Resources and Ore Reserves as at 30 June 2009 <sup>32</sup>											
	Tonnes (Mt)	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)	Gold (g/t)	Zinc (000's t)	Copper (000's t)	Lead (000's t)	Silver (Moz)	Gold (Moz)
Mineral Resources <sup>33</sup>											
Measured	3.8	14.3	0.5	3.9	147	2.1	543.4	19.0	148.2	17.9	0.3
Indicated	2.9	15.5	0.5	3.9	130	2.1	448.7	14.5	112.9	12.1	0.2
Inferred	7.4	11.1	0.3	3.9	140	1.6	822.6	22.2	289.0	33.5	0.4
<b>Total Mineral Resources</b>	14.1	12.9	0.4	3.9	140	1.9	1,814.7	55.7	550.1	63.5	0.8
Ore Reserves <sup>34</sup>											
Proved	1.7	13.3	0.4	3.6	131	1.8	229.9	6.6	62.2	7.3	0.1
Probable	1.4	15.7	0.5	3.8	129	1.8	223.1	6.5	54.0	5.9	0.1
Total Ore Reserves	3.2	14.4	0.4	3.7	130	1.8	453.1	13.1	116.2	13.2	0.2

Source: MMG

Historically, the Rosebery Mine has operated with only around three years of reserves. In 2006, Zinifex commenced a US\$19 million exploration project, titled Project Horizons, with the objective of extending the life of the mine to 2020. The project focussed on infill drilling and

<sup>32</sup> Significant figures do not imply precision. Figures are rounded according to JORC Code Guidelines. Includes 100% of all mineral resources, which include ore reserves. "oz" refers to troy ounces, which equal to 31.1035 grams per ounce.

<sup>33</sup> The cut-off grade for the estimation of mineral resources is based on metallurgically recoverable total metal units expressed as a dollar value (A\$125 per tonne).

Ore reserves have been estimated using a cut off grade based on Nett Smelter Return of US\$175/t, using a copper price of US\$2.00 per pound, zinc price of US\$0.90 per pound, lead price of US\$0.70 per pound, silver price of US\$11/oz, gold price of US\$750/oz and a 0.75 exchange rate.

exploration of the deeper K and PK Lenses. In May 2007, Zinifex announced that successful exploration drilling from the initial stages of Horizons had increased the Rosebery resource by 65% and substantially extended the life of the mine. Resources were further increased in 2008 but reserves have been decreasing. The following table shows movements in total mineral resources and ore reserves at Rosebery in recent years:

Rosebery – Mineral Resources and Ore Reserves									
	A	As at 31 March 2007 As at 30 June							
	2005	2006	2007	2008	2009				
Resources <sup>35</sup> (Mt)	6.5	7.7	11.7	15.2	14.1				
Reserves (Mt)	2.3	2.6	3.8	3.5	3.2				

Source: MMG

MMG believes there remains considerable potential for further increases at the Rosebery mine through exploration and delineation drilling. Drilling has also recommenced at the Jupiter prospect, which had previously returned encouraging results, seven kilometres south of Rosebery.

#### Expansion

No major expansions are planned at Rosebery but there is an ongoing continuous improvement program to optimise the operations and reduce costs.

The processing plant at Rosebery was commissioned in the 1970s and no major upgrade has been carried out in more than 20 years. In the past, the reserves were insufficient to justify major capital spending on the concentrator. With Project Horizons extending the mine life, a prefeasibility study was undertaken in 2008 for the replacement of the concentrator with a more modern plant. The new plant was estimated to cost approximately US\$140 million and was expected to have a throughput of one million tonnes per annum. However, MMG believes that greater value can be generated through the appropriate optimisation of the crushing and grinding circuits.

A US\$1 million study assessing the potential development of the Hercules mine is expected to be completed in 2011. Re-establishment of site access and bulk sampling is planned as part of a staged approach to the potential extraction of the resource, which is subject to confirmation that the South Hercules mineralisation is amenable to treatment through the Rosebery plant. The above reported resource estimates do not include the South Hercules resource, which have been estimated at 1.0 million tonnes at an average silver and gold grade of 133g/t and 2.4g/t respectively.

Refers to measured, indicated and inferred resources and includes ore reserves.

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# Operating Performance

Rosebery's operating performance for the five years ended 31 December 2009 and the six months ended 30 June 2010 is summarised below:

Rosebery - Operating Statistics								
		Year	r to 31 Decen	ıber		Six months		
	200536	200637	200734	200838	200939	ended 30 June 2010		
Ore mined (000's tonnes)	733	711	682	735	725	305		
Ore milled (000's tonnes)	709	641	726	815	795	340		
Zinc milled grade (%)	13.3	14.3	12.4	11.1	12.1	12.1		
Lead milled grade (%)	4.4	4.7	3.8	4.1	4.0	4.0		
Copper milled grade (%)	0.4	0.4	0.4	0.3	0.4	0.3		
Silver milled grade (g/t)	130.9	153.4	156.0	123.2	134.9	124.9		
Gold milled grade (g/t)	1.8	2.3	1.7	1.4	1.7	1.7		
Zinc recovery (%)	89.9	89.7	89.7	88.6	88.6	87.6		
Lead recovery (%)	81.3	81.2	77.8	79.2	79.0	77.6		
Copper recovery (%)	65.0	60.2	60.2	53.0	53.6	55.6		
Gold recovery (%)	79.3	80.9	71.6	24.7	21.3	25.0		
Contained metals								
Zinc (000's tonnes)	88.8	86.8	84.2	84.9	85.1	35.9		
Lead (000's tonnes)	25.1	24.4	21.6	28.7	25.0	10.4		
Copper (000's tonnes)	1.7	1.4	1.7	2.1	1.9	0.6		
Gold (000's ounces)	33.2	37.7	27.9	30.7	34.1	15.2		
Silver (000's ounces)	2,694	2,812	3,033	2,985	3,088	1,143		
Total cash costs (US¢/lb zinc)40	41.0	41.0	49.1	40.2	32.1	24.9		

Source: MMG

Zinc and lead head grades have declined from their highs as mining has moved to lower grade areas of the deposit. The lower grades have been somewhat offset by an increase in the volume of ore treated. Zinc recoveries and production have been stable. Lead production has been more volatile due to fluctuating grades and recovery rates. For the 12 months ended December 2009, Rosebery produced 85,100 tonnes of contained zinc and 25,000 tonnes of contained lead and the cash costs after credits for copper, gold and silver were US\$0.32 per pound of zinc.

# Outlook

In 2010 MMG expects to process around 720,000 tonnes of ore to produce around 83,000-87,000 tonnes of zinc and 23,000-25,000 tonnes of lead.

As reported in Zinifex's Explanatory Memorandum in relation to the merger with Oxiana.

As reported in Zinifex's Explanatory Memorandum in relation to the merger with Oxiana.

<sup>38</sup> As reported by OZL.

<sup>39</sup> Century mine was operated by OZL until acquired by MMG in June 2009. The reported operating statistics is based on the full year performance.

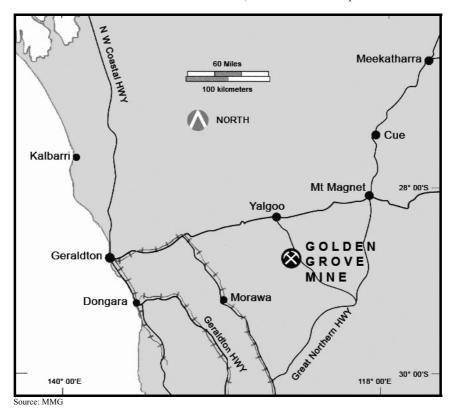
<sup>&</sup>quot;lb" refers to pounds. There are 2,204 pounds per tonne.

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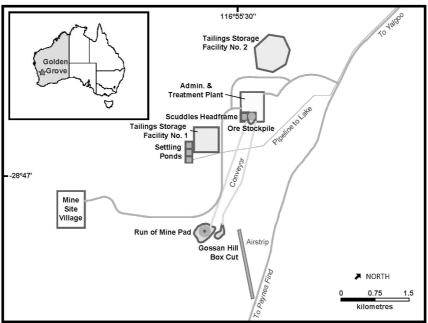
#### 4.4 Golden Grove

#### Overview

Oxiana acquired the Golden Grove operations from Newmont Mining in July 2005 for US\$265 million. Golden Grove is located approximately 450 kilometres north-east of Perth and 280 kilometres east of Geraldton in Western Australia, as illustrated on the map below.



The assets acquired included Gossan Hill, a copper-zinc-lead-gold-silver underground mine, the Scuddles zinc-copper underground mine, a treatment plant and the surrounding tenement package covering 12,306 hectares. Both mines are a source of copper ore containing minor amounts of lead, zinc and precious metals and of zinc ore containing significant amounts of copper, lead, silver and gold. The zinc concentrate, copper concentrate and precious metal concentrates produced are exported to smelters in China, Korea, Japan, India and Thailand, via the Port of Geraldton. A map of the Golden Grove operations is shown below:



Source: MMG

Production at Golden Grove began with the mining of the Scuddles mineral deposit in 1990. This was followed eight years later with the mining of Gossan Hill. In July 2005, the Scuddles mine was put on care and maintenance but re-opened in mid-2007 on a limited scale. However, lower commodity prices and improved performance from Gossan Hill, from which sufficient ore can be sourced to operate the plant at full capacity, prompted the placement of Scuddles on care and maintenance in January 2009.

# Geology and Mineralisation

The Scuddles and Gossan Hill volcanic hosted massive sulphide ("VHMS") deposits are situated within the Warriedar Fold Belt, which is part of the Yalgoo-Singleton greenstone belt in the southern Murchison Province of the Archean Yilgarn Block of Western Australia. The mineralisation is hosted within a thick package of predominantly felsic Archean volcanogenic sediments and volcanics.

VHMS deposits often occur in clusters. The distribution of mineral deposits already discovered at Golden Grove, along with positive results from earlier drilling, suggests that there is strong potential for the delineation of further mineralisation at Golden Grove.

## Mining and Processing

Underground mining at Golden Grove is by sublevel open stoping, with the majority of ore currently being mined from the Amity and Hougoumont mineral deposits. Ore from Gossan Hill is trucked to the surface where it is crushed and delivered to the mill via a three kilometre overland conveyor. Zinc and copper ores are treated separately on a batch basis using the same process plant, which consists of a two stage grinding circuit followed by sequential flotation. Copper ore contains only minimal amounts of other metals, which allows the copper ore to be floated in a single stage circuit, although ore with a high talc content requires a pre-float to remove the talc. Lead, gold and silver from the zinc ore is recovered to a precious metal concentrate prior to zinc flotation. The plant has a throughput capacity of 1.7 million tonnes per annum. The fact that zinc

and copper ores are found in distinct deposits and are batch processed in the same plant affords MMG the flexibility to focus production on one metal or the other.

### Resources and Reserves

Golden Grove mineral resources and ore reserves as at 30 June 2009 are set out in the table below:

	Tonnes	Zinc	Copper	Lead	Silver	Gold	Zinc	Copper	Lead	Silver	Gold
	(Mt)	(%)	(%)	(%)	(g/t)	(g/t)	(000's t)	(000's t)		(Moz)	(Moz
Mineral Resources <sup>42</sup>											
Primary Copper											
Measured	10.2	0.6	3.1	0.0	19	0.6	63.7	318.3	3.2	6.3	0.2
Indicated	3.2	0.4	2.8	-	14	0.5	12.7	89.0	-	1.4	0.
Inferred	5.8	0.9	3.2	-	28	0.7	49.7	187.0	-	5.2	0.
Sub-total	19.1	0.7	3.1	0.0	21	0.6	126.1	594.3	3.2	12.9	0.
Oxide Copper											
Measured	-	-	-	-	-	-	-	-	-	-	-
Indicated	-	-	-	-	-	-	-	-	-	-	-
Inferred	2.5	-	2.3	-	-	-	-	58.0	-	-	-
Sub-total	2.5	-	2.3	-	-	-	-	58.0	-	-	-
Zinc											
Measured	4.1	12.1	0.4	1.2	84	1.6	495.4	18.3	49.2	11.1	0
Indicated	0.8	12.0	0.6	2.1	120	2.2	96.3	4.9	16.6	3.1	0.
Inferred	4.0	11.1	0.7	0.7	64	1.0	439.5	26.4	27.8	8.1	0.
Sub-total	8.9	11.6	0.6	1.1	78	1.4	1,031.2	49.7	93.6	22.3	0.4
Gold											
Measured	-	-	-	-	-	-	-	-	-	-	-
Indicated	-	-	-	-	-	-	-	-	-	-	-
Inferred	1.1	-	-	-	100	3.2	-	-	-	3.6	0.
Sub-total	1.1	-	-	-	100	3.2	-	-	-	3.6	0.
Total Mineral Resources							1,157.3	702.0	96.9	38.7	0.
Ore Reserves <sup>43</sup>											
Primary Zinc											
Proved	1.2	12.5	0.4	1.5	73	1.6	148.2	4.7	17.6	2.8	0.
Probable	0.9	11.0	0.4	1.7	95	2.0	101.2	3.2	15.5	2.8	0.
Sub-total	2.1	11.8	0.4	1.6	82	1.7	249.4	8.0	33.1	5.6	0.
Primary Copper											
Proved	2.6	0.4	3.5	0.0	18	0.4	11.5	90.0	0.5	1.5	0.
Probable	1.0	0.4	3.2	0.1	21	0.5	4.2	33.4	0.6	0.7	0.
Sub-total	3.6	0.4	3.4	0.0	19	0.5	15.7	123.4	1.1	2.2	0.
Total Ore Reserves							265.1	131.3	34.1	7.8	0.3

Source: MMG

Significant figures do not imply precision. Figures are rounded according to JORC Code Guidelines. Includes 100% of all mineral resources, which include ore reserves. "oz" refers to troy ounces, which equal to 31.1035 grams per ounce.

Mineral resources have been estimated using a cut-off grade based on the Nett Smelter Return value of US\$70 per tonne.

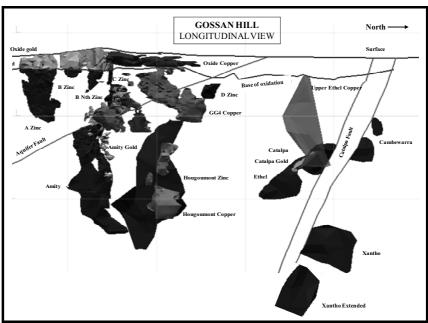
Ore reserves have been estimated using a cut off grade based on Nett Smelter Return values ranging from US\$110/t, using a copper price of US\$2.00 per pound, zinc price of US\$0.90 per pound, lead price of US\$0.70 per pound, silver price of US\$11/oz, gold price of US\$750/oz and a 0.75 exchange rate.

#### **Expansion and Exploration**

Golden Grove reserves support mining operations at current rates of production until approximately 2012. However, there is considerable potential to extend mining operations, both through mining underground resources and other mineralisation not currently in reserves, and through potential open pit mining of gold, copper and zinc mineralisation. In addition, the area around the Golden Grove operations remains prospective for further discoveries.

Exploration at Golden Grove was suspended in late 2008 due to capital constraints but drilling recommenced at Gossan Hill and Scuddles in October 2009 and at Gossan Valley, located eight to 10 kilometres south of the Golden Grove operations, in the March 2010 quarter. At Gossan Hill, underground exploration has been promising, including at Xantho Deeps, at Amity and between Gossan Deeps and Hougoumont. At Scuddles, exploration is continuing and an update to resources is expected soon. Ore from Scuddles is expected to contribute to production when the Gossan Hill mine depletes. At Gossan Valley, MMG has had a number of promising results.

The location of the various expansion opportunities are identified in the following long section of the Golden Grove mineral deposits:



Source: MMG

Construction of a new tailings storage facility started in late 2009 and is expected to be completed in September 2010. MMG estimates capital costs at US\$24 million.

In May 2010, MMG started a feasibility study contemplating the development of an open pit operation to exploit the oxide and the supergene copper resource found above the Gossan Hill underground operation. Treatment of the oxide copper would require some modifications to the current treatment process to allow flotation of the oxide ore. MMG expects total production of 240,000 tonnes of copper concentrate grading 25% copper from 2011 to 2014. The project is tabled for board approval in late 2010. Mining of the copper pit might also allow the subsequent recovery of zinc ore-bearing pillar remnants from the top of the underground mining operation.

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#### **Operating Performance**

Golden Grove's operating performance for the five years ended 31 December 2009 and the six months ended 30 June 2010 is summarised below:

Golden Grove - Operating Statistics									
		Year to 31 December							
	200544	2006	2007	2008	2009	ended 30 June 2010			
Zinc ore mined (000's tonnes)	309	994	1,043	1,043	409	312			
Zinc ore milled (000's tonnes)	306	1,004	1,021	1,051	398	323			
Average zinc head grade (%)	13.8	15.1	14.0	14.5	16.8	13.6			
Copper ore mined (000's tonnes)	326	386	404	751	1,140	234			
Copper ore milled (000's tonnes)	352	363	432	611	1,012	487			
Average copper head grade (%)	3.4	3.4	4.0	3.6	3.4	3.6			
Contained metals in concentrates:									
- Zinc (000's tonnes)	70.4	138.8	132.0	139.9	56.9	43.8			
- Copper (000's tonnes)	21.5	10.8	15.4	18.5	30.8	14.2			
- Gold (000's ounces) <sup>45</sup>	25.3	50.2	48.8	47.8	29.1	21.9			
- Silver (000's ounces) <sup>45</sup>	2,175	3,064	3,165	3,158	1,381	1,071			
- Lead (000's tonnes) <sup>45</sup>	4.9	11.6	8.1	13.3	4.4	4.5			
Total cash costs (US¢/lb zinc)46	39	27	32	43	159	73			

Source: MMC

In 2006, the Golden Grove operations focused on mining zinc-rich sections of the ore bodies resulting in higher production of the metals associated with the zinc mineralisation and a decline in copper production. Production was higher than in the previous year because of an increase in mining and milling throughput rates resulting from efficiency improvements and an increase in zinc grade. The lower cash costs resulted from lower mining and milling costs as well as a lower average Australian dollar United States dollar exchange rate.

During 2007, throughput rates reached an all time record of 1.65 million tonnes per annum following modifications to the mill. Total cash costs increased despite increased by-product credits partially offsetting high mining costs and a stronger Australian dollar United States dollar exchange rate.

The increase in the total cash costs in 2008 was a result of a reduction in by-product credits, the pre-crushing of copper ore, the full-year contribution of the higher cost Scuddles mine and increased production drilling.

2009 saw the suspension of operations at Scuddles, which was put on care and maintenance on 13 January 2009. Production focused on copper rather than zinc to leverage off the strengthening copper price. Although copper production was significantly higher than in the previous periods, it was below guidance because of unplanned shutdowns. Production of zinc and its associated metals, lead and silver, was down. Cash costs, which are calculated per unit of zinc produced, were lower because of headcount reductions, the replacement of contractors with in-house mining operators and increased by-product credits from copper, which more than offset the lower by-product contributions from lead, silver and gold.

OZL's ownership is from 1 July 2005.

One ounce equals 31.1035 grams.

Total cash costs are per pound and are after treatment and refining costs, royalty costs and net of copper, lead, gold and silver credits. There are 2.204 pounds per tonne.

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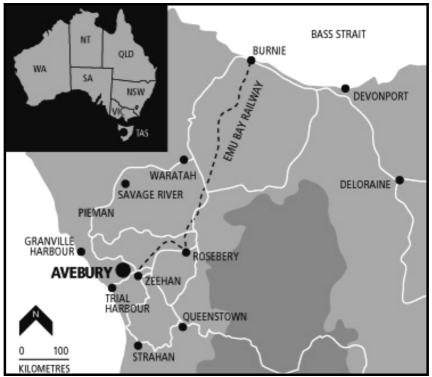
#### Outlook

Production guidance for 2010 is 30,000-32,000 tonnes of copper in concentrate and 80,000-85,000 tonnes of zinc in concentrate.

# 4.5 Avebury

### Overview

The Avebury nickel project is located approximately six kilometres west of Zeehan on the west coast of Tasmania and about 150 kilometres by road from the port of Burnie. The Avebury deposit lies within the western Tasmanian mineral province, which hosts a number of major mineral deposits including copper, gold, lead, zinc and magnetite. The region has a long history of exploration and prospecting and Zeehan was actively mined for silver-lead deposits during the 1890s and early 1900s.

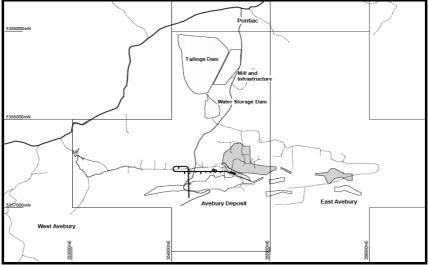


Source: MMG

The Avebury deposit was discovered by Allegiance Mining NL ("Allegiance") in 1998 and mining commenced in December 2006. Zinifex acquired Avebury through a takeover of Allegiance during the first half of 2008. The processing plant was commissioned in June 2008. The original mine life, based on reserves at the time production commenced, was around eight years, with an expectation that additional resources would be identified to support a larger and longer life operation. However, in response to declining nickel prices, OZL announced on 19 December 2008 that the project would be put on care and maintenance. MMG is currently reviewing the operations with a view to recommencing production as soon as practical.

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The map below shows the location of the deposits, the processing plant and the associated infrastructure.



#### Source: MMG

# Geology and Mineralisation

The project is based on the mining of four principal east-west striking nickel lodes, the Avebury North, Avebury Central, Viking North and Viking South lodes, as well as a number of minor ancillary lodes. Mineralisation is predominantly pentlandite, with smaller quantities of pyrrhotite and magnetite.

# Mining and Treatment

Mining at Avebury is by underground mining methods, primarily by transverse and longitudinal open stoping methods. Access to the mineral deposits is through two declines: the North Avebury decline to the North Avebury mineral deposit and further eastward extensions to the Avebury ore systems, and the Viking Decline to the Viking mineral deposit and westward extensions.

The conventional processing plant was designed with capacity to process 900,000 tonnes of ore to produce approximately 8,500 tonnes of nickel per annum in a nickel concentrate grading around 20%. The process includes 3-stage crushing, milling and flash flotation before treatment through a flotation circuit to produce nickel concentrates. The plant has the capacity to treat nickel sulphides locked in magnetite, through a magnetic separator, regrind mill and retreat flotation cells.

An agreement is in place to sell all concentrate production to Jinchuan Group Limited, a major Chinese nickel miner and smelter.

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#### Resources

Avebury mineral resources as at 30 June 2009 are summarised as follows:

Avebury – Mineral Resources as at 30 June 2009 <sup>47</sup>								
	Tonnage (Mt)	Nickel (%)	Nickel (000's t)					
Mineral Resources <sup>48</sup>								
Measured	3.4	1.1	37.9					
Indicated	4.7	1.0	44.4					
Inferred	14.0	0.9	131.3					
<b>Total Mineral Resources</b>	22.0	1.0	213.5					

Source: MMG

MMG is undertaking further drilling at Viking and Avebury East to delineate additional resources with a view to extending the life and increasing the value of the operation.

### **Operating Performance**

The Avebury processing plant was commissioned in June 2008 and the first nickel concentrate was produced in mid-July. Ramp up was ahead of schedule and the operations had reached a throughput rate of approximately 800,000 tonnes per annum by the time it was put on care and maintenance in December 2008 in response to declining nickel prices. Below is a summary of the operating performance of Avebury for the six months it was in operation:

Avebury – Operating Statistics									
	Quarter to 30 September 2008	Quarter to 31 December 2008	Year to 31 December 2008						
Ore milled (000's tonnes)	135.0	202.0	336.5						
Nickel head grade (%)	1.0	0.9	0.9						
Nickel recovery (%)	62.5	68.5	68.6						
Nickel concentrate (000's tonnes)	4.8	7.0	11.8						
Concentrate grade (% nickel)	17.0	16.1	16.7						
Contained nickel (000's tonnes)	0.9	1.1	2.1						
Total cash costs (US\$/lb nickel)49	11.0	7.1	9.9						

Source: MMG

# Outlook

The operation had not reached full capacity when it was put on care and maintenance and it is therefore not fully understood. In particular, the presence of higher than expected levels of arsenic in parts of the ore body can result in arsenic grades in the concentrate that exceed customer specifications. The configuration of the mine does not allow for selective mining or blending of high arsenic ores with low arsenic ores. A number of alternative options are currently under review. The operation will require the construction of a backfill plant and the development of a second tailings storage facility to add to the existing facility's three year capacity. MMG believes that Avebury has the potential to operate at its nameplate capacity of 900,000 tonnes per annum

<sup>47</sup> Significant figures do not imply precision. Figures are rounded according to JORC Code Guidelines. Includes 100% of all resources, which include reserves.

<sup>48</sup> Resources have been estimated using a cut-off grade of 0.7% nickel.

<sup>49</sup> Total cash costs are per pound and are after treatment and refining costs, royalty costs and net of copper, lead, gold and silver credits. There are 2,204 pounds per tonne.

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and to become a profitable mine. MMG expects that once the arsenic issue has been resolved the operations could be re-started and reach production capacity within three months.

### 4.6 Projects and Exploration

# 4.6.1 Dugald River

#### Overview

The Dugald River project in based on one of the world's largest known undeveloped lead-zinc-silver deposits. It is located in north-west Queensland, approximately 65 kilometres north-west of Cloncurry. The project is located close to power, water and transport infrastructure. Pasminco acquired the Dugald River project, together with the Century mine, from CRA in 1997. The project formed part of the assets acquired by Zinifex when it listed in 2004.

The Dugald River deposit was discovered in the 1870s. Notwithstanding the size and attractive zinc grades of the deposit, it was not developed by previous owners because of marginal project economics and elevated manganese content that made the Dugald River zinc concentrates unattractive to zinc smelters at the time.

Growth in the smelting industry, technological changes and the increase in zinc prices from late 2005 prompted OZL to conduct a pre-feasibility study, which was completed in December 2006. A feasibility study followed and was completed in December 2008. Since then, MMG has completed documentation and the environmental impact statement has been reactivated with the aim to submit permit approval in 2010. The mining lease portfolio is under review. MMG expects to seek board approval for the project in late 2010.

### Mining and Processing

The feasibility study concluded that a two million tonnes per annum underground mine with a mine life of over 20 years was optimal. Given the narrow, steeply dipping nature of the ore body, mining would be by conventional underground mining methods. High metal recovery rates could be achieved with standard crushing, grinding and flotation processing (although a relatively fine grind will be required). Annual average production of more than 200,000 tonnes of zinc, 25,000 tonnes of lead and one million ounces of silver in concentrate is contemplated. Dugald River has the potential to replace up to 40% of Century's zinc production when Century operations cease. The presence of high grade ore will allow MMG to mine high grade zones selectively if required.

The project has good access to infrastructure, with a sealed two-lane highway only 10 kilometres to the east of the site and power and water readily available. Zinc concentrates would be transported approximately 100 kilometres to BHP's rail facility at Yurbi and then railed to Townsville. It is currently contemplated that Dugald River would be a fly-in/fly-out operation through Cloncurry airport.

It is estimated that development and commissioning would take approximately three years from commencement of the project, allowing commercial production to commence in 2014. Initial capital costs are expected to be approximately US\$790 million and average C1 cash costs are estimated at around US\$0.65 per pound of zinc.

#### Resources

Dugald River's mineral resources as at 30 June 2009 are set out in the table below:

Dugald River Mineral Resources as at 30 June 200950										
	Tonnes (Mt)	Zinc (%)	Lead (%)	Silver (g/t)	Zinc (000's t)	Lead (000's t)	Silver (Moz)			
Measured	20.6	13.1	1.9	56	2,698.6	391.4	37.1			
Indicated	23.0	12.6	2.0	28	2,898.0	460.0	20.7			
Inferred	9.4	10.7	1.4	14	1,005.8	131.6	4.1			
<b>Total Mineral Resources</b>	53.0	12.5	1.9	36	6,602.4	983.0	61.9			

Source: MMG

MMG should be in a position to release an updated reserves and resources statement later in 2010.

A large copper target has been identified and there is potentially an opportunity to treat the copper mineralisation through the plant.

### 4.6.2 Exploration

MMG has regional exploration interests in Canada, Australia and Indonesia. The major exploration targets are copper, zinc and nickel.

Amongst the most advanced of MMG's exploration interests are its projects in the Nunavut Province of Canada. Principal assets include the Izok Lake copper, zinc, lead and silver resource, the High Lake copper, zinc, lead and silver resource, gold resources at Lupin and Ulu, base metal deposits at Gondor and Hood and around 2,000 square kilometres of exploration tenements.

Mineral resource estimates have been prepared for the Izok Lake and High Lake copper, zinc, lead and silver projects. Mineral resources as at 30 June 2009 for Izok Lake and High Lake are set out in the table below:

Izok Lake and High Lake – Mineral Resources as at 30 June 2009 <sup>51</sup>											
	Tonnes (Mt)	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)	Gold (g/t)	Zinc (000's t)	Copper (000's t)	Lead (000's t)	Silver (Moz)	Gold (Moz)
Izok Lake											
Measured	-	-	-	-	-	-	-	-	-	-	-
Indicated	14.4	12.9	2.5	1.3	71	-	1,863.5	361.5	184.3	32.9	-
Inferred	0.4	6.4	3.8	0.3	54	-	23.6	14.0	1.0	0.6	-
Total Izok Lake	14.8	12.8	2.5	1.3	71	-	1,887.1	375.5	185.3	33.5	-
High Lake											
Measured	-	-	-	-	-	-	-	-	-	-	-
Indicated	17.2	3.4	2.3	0.3	70	1.0	576.2	387.0	53.3	38.7	0.5
Inferred	0.0	2.4	0.5	0.4	122	0.2	1.0	0.2	0.2	0.2	0.0
Total High Lake	17.2	3.3	2.2	0.3	70	0.9	577.2	387.2	53.5	38.9	0.5

Source: MMG

Significant figures do not imply precision. Figures are rounded according to JORC Code Guidelines. Includes 100% of all resources and resources include reserves. The resource estimate is based on a cut-off grade of 6% zinc. "oz" refers to troy ounces, which equal to 31.1035 grams per ounce.

Significant figures do not imply precision. Figures are rounded according to JORC Code Guidelines. "oz" refers to troy ounces, which equal to 31.1035 grams per ounce.

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Their remote location (Izok Lake is approximately 360 kilometres north of Yellowknife and High Lake is approximately 190 kilometres further north), the Arctic environment and the limited infrastructure in place mean that substantial capital expenditure would be required for their development. A concept study on Izok Lake was completed in 2009 and a prefeasibility study is currently underway and is expected to be completed late 2010.

The Lupin underground gold mine has been on care and maintenance since 2005. If further mineralisation is delineated there would be potential to reopen the mine.

The Ulu gold project, for which underground development is in place, contains a modest resource with upside potential. Mineralisation from Ulu could potentially be treated at Lupin.

More detail regarding MMG's exploration interests are set out in the detailed report of AMC.

# 5 Valuation Methodology

#### 5.1 Overview

Grant Samuel's Chapter 18 Valuation of MMG has been assessed by aggregating calculated values for MMG's Mineral Assets and adjusting for net debt and other assets and liabilities.

Grant Samuel's assessment of MMG's Mineral Assets has been determined having regard to parameters outlined in Chapter 18 of the Listing Rules. In particular, Listing Rule 18.34 states that:

- any valuation of Mineral Assets must be prepared under the VALMIN Code<sup>52</sup>, SAMVAL Code<sup>53</sup>, CIMVAL<sup>54</sup> or such other code approved by the Exchange from time to time;
- the basis of the valuation, relevant assumptions and the reason why a particular method of valuation is considered most appropriate having regard to the nature of the valuation and the development status of the asset must be clearly stated; and
- if more than one valuation method is used and different valuations result, how the valuations compare and the reason for selecting the value adopted must be explained.

Grant Samuel has concluded on the basis of Listing Rule 18.30(3) that its Chapter 18 Valuation of MMG can only take into account the estimated value of measured and indicated resources that are considered to be economically extractable, which will generally mean that the Chapter 18 Valuation will be limited to an estimate of the value of reserves (i.e. that portion of measured and indicated resources that has been demonstrated to be economic). Of particular significance, Listing Rule 18.30(3) states that valuations for inferred resources are not permitted.

Market based valuations of resources assets (i.e. both valuations that attempt to estimate fair market value and market participants' assessment of value as reflected in transaction prices) generally take into account, where appropriate, measured, indicated and inferred resources, the potential for exploitation of additional mineralisation not yet classified as resources, and broader exploration prospectivity. The exclusion of these sources of potential value from the Chapter 18 Valuation means that the Chapter 18 Valuation does not reflect a market value: it does not represent an estimate of the value that might be realised through an arm's length transaction. Rather, the Chapter 18 Valuation is essentially an estimate of the value notionally attributable to reserves only.

The quantum of the difference between fair market values and values estimated for the purposes of a Chapter 18 Valuation will depend on the nature of individual resources assets. For some assets, particularly those that are well understood and towards the end of their economic lives, it is likely that there will be limited opportunities to exploit mineralisation beyond current reserves. For such assets, the difference between market value and values estimated for the purposes of a Chapter 18 Valuation may be immaterial. However, for other assets (such as resources projects in the early stages of their development or mines where it is impractical or uneconomic to prove up significant reserves in advance of mining, but where the orebody being mined is such as to provide reasonable grounds to expect that mining will continue for years into the future) the difference between estimates of market value and estimates of value for the purpose of a Chapter 18 Valuation could be substantial.

VALMIN Code represents the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (2005 edition), as prepared by the VALMIN Committee, a joint committee of The Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Mineral Industry Consultants Association as amended from time to time.

<sup>53</sup> SAMVAL Code represents the South African Code for the Reporting of Mineral Asset Valuation (2008 edition) as amended from time to time.

<sup>54</sup> CIMVAL represents the Standards and Guidelines for Valuation of Mineral Properties endorsed by the Canadian Institute of Mining, Metallurgy and Petroleum, February 2003 (final version) as amended from time to time.

There are four primary methodologies commonly used for valuing operating businesses:

- capitalisation of earnings or cash flow;
- discounting projected cash flows;
- industry rules of thumb; and
- estimation of the aggregate proceeds from an orderly realisation of assets.

Each of these valuation methodologies has application in different circumstances. The primary factor in determining which methodology is appropriate is normally the actual practice adopted by purchasers of the type of businesses and assets involved. However, given that a Chapter 18 Valuation does not seek to replicate a market based valuation, this approach to determining which methodology to adopt is not necessarily helpful.

Grant Samuel has adopted the discounted cash flow ("DCF") methodology for the purpose of its Chapter 18 Valuation. The DCF methodology is widely used in the valuation of resources assets. More importantly, in the context of the requirements for a Chapter 18 Valuation, it allows for the preparation of an estimate of value that only takes into account specified mineralisation (i.e. reserves plus that portion of measured and indicated resources that are economically extractable).

The discounted cash flow methodology involves the calculation of net present values by discounting expected future cash flows. Projected cash flows are discounted to a present value using discount rates that take into account the time value of money and risks associated with the cash flows. The discounted cash flow methodology is particularly appropriate for assets such as mineral assets where reserves are depleted over time and where significant capital expenditure is required. It is the primary method of valuation in the mining industry.

Grant Samuel developed cash flow models for each of the key Mineral Assets of MMG. The financial models were developed by Grant Samuel on the basis of operating models developed by AMC based on life of mine plans provided by MMG. The operating models developed by AMC had regard only to that portion of measured and indicated resources that has been demonstrated to be economically extractable, which generally corresponded to reserves. AMC reviewed each of the technical assumptions in the operating models, including those regarding reserve estimates, production profiles, operating costs and capital costs. Grant Samuel determined the economic and financial assumptions used in the cash flow models. The net present value of each mineral asset has been calculated on an ungeared after tax basis as at 1 July 2010.

Alternative valuation methodologies, such as reserve and resource multiples of comparable companies and comparable transactions, have not been considered as secondary evidence of value. Alternative valuation methodologies typically attribute value to measured and indicated resources that have not yet been proven economic, to inferred resources and to the opportunity for addition mineralisation such as exploration potential. There is no way of determining the value attributable solely to reserves through these valuation methodologies.

The valuations of the Mineral Assets represent Grant Samuel's overall judgements as to value given the parameters of Chapter 18 of the Listing Rules. They do not rely on any one particular set of economic assumptions. The valuations have been determined having regard to the sensitivity of DCF analysis to a range of economic assumptions. The valuations incorporate Grant Samuel's judgemental assessment of the impact on value of factors such as location (and therefore exposure to sovereign risk).

For the avoidance of any doubt, the Chapter 18 Valuation of MMG does not represent Grant Samuel's assessment of the market value of the company. It effectively represents an estimate of the value that is notionally attributable to reserves only. Estimates of value determined on this basis are essentially theoretical. Such estimates of value could vary, potentially materially, from fair market value.

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The valuations are based on a number of important assumptions, including assumptions regarding future metal prices and the A\$:US\$ exchange rate. The valuations reflect the technical judgements of AMC regarding the prospects for each of MMG's operations. Metal prices, exchange rates and expectations regarding future operating parameters can change significantly over short periods of time. Such changes can have significant impacts on calculated value. Accordingly, while the values estimated are believed to be appropriate for the purpose of a Chapter 18 Valuation, they may not be appropriate for other purposes or in the context of changed economic circumstances or different operational prospects for the mining assets of MMG.

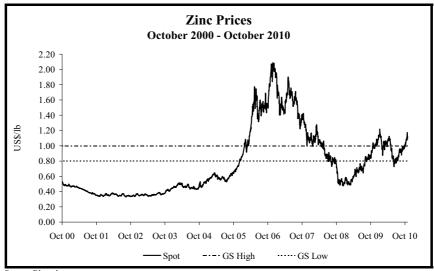
#### 5.2 Valuation Assumptions

The valuations of the key Mineral Assets of MMG have been determined by reference to DCF valuation analysis. This analysis involves making a number of general assumptions regarding future commodity prices, economic factors and discount rates. The NPV valuations for each of the Mineral Assets are sensitive to the assumptions used in the analysis. Relatively small changes in certain variables can cause significant changes in value. For this reason, NPV valuations should be treated with caution.

The key assumptions are:

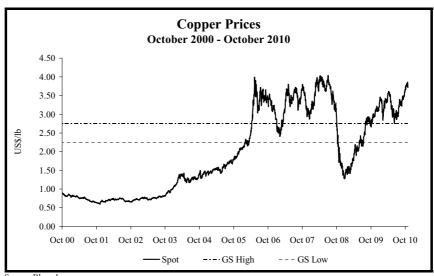
- historical commodity prices and exchange rates from 1 July 2010 to 31 October 2010;
- long run real zinc prices in the range US\$0.80-1.00 per pound;
- long run real copper prices in the range US\$2.25-2.75 per pound;
- long run real lead prices in the range US\$0.60-0.80 per pound;
- real gold prices of US\$1,350 per ounce and real silver prices of US\$24.00 per ounce, based on gold and silver prices prevailing around 31 October 2010;
- an exchange rate of A\$1.00=US\$0.98 declining in line with forward market estimates;
- long run inflation rates of 2.5% per annum for both Australia and the United States;
- nominal discount rates for the discounted cash flow valuations in the range 8.5-10.5%. The discount rates represent estimates of the costs of capital for investors in resources projects derived both in world markets and in the Australian market. The rates are estimates of weighted average costs of capital and have been applied to expected future ungeared after-tax cash flows. The basis for the selection of the rates is set out in Appendix 1; and
- tax depreciation schedules determined on the basis of tax written down values for various asset categories. Accumulated carry forward expenditures that are deductible for tax purposes have been allowed for in the financial models.

Grant Samuel has assumed long run zinc prices (in real terms) in the range US\$0.80-1.00 per pound for valuation purposes. The zinc price assumptions compared to historical zinc prices is shown below:



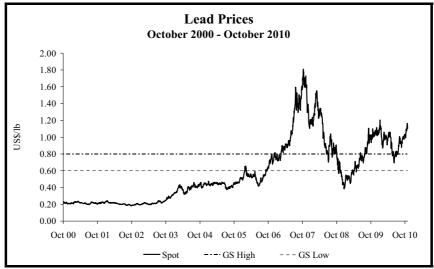
Source: Bloomberg
Note: Historical prices are in nominal terms but Grant Samuel price assumptions (as illustrated) are in 2010 dollars.

Grant Samuel has assumed long term copper prices (in real terms) in the range US\$2.25-2.75 per pound for valuation purposes. The copper price assumptions compared to historical copper prices is shown below:



Note: Historical prices are in nominal terms but Grant Samuel price assumptions (as illustrated) are in 2010 dollars.

Grant Samuel has assumed long term lead prices (in real terms) in the range US\$0.60-0.80 per pound for valuation purposes. The lead price assumptions compared to historical lead prices is shown below:



Source: Bloomberg

Note: Historical prices are in nominal terms but Grant Samuel price assumptions (as illustrated) are in 2010 dollars.

After trading for many years within a reasonably stable range of prices (in the case of zinc, approximately US\$0.40-0.60 per pound, in the case of copper, approximately US\$0.70-0.90 per pound and in the case of lead in the range US\$0.18-0.25 per pound), zinc prices started strengthening substantially in late 2004/early 2005 and copper and lead in late 2003. Prices remained relatively high for a number of years but fell sharply in mid-2007 for zinc and mid-2008 for copper and lead. Since late 2005, commodities prices have been very volatile and there has been little consensus regarding future zinc, copper and lead prices, both for the short and the longer term.

The assumptions regarding long run zinc, copper and lead prices adopted for the purposes of the valuation of MMG's mining assets are broadly consistent with the range of forecast price assumptions used by market analysts.

Given the volatility in commodity markets and the widely varying views of industry analysts, commentators and corporate participants, assumptions regarding future zinc, copper and lead prices are inherently subject to considerable uncertainty. It should be noted that the value of the MMG could vary, perhaps significantly, with changes in commodity prices and price expectations. The assumptions in relation to long run zinc, copper and lead prices adopted by Grant Samuel do not represent forecasts by Grant Samuel but are intended to reflect the range of assumptions that could reasonably be adopted by industry participants in their pricing of resources assets and companies.

Appendix 2 discusses the zinc and copper markets in more detail.

# 5.3 Resources Projects and Optionality

The conventional discounted cash flow methodology implicitly assumes that the rate of output from a mining operation is pre-determined. This methodology ignores the value inherent in management's ability to vary production and other operating parameters in reaction to changes in commodity prices or other circumstances. Management may change the rate of production of a

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mine, close or re-open the mine or in certain circumstances even abandon it. Accordingly, a mine may be regarded as an option (or series of options) over the resources it contains.

The value of management flexibility is illustrated by the example of a marginal mine, where the marginal cash production cost is equal to expected revenue. Application of the conventional discounted cash flow methodology would result in the estimate of a zero value for the mine. In reality, however, the mine will have some value, because management is able to reduce or cease production if marginal revenue falls below the marginal cash cost of production and to resume or increase production if commodity prices rise.

Similarly, the designs and long term development alternatives for many mines allow management to change operating plans in the light of future commodity prices and operating costs. Life of mine plans frequently involve mining marginal ore, making additional cut backs or making other operational decisions at some point in the future. However, management is commonly not required to commit to such decisions at the commencement of the mining project. Firm commitments are only required much later in the project, at which time management will be able to make decisions on the basis of the commodity prices and other circumstances then prevailing. The mining operations as they relate to (for example) the mining of marginal ore or a final cut back may be thought of as a series of call options exercisable at the marginal mining costs to be incurred at the time. These options represent additional value not captured by the conventional discounted cash flow methodology.

An alternative perspective is that management flexibility results in changes in commodity prices having an asymmetric impact on the value of a mining operation. If commodity prices rise unexpectedly, the mine will earn greater revenue (and may be able to mine additional mineralisation not originally scheduled for production). If commodity prices fall unexpectedly, production will be curtailed or, in the worst case, stopped. The mine will not continue, in the long term, to be operated at a cash operating loss. By contrast, deterministic valuation models implicitly assume that there is some possibility of the mine operating on a long term basis at a cash operating loss, in the same way that it implicitly assumes that the mine may earn "super profits" as a result of a persistent increase in commodity prices.

Grant Samuel is aware of valuation methodologies that attempt to incorporate the option value associated with management flexibility, using a combination of conventional discounted cash flow analysis and option theory. However, the application of these methodologies is impractical in the context of the complex and unpredictable nature of mining operations. In making judgments on value, Grant Samuel has given general consideration as to the characteristics of the various mining operations and the value of management flexibility or underlying option value implicit in those characteristics. In particular, Grant Samuel has considered the extent to which:

- operations are marginal (i.e. the operations represent or incorporate options "close to the money"); and
- length of mine life or other characteristics give management flexibility over the conduct of mining operations.

The valuation of each project includes a subjective assessment of the real option value inherent in the project.

# 6 Chapter 18 Valuation of MMG

#### 6.1 Summary

For the purposes of the Chapter 18 Valuation, Grant Samuel has valued MMG in the range US\$1,533-1,741 million. The Chapter 18 Valuation is summarised below:

MMG – Chapter 18 Valuation Summary (US\$ million)					
	Valuation Report _	Value	Range		
	Section Reference	Low	High		
Sepon (MMG's 90% interest)	6.2	918	972		
Century	6.3	1,000	1,100		
Rosebery	6.4	195	215		
Golden Grove	6.5	195	215		
Other mineral assets	6.6	-	-		
Other assets	6.7	144	148		
Corporate costs	6.8	(150)	(140)		
Enterprise value		2,302	2,510		
Net debt	6.9	(769)	(769)		
Chapter 18 Valuation		1,533	1,741		

The Chapter 18 Valuation can in effect only reflect the estimated value of the reserves associated with Mineral Assets, adjusted for non mineral assets and liabilities. There are currently no reserves attributable to Avebury, Dugald River or MMG's exploration assets. Accordingly, no value has been attributed to these assets for the purposes of the Chapter 18 Valuation. MMG's life of mine plans for, in particular, Rosebery and Golden Grove contemplate the mining of substantial mineralisation beyond current reserves and AMC has concluded that it is reasonable to expect that operations at these mines will continue well beyond the exhaustion of current reserves. However, the valuations set out above are limited to estimates of the value attributable to reserves as at 30 June 2010, estimated by AMC on the basis of reserves stated as at 30 June 2009 adjusted for depletion from subsequent production. As a result, the Chapter 18 Valuation of MMG does not in any way represent an estimate of the market value of MMG.

The Mineral Assets for the Chapter 18 Valuation have been valued based on DCF analysis. The production rates and operating and capital costs were reviewed in detail by AMC. The discounted cash flow models project cash flows from 1 July 2010 onwards until the end of the mines' lives (which are assumed to end with the depletion of current reserves). AMC's Competent Person's report containing these assumptions is appended and forms part of the circular.

# 6.2 Sepon

For the purposes of the Chapter 18 Valuation, Grant Samuel has valued 100% of the Sepon copper and gold reserves in the range US\$1,020-1,080 million. On this basis, MMG's 90% interest in Sepon's copper and gold reserves is valued in the range US\$918-972 million. Grant Samuel has attributed a value to 100% of the Sepon Copper reserves of US\$970-1,020 million and to 100% of the Sepon Gold reserves of US\$50-60 million.

The Chapter 18 Valuation of Sepon is an overall judgement on value. It takes into account the value of Sepon Copper reserves, which contribute most of the value of Sepon, and the value of the Sepon Gold reserves. The Chapter 18 Valuation also reflects Grant Samuel's judgemental assessment of the impact on value of sovereign risk associated with Sepon's location in Laos.

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## 6.2.1 Sepon Copper

For the purposes of the Chapter 18 Valuation, Grant Samuel has valued the Sepon Copper reserves in the range US\$970-1,020 million.

The valuation is based on DCF analysis of the mining operation, on the assumption that only ore reserves are mined. A detailed financial model was developed based on the 30 June 2009 ore reserve depleted for production from July 2009 to June 2010. The analysis incorporates production, capital and operating cost projections developed by AMC using information provided by MMG.

The model assumes the milling of 16.9 million tonnes of ore at an average copper grade of 4.0%. It is assumed that, following the completion in 2011 of the expansion of the copper operations, the plant is able to produce 81,000 tonnes of copper per annum. Mining is completed in 2018 but milling operations continue until 2019, with closure costs of US\$120 million (in 2010 dollars) incurred in that year.

The following table summarises projected production and costs for the Chapter 18 Valuation. The statistics include production for the half year commencing 1 July 2010:

Sepon Copper Chapter 18 Valuation – Model Parameters <sup>55</sup>						
	Six months ended		Year to 31	December		. Total life of
	2010	2011	2012	2013	2014	mine
Ore milled (000's tonnes)	760	1,863	1,911	1,935	1,935	16,944
Copper milled grade (%)	5.0	4.6	4.6	4.6	4.6	4.0
Copper production (000's tonnes)	) 34	78	80	81	81	617
Total cash costs (US¢/lb copper)50	129	124	135	133	127	133
Capital expenditure (US\$ million	) 60.6	46.2	25.7	11.0	11.0	304.5 <sup>57</sup>

The following table summarises the results of the DCF analysis for the Chapter 18 Valuation:

Sepon Copper Chapter 18 Valuation – DCF Analysis (US\$ million) <sup>58</sup>					
	Long	Long Term Copper Price Scenario			
Discount Rate	\$2.25	\$2.50	\$2.75		
8.5%	953	1,069	1,182		
9.5%	930	1,041	1,148		
10.5%	907	1,013	1,116		

The table above illustrates the sensitivity of the calculated NPV values to a range of valuation assumptions.

Because Sepon is located in Laos, there are arguably sovereign risk issues not associated with mines in first world jurisdictions. In Grant Samuel's view, however, these sovereign risk issues have only a limited impact on the value of Sepon. In general, mining companies appear to be increasingly willing to develop or acquire projects in locations that would traditionally have been viewed as high risk (and which appear significantly riskier than Laos). In the case of Sepon, MMG has been producing from the Sepon Gold operation

Assumes 100% interest. Costs and capital expenditures are in 2010 dollars.

After royalties. The copper premium is taken as a credit. "lb" refers to pounds. There are 2,204 pounds per tonne.

<sup>57</sup> Includes closure costs.

<sup>58</sup> Assumes 100% interest.

since 2002 and from the Sepon Copper operation since March 2005. The permitting approvals process and the determination of arrangements between mine operator and government (which are parts of the project development process during which projects can be particularly vulnerable to the incidence of sovereign risk) are long since completed. MMG believes that it enjoys a well-established and productive relationship with the Laos government, under a 50 year agreement<sup>59</sup> that sets out the rights and obligations of both parties. The experience of PanAust Limited ("PanAust") in Laos, where PanAust has successfully developed the Phu Bia gold project and is producing from the significant Phu Kham copper-gold project, also suggests that Laos is a relatively benign environment from a sovereign risk perspective.

Based on the DCF analysis for Sepon Copper's ore reserves and having regard to the matters set out above, Grant Samuel has attributed an overall value of US\$970-1,020 million to a 100% interest in Sepon Copper.

## 6.2.2 Sepon Gold

For the purposes of the Chapter 18 Valuation, Grant Samuel has valued the Sepon Gold reserves in the range US\$50-60 million.

The valuation is based on DCF analysis of the mining operation, on the assumption that only ore reserves are mined. A detailed financial model was developed based on the 30 June 2009 ore reserve depleted for production from July 2009 to June 2010. The analysis incorporates production, capital and operating cost projections developed by AMC using information provided by MMG.

The model assumes the treatment of 1.4 million tonnes of ore grading 1.55g/t for total gold production of around 52,000 ounces at average cash costs of approximately US\$266 per ounce. Site administration costs and closure costs relating to the gold operation have not been allocated to Sepon Gold but have been reflected in the cost estimates used for the Sepon Copper financial model.

The following table summarises projected production and costs for the Chapter 18 Valuation. Production is assumed to be completed by the end of the 2010 calendar year:

Sepon Gold Chapter 18 Valuation – Model Parameters <sup>60</sup>				
	Six months ended 31 December 2010	Total life of mine		
Ore milled (000's tonnes)	1,399	1,399		
Gold milled grade (g/t)	1.55	1.55		
Gold production (000's oz) <sup>61</sup>	52	52		
Total cash costs (US\$/oz gold) <sup>62</sup>	266	266		
Capital expenditure (US\$ million)	-	-		

The following table summarises the results of the DCF analysis for the Chapter 18 Valuation:

The agreement is for an initial period of 30 years, which started in 2003, with two 10 year extensions possible.

Assumes 100% interest. Costs and capital expenditures are in 2010 dollars.

<sup>&</sup>quot;oz" refers to troy ounces, which equal to 31.1035 grams per ounce.

<sup>62</sup> After royalties

Sepon Gold Chapter 18 Valuation – Results from Financial Analysis (US\$ million) <sup>63</sup>					
	Spot Gold Price				
Discount Rate	\$1,330	\$1,350	\$1,370		
8.5%	52	52	52		
9.5%	52	52	52		
10.5%	52	52	52		

Because it is assumed for the purposes of the Chapter 18 Valuation that future production is limited to the exploitation of current reserves, the Sepon Gold operations are assumed to have an operating life of only six months. As a result, the DCF analysis is not sensitive to discount rates.

As discussed above, Grant Samuel believes that the sovereign risk issues associated with the location of the mine in Laos have only a limited impact on the value of Sepon, particularly given the limited remaining life of the gold operations. Consequently, Grant Samuel has attributed a value of US\$50-60 million to a 100% interest in the Sepon Gold reserves.

#### 6.3 Century

For the purposes of the Chapter 18 Valuation, Grant Samuel has valued Century in the range US\$1,000-1,100 million.

The valuation is based on DCF analysis of the mining operation, on the assumption that only reserves are mined. A detailed financial model was developed for the purpose of the DCF analysis, based on the 30 June 2009 ore reserve depleted for production from July 2009 to June 2010. The analysis incorporates production, capital and operating cost projections developed by AMC using information provided by MMG.

The model assumes the treatment of 26.1 million tonnes of ore grading 11.0% zinc and 1.1% lead for a total production of approximately 2.3 million tonnes of zinc and 0.2 million tonnes of lead in concentrates. Average cash operating costs over the life of the operation are estimated at US\$0.62 per pound of payable zinc (in 2010 dollars) while the total capital expenditure is forecast at approximately US\$130 million, which includes US\$92 million in closure related costs. The written down value of the plant and equipment as at 30 June 2010 was US\$647 million, which is depreciated over the remaining life of the operations. No value has been attributed to the remant plant and infrastructure. The Century operation is expected to complete in 2014 when the remaining reserves are exhausted.

The following table summarises projected production and costs for the Chapter 18 Valuation. The statistics include production for the half year commencing 1 July 2010:

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<sup>63</sup> Assumes a 100% interest.

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Century Chapter 18 Valuation – Model Parameters <sup>64</sup>						
	Six months ended	Year to 31 December				Total life of
	31 December 2010	2011	2012	2013	2014	mine
Ore milled (000's tonnes)	2,992	5,757	6,020	5,661	5,541	25,970
Zinc milled grade (%)	11.4	11.2	10.7	11.5	10.4	11.0
Lead milled grade (%)	1.0	0.9	1.1	1.2	1.0	1.1
Silver milled grade (g/t)	18.0	13.6	17.6	23.4	22.1	19.0
Zinc recovery (%)	79.7	79.2	80.0	79.5	77.0	79.0
Lead recovery (%)	60.7	60.4	62.7	63.0	58.4	61.1
Contained metal in concentrates						
Zinc (000's tonnes)	272.5	513.1	513.1	517.0	442.6	2,258.3
Lead (000's tonnes)	18.1	32.0	42.4	43.9	32.5	169.0
Silver (000's ounces)	656	954	1,286	1,610	1,491	5,997
Total cash costs (US¢/lb zinc)65	0.68	0.73	0.65	0.57	0.51	0.62
Capital expenditure (US\$ million)	6.8	13.8	10.9	3.4	95.5	130.4

The following table summarises the results of the DCF analysis for the Chapter 18 Valuation. As Century operations are assumed to complete in 2014 in the reserve valuation model, zinc and lead do not reach their long run prices, which take effect from 2015. The average zinc and lead prices over the period are shown below for the purposes of understanding the sensitivity analysis.

Century Chapter 18 Valuation – DCF Analysis (US\$ million)						
		Zinc Price Scenario				
	Long Term US\$0.80 Average US\$0.95	Long Term US\$0.90 Average US\$1.00	Long Term US\$1.00 Average US\$1.04			
	Lead Price Scenario					
Discount Rate	Long Term US\$0.60 Average US\$0.87	Long Term US\$0.70 Average US\$0.91	Long Term US\$0.80 Average US\$0.96			
8.5%	964	1,065	1,165			
9.5%	946	1,044	1,141			
10.5%	929	1,024	1,119			

The table above illustrates the sensitivity of the calculated NPV values to a range of valuation assumptions.

Grant Samuel's valuation of Century in the range US\$1,000-1,100 million reflects the DCF analysis summarised above and takes into account the following factors:

- Century is one of the world's largest zinc mines and its location in Queensland means that it
  is exposed to relatively low levels of sovereign risk;
- the value of Century is extremely sensitive to movements in zinc prices. If current zinc prices of around US\$1.10 per pound were to persist for the life of the mine, the estimated NPV would be around US\$1,267 million. However, the NPV reduces to around US\$659 million for flat zinc prices of US\$0.80 per pound (NPVs estimated using a nominal discount rate of 9.5%); and
- there are operational risks (primarily geotechnical issues) that are not reflected in the valuation case and associated cash flow projections.

Costs and capital expenditures are in 2010 donars.

Costs and capital expenditures are in 2010 dollars.

<sup>65</sup> Costs are per pound of zinc produced and are after treatment and refining costs and royalties. There are 2,204 pounds per tonne. Silver and lead are taken as credits.

#### 6.4 Rosebery

For the purposes of the Chapter 18 Valuation, Grant Samuel has valued Rosebery's ore reserves in the range US\$195-215 million.

The valuation is based on DCF analysis of the mining operation, on the assumption that only ore reserves are mined. A detailed financial model was developed for the purpose of the DCF analysis, based on the 30 June 2009 ore reserve depleted for production from July 2009 to June 2010. The analysis incorporates production, capital and operating cost projections developed by AMC using information provided by MMG.

The model assumes the treatment of 1.8 million tonnes of ore grading 12.6% zinc and 3.9% lead for a total production of around 209,200 tonnes of zinc and 55,500 tonnes of lead in concentrates. The total ore processed does not include all of the ore reserves as production volumes reduce significantly in the later years of a reserves only case, making it uneconomic to process the remaining reserves. Average cash operating costs over the life of the operation are estimated at US\$0.23 per pound of payable zinc while the total capital expenditure is forecast at approximately US\$67 million, which includes US\$31 million in closure related costs. Mining of Rosebery reserves is modelled to be completed in 2012.

The following table summarises projected production and costs for the Chapter 18 Valuation. The statistics include production for the half year commencing 1 July 2010:

Rosebery	Chapter 18 Va	luation –	Model Par	rameters66		
11000.00.5	Six months ended 31 December		Year to 31			Total life
	2010	2011	2012	2013	2014	of mine
Ore milled	360	720	720	-	-	1,800
Zinc milled grade (%)	12.3	12.7	12.6	-	-	12.6
Lead milled grade (%)	4.3	3.8	3.8	-	-	3.9
Copper milled grade (%)	0.4	0.4	0.4	-	-	0.4
Silver milled grade (g/t)	130	130	130	-	-	130
Gold milled grade (g/t)	1.8	1.8	1.8	-	-	1.8
Zinc recovery (%)	89.0	89.0	89.0			89.0
Lead recovery (%)	79.0	79.0	79.0	-	-	79.0
Copper recovery (%)	54.0	54.0	54.0	-	-	54.0
Gold recovery (%)	20.0	20.0	20.0	-	-	20.0
Contained metal produced						
Zinc (000's tonnes)	40.7	84.6	83.9	-	-	209.2
Lead (000's tonnes)	12.2	21.6	21.6	-	-	55.5
Copper (000's tonnes)	0.8	1.6	1.6	-	-	4.0
Gold (000's ounces)	14.1	28.2	28.2	-	-	70.5
Silver (000's ounces)	1,342	2,683	2,683	-	-	6,708
Total cash costs (US¢/lb zinc)67	21	18	28	-	-	23
Capital expenditure (US\$ million)	10.1	25.9	-	31.0	-	67.0

<sup>66</sup> Costs and capital expenditures are in 2010 dollars.

<sup>67</sup> Costs are per pound of zinc produced and are after treatment and refining costs and royalties. There are 2,204 pounds per tonne. Gold, silver, copper and lead are taken as credits.

The following table summarises the results of the DCF analysis for the Chapter 18 Valuation. As Rosebery operations are assumed to complete in 2012 in the reserve valuation model, zinc and lead do not reach their long run prices, which take effect from 2015. The average zinc and lead prices over the period are shown below for the purposes of understanding the sensitivity analysis.

Rosebery Chapter 18 Valuation – DCF Analysis (US\$ million)						
		Zinc Price Scenario				
	Long Term US\$0.80 Average US\$1.00	Long Term US\$0.90 Average US\$1.03	Long Term US\$1.00 Average US\$1.05			
		Lead Price Scenario				
Discount Rate	Long Term US\$0.60 Average US\$0.96	Long Term US\$0.70 Average US\$0.99	Long Term US\$0.80 Average US\$1.01			
8.5%	197	205	214			
9.5%	195	203	211			
10.5%	193	201	209			

The sensitivity analysis above is based on a range of zinc prices over the life of the operation and for different discount rates.

## 6.5 Golden Grove

For the purposes of the Chapter 18 Valuation, Grant Samuel has valued Golden Grove's ore reserves in the range US\$195-215 million.

The valuation is based on DCF analysis of the mining operation, on the assumption that only reserves are mined. Detailed financial models were developed for the purpose of the DCF analysis, based on the 30 June 2009 Ore Reserve depleted for production from July 2009 to June 2010. The analysis incorporates production, capital and operating cost projections developed by AMC using information provided by MMG.

The valuation assumes that 2.9 million tonnes is mined from Gossan Hill underground and 0.7 million tonnes from Scuddles underground. Total ore milled over the life of the project is approximately 3.6 million tonnes at grades of 10.9% zinc and 3.4% copper. On the assumption that production volumes would reduce significantly in the later years of a reserve only case (because a significant proportion of scheduled production for these years is derived from mineralisation not currently in reserves, which cannot be included in the reserves only case), production in these years is no longer economic and consequently not all reserves are included in the Chapter 18 Valuation case. For the purpose of the Chapter 18 Valuation scenario, operations only continue until 2012. Total capital expenditure is US\$44 million.

The following table summarises projected production and costs for the Chapter 18 Valuation. The statistics include production for the half year commencing 1 July 2010:

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Golden Gro	Golden Grove Chapter 18 Valuation – Model Parameters68					
	Six months ended 31 December –		Year to 31	December		Total life
	2010	2011	2012	2013	2014	of mine
Ore milled						
Zinc (000's tonnes)	334	668	237	-	-	1,239
Copper (000's tonnes)	516	1,033	820	-	-	2,369
Oxide copper (000's tonnes)	-	-	-	-	-	-
Zinc milled grade (%)	10.6	10.3	12.0	-	-	10.9
Zinc concentrate grade (%)	52.5	52.5	52.5	-	-	52.5
Copper milled grade (%)	3.3	3.4	3.3	-	-	3.4
Copper concentrate grade (%)	23.0	23.0	23.0	-	-	23.0
Contained metal in concentrates						
Zinc (000's tonnes)	32	63	26	-	-	122
Copper (000's tonnes)	15	31	24	-	-	71
Lead (000's tonnes)	4	7	4	-	-	15
Gold (000's ounces)	15	26	15	-	-	56
Silver (000's ounces)	896	1,628	873	-	-	3,397
Total cash costs (US¢/lb zinc)69	(38)	(34)	34	-	-	(20)
Capital expenditure (US\$ million)	26.8	14.5	-	-	-	41.3

The following table summarises the results of the DCF analysis for the Chapter 18 Valuation. As Golden Grove operations are assumed to complete in 2012 in the reserve valuation model, zinc and copper do not reach their long run prices, which take effect from 2015. The average zinc and copper prices over the period are shown below for the purposes of understanding the sensitivity analysis.

Golden Grove Chapter 18 Valuation – DCF Analysis (US\$ million)						
		Zinc Price Scenario				
	Long Term US\$0.80 Average US\$1.01					
		Copper Price Scenario				
Discount Rate	Long Term US\$2.25 Average US\$3.34	Long Term US\$2.50 Average US\$3.40	Long Term US\$2.75 Average US\$3.45			
8.5%	198	207	215			
9.5%	196	205	214			
10.5%	194	203	212			

# 6.6 Other Mineral Assets

Listing Rule 18.30 has the effect that value can only be attributed to measured and indicated resources (i.e. that portion of measured and indicated resources not currently in reserves) if there is a reasonable basis to conclude that they are economically extractable. AMC has concluded in the case of Dugald River and Avebury, given the uncertainties associated with their development (in the case of Dugald River) or re-opening (in the case of Avebury) that it is not currently appropriate to conclude that the relevant resources have been demonstrated (with a sufficient degree of confidence) to be economically extractable. Accordingly, no value has been attributed to Dugald

<sup>68</sup> Costs and capital expenditures are in 2010 dollars.

<sup>69</sup> Costs are per pound of zinc produced and are after treatment and refining costs and royalties. There are 2,204 pounds per tonne. Gold, silver, copper and lead are taken as credits.

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River or Avebury for the purpose of the Chapter 18 valuation. Similarly, no value has been attributed to MMG's exploration assets.

## 6.7 Other Assets

Other assets represent MMG's investments in equities listed on major global exchanges. Given the liquidity of these investments and the fact that they represent portfolio interests, Grant Samuel believes that it is reasonable to value them at the prevailing share price and exchange rate. As at 30 June 2010, MMG's investment represented by the market value of the shares converted to US\$ at the spot rate totalled US\$94 million. Since 30 June 2010, the US\$ share price has appreciated. Accordingly, Grant Samuel has adopted a value of US\$144-148 million based on MMG's advice.

## 6.8 Corporate Costs

The valuation of MMG's Mineral Assets does not reflect MMG's corporate costs including centralised administration costs which are recharged to the individual operations. Therefore, a separate allowance has been made for the corporate costs. MMG's corporate costs in terms of EBITDA are forecast to be approximately US\$83.0 million in 2010. These costs include transaction related costs, which are unlikely to be incurred on an ongoing basis. As a result, Grant Samuel has assumed maintainable unallocated corporate costs of approximately US\$70 million, which will decline over time in line with the closure of the individual operations. These costs represent costs associated with operating MMG's head office in Melbourne and include costs of the MMG executive management team, finance, marketing, and corporate administration. These costs also include the cost of payroll, information technology, human resources, insurance and legal support services provided by the Melbourne head office to the MMG operations.

Grant Samuel has assumed a value of US\$(140) – (150) million in respect of the unallocated corporate costs. The range of negative values attributed to head office costs represents a multiple of 2.0-2.1 times maintainable EBITDA. The valuation range was supported by a DCF analysis.

# 6.9 Net Debt

MMG's net debt for valuation purposes is summarised in the following table:

MMG – Net Debt for Valuation Purposes				
	\$ million			
Cash and cash equivalents	334.4			
Debt	(1,100.3)			
Adjustment for Sepon net debt	(2.7)			
Net Debt	(768.6)			

MMG's net debt has been adjusted for the 10% of the net debt associated with Sepon that is not attributable to MMG.

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# 7 Qualifications, Declarations and Consents

#### 7.1 Qualifications

The Grant Samuel group of companies provide corporate advisory services (in relation to mergers and acquisitions, capital raisings, debt raisings, corporate restructurings and financial matters generally), property advisory services, manages specialist funds and provides marketing and distribution services to fund managers. The primary activity of Grant Samuel & Associates Pty Limited is the preparation of corporate and business valuations and the provision of independent advice and expert's reports in connection with mergers and acquisitions, takeovers and capital reconstructions. Since inception in 1988, Grant Samuel and its related companies have prepared more than 435 public independent expert and appraisal reports. Grant Samuel is a corporate member of the Australasian Institute of Mining and Metallurgy (AusIMM).

The persons responsible for preparing this report on behalf of Grant Samuel are Stephen Cooper BCom (Hons) ACA CA (SA) ACMA, Cameron Stewart LLB BCom and Sarah Morgan B.E. (Hons) PGDip Cont Art MBA MAUSIMM. Each has a significant number of years of experience in relevant corporate advisory matters. Tina De Young BCom CFA, Matt Leroux M.Aero.E MBA and Shakeel Mohammed MS MBA assisted in the preparation of the report. Each of the above persons is an authorised representative of Grant Samuel pursuant to its Australian Financial Services Licence under Part 7.6 of the Corporations Act.

#### 7.2 Disclaimers

It is not intended that this report should be used or relied upon for any purpose other than as a Valuation report in accordance with Chapter 18 of the Listing Rules. Grant Samuel expressly disclaims any liability to the Company or any shareholder of the Company who relies or purports to rely on the report for any other purpose and to any other party who relies or purports to rely on the report for any purpose whatsoever.

This report has been prepared by Grant Samuel with care and diligence and the statements and opinions given by Grant Samuel in this report are given in good faith and in the belief on reasonable grounds that such statements and opinions are correct and not misleading. However, no responsibility is accepted by Grant Samuel or any of its officers or employees for errors or omissions however arising in the preparation of this report, provided that this shall not absolve Grant Samuel from liability arising from an opinion expressed recklessly or in bad faith.

## 7.3 Independence

Grant Samuel believes it is independent for the purposes of preparing the report.

Grant Samuel, and each of Stephen Cooper, Sarah Morgan and Cameron Stewart, comply with the independence requirement under Rule 18.22 of the Listing Rules. Specifically, Grant Samuel and each of Stephen Cooper, Sarah Morgan and Cameron Stewart is independent of the Company, its directors, senior management and advisers and:

- do not have any economic or beneficial interest (present or contingent) in any of the assets being reported on;
- will not be remunerated with a fee dependent on the findings of this Valuation Report or the report dated 27 September 2010 setting out the market valuation of MMG;
- in the case of each of Stephen Cooper, Sarah Morgan and Cameron Stewart, is not an officer, employee or proposed officer of the Company or any group, holding or associated company of the Company; and
- in the case of Grant Samuel, is not a group, holding or associated company of the Company.
   None of Grant Samuel's officers is an officer or proposed officer of any group, holding or associated company of the Company.

Grant Samuel had no part in the formulation of the Acquisition. Its only role has been the preparation of this report.

Grant Samuel will receive a fixed fee of US\$900,000 for the preparation of this report. This fee is not contingent on the outcome of the Acquisition. Grant Samuel's out of pocket expenses in relation to the preparation of the report will be reimbursed. Grant Samuel will receive no other benefit for the preparation of this report.

#### 7.4 Declarations

The Company has agreed that it will indemnify Grant Samuel and its employees and officers in respect of any liability suffered or incurred as a result of or in connection with the preparation of the report. This indemnity will not apply in respect of the proportion of any liability found by a court to be primarily caused by any conduct involving gross negligence or wilful misconduct by Grant Samuel. The Company has also agreed to indemnify Grant Samuel and its employees and officers for time spent and reasonable legal costs and expenses incurred in relation to any inquiry or proceeding initiated by any person. Any claims by the Company are limited to an amount equal to the fees paid to Grant Samuel. Where Grant Samuel or its employees and officers are found to have been grossly negligent or engaged in wilful misconduct Grant Samuel shall bear the proportion of such costs caused by its action.

Advance drafts of this report were provided to the Company, MMG and its advisers. Certain changes were made to the drafting of the report as a result of the circulation of the draft report. There was no alteration to the methodology, evaluation or conclusions as a result of issuing the drafts.

## 7.5 Consents

This report has been prepared for the benefit of the Directors and shareholders of the Company and is to be appended and form part of the shareholder circular to be issued to the shareholders of the Company in connection with the Acquisition. Neither the whole nor any part of this report nor any reference thereto may be included in any other document without the prior written consent of Grant Samuel as to the form and context in which it appears.

## 7.6 Other

The accompanying letter dated 22 November 2010 and the Appendices form part of this report.

GRANT SAMUEL & ASSOCIATES PTY LIMITED

Great Samuel & Associates

22 November 2010

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## Appendix 1

#### **Selection of Discount Rate**

#### 1 Overview

Grant Samuel has selected discount rates of 8.5-10.5% (US dollar cash flows) to apply to the forecast nominal ungeared after tax cash flows for MMG's Mineral Assets.

The cash flows of MMG's Mineral Assets have been denominated in US dollars and discounted on the basis of rates appropriate for international capital markets. Given that many of the potential acquirers of the Mineral Assets of MMG are international mining companies, the assets are likely to be priced on the basis of costs of capital established in international capital markets.

Selection of the appropriate discount rate to apply to the forecast cash flows of any business enterprise is fundamentally a matter of judgement. The valuation of an asset or business involves judgements about the discount rates that may be utilised by potential acquirers of that asset. There is a body of theory which can be used to support that judgement. However, a mechanistic application of formulae derived from that theory can obscure the reality that there is no "correct" discount rate. Despite the growing acceptance and application of various theoretical models, it is Grant Samuel's experience that many companies rely on less sophisticated approaches. Many businesses use relatively arbitrary "hurdle rates" which do not vary significantly from investment to investment or change significantly over time despite interest rate movements. Valuation is an estimate of what real world buyers and sellers of assets would pay and must therefore reflect criteria that will be applied in practice even if they are not theoretically correct. Grant Samuel considers the rates adopted to be reasonable discount rates that acquirers would use irrespective of the outcome or shortcomings of applying any particular theoretical model.

The discount rates that Grant Samuel has adopted are reasonable relative to the rates derived from theoretical models. The discount rates represent an estimate of the weighted average cost of capital ("WACC") appropriate for these assets. Grant Samuel has calculated a WACC based on a weighted average of the cost of equity and the cost of debt. This is the relevant rate to apply to ungeared cash flows. There are three main elements to the determination of an appropriate WACC. These are:

- cost of equity;
- cost of debt; and
- debt/equity mix.

WACC is a commonly used basis but it should be recognised that it has shortcomings in that it:

- represents a simplification of what are usually much more complex financial structures; and
- assumes a constant degree of leverage which is seldom correct.

The cost of equity has been derived from application of the Capital Asset Pricing Model ("CAPM") methodology. The CAPM is probably the most widely accepted and used methodology for determining the cost of equity capital. There are more sophisticated multivariate models which utilise additional risk factors but these models have not achieved any significant degree of usage or acceptance in practice. However, while the theory underlying the CAPM is rigorous the practical application is subject to shortcomings and limitations and the results of applying the CAPM model should only be regarded as providing a general guide. There is a tendency to regard the rates calculated using CAPM as inviolate. To do so is to misunderstand the limitations of the model. For example:

the CAPM theory is based on expectations but uses historical data as a proxy. The future is not necessarily the same as the past;

. . .

- the measurement of historical data such as risk premia and beta factors is subject to very high levels
  of statistical error. Measurements vary widely depending on factors such as source, time period and
  sampling frequency;
- the measurement of beta is often based on comparisons with other companies. None of these
  companies is likely to be directly comparable to the entity for which the discount rate is being
  calculated and may operate in quite different markets;
- parameters such as the debt/equity ratio and risk premium are based on subjective judgements; and
- there is not unanimous agreement as to how the model should adjust for factors such as taxation. The CAPM was developed in the context of a "classical" tax system. Australia's system of dividend imputation has a significant impact on the measurement of net returns to investors.

The cost of debt has been determined by reference to the pricing implied by the debt markets in the US. The cost of debt represents an estimate of the expected future returns required by debt providers.

Selection of an appropriate debt/equity mix is a matter of judgement. The debt/equity mix represents an appropriate level of gearing, stated in market value terms, for the business over the forecast period. The relevant proportions of debt and equity have been determined having regard to the financial gearing of the industry in general and comparable companies, and judgements as to the appropriate level of gearing considering the nature and quality of the cash flow stream.

The following sections set out the basis for Grant Samuel's determination of the discount rates to be applied in valuing the assets of MMG and the factors which limit the accuracy and reliability of the estimates.

## 2 Definition and Limitations of the CAPM and WACC

The CAPM provides a theoretical basis for determining a discount rate that reflects the returns required by diversified investors in equities. The rate of return required by equity investors represents the cost of equity of a company and is therefore the relevant measure for estimating a company's weighted average cost of capital. CAPM is based on the assumption that investors require a premium for investing in equities rather than in risk free investments (such as US medium to long term Treasury Bond). The premium is commonly known as the market risk premium and notionally represents the premium required to compensate for investment in the equity market in general.

The risks relating to a company or business may be divided into specific risks and systematic risks. Specific risks are risks that are specific to a particular company or business and are unrelated to movements in equity markets generally. While specific risks will result in actual returns varying from expected returns, it is assumed that diversified investors require no additional returns to compensate for specific risk, because the net effect of specific risks across a diversified portfolio will, on average, be zero. Portfolio investors can diversify away all specific risk.

However, investors cannot diversify away the systematic risk of a particular investment or business operation. Systematic risk is the risk that the return from an investment or business operation will vary with the market return in general. If the return on an investment was expected to be completely correlated with the return from the market in general, then the return required on the investment would be equal to the return required from the market in general (i.e. the risk free rate plus the market risk premium).

Systematic risk is affected by the following factors:

- financial leverage: additional debt will increase the impact of changes in returns on underlying assets and therefore increase systematic risk;
- cyclicality of revenue: projects and companies with cyclical revenues will generally be subject to greater systematic risk than those with non-cyclical revenues; and

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 operating leverage: projects and companies with greater proportions of fixed costs in their cost structure will generally be subject to more systematic risk than those with lesser proportions of fixed costs

CAPM postulates that the return required on an investment or asset can be estimated by applying to the market risk premium a measure of systematic risk described as the beta factor. The beta for an investment reflects the covariance of the return from that investment with the return from the market as a whole. Covariance is a measure of relative volatility and correlation. The beta of an investment represents its systematic risk only. It is not a measure of the total risk of a particular investment. An investment with a beta of more than one is riskier than the market and an investment with a beta of less than one is less risky. The discount rate appropriate for an investment which involves zero systematic risk would be equal to the risk free rate.

The formula for deriving the cost of equity using CAPM is as follows:

Re = Rf + Beta (Rm - Rf)

Where:

= the cost of equity capital;

Re = the cost of equity
Rf = the risk free rate;
Beta = the beta factor;

Rm = the expected market return; and Rm - Rf = the market risk premium.

The beta for a company or business operation is normally estimated by observing the historical relationship between returns from the company or comparable companies and returns from the market in general. The market risk premium is estimated by reference to the actual long run premium earned on equity investments by comparison with the return on risk free investments.

The formula conventionally used to calculate a WACC under a classical tax system is as follows:

 $WACC = (Re \times E/V) + (Rd \times (1-t) \times D/V)$ 

Where:

E/V = the proportion of equity to total value (where V = D + E);

D/V = the proportion of debt to total value; Re = the cost of equity capital; Rd = the cost of debt capital; and

the corporate tax rate

The models, while simple, are based on a sophisticated and rigorous theoretical analysis. Nevertheless, application of the theory is not straightforward and the discount rate calculated should be treated as no more than a general guide. The reliability of any estimate derived from the model is limited. Some of the

# Risk Free Rate

issues are discussed below:

Theoretically, the risk free rate used should be an estimate of the risk free rate in each future period (i.e. the one year spot rate in that year if annual cash flows are used). There is no official "risk free" rate but rates on government securities are typically used as an acceptable substitute. More importantly, forecast rates for each future period are not readily available. In practice, the long term Commonwealth Government Bond rate is used as a substitute in Australia and medium to long term Treasury Bond rates are used in the United States. It should be recognised that the yield to maturity of a long term bond is only an average rate and where the yield curve is strongly positive (i.e. longer term rates are significantly above short term rates) the adoption of a single long term bond rate has the effect of reducing the net present value where the major positive cash flows are in the initial years. The long term bond rate is therefore only an approximation.

The ten year bond rate is a widely used and accepted benchmark for the risk free rate. Where the forecast period exceeds ten years, an issue arises as to the appropriate bond to use. While longer

Page 3

term bond rates are available, the ten year bond market is the deepest long term bond market in Australia and is a widely used and recognised benchmark. There is a very limited market for bonds of more than ten years. In the United States, there are deeper markets for longer term bonds. The 30 year bond rate is a widely used benchmark. However, long term rates accentuate the distortions of the yield curve on cash flows in early years. In any event, a single long term bond rate matching the term of the cash flows is no more theoretically correct than using a ten year rate. More importantly, the ten year rate is the standard benchmark used in practice.

Where cash flows are less than ten years in duration the opposite issue arises. An argument could be made that shorter term, and therefore lower, bond rates should be used in determining the discount rate for there assets. While Grant Samuel believes this is a legitimate argument, an adjustment may give a misleading impression of precision for the whole methodology. In any event, the impact on valuation would usually be trivial.

In practice, Grant Samuel believes acquirers would use a common rate. The ten year bond rate can be regarded as an acceptable standard risk free rate for medium to long term cash flows, particularly given its wide use.

## Market Risk Premium

The market risk premium (Rm - Rf) represents the "extra" return that investors require to invest in equity securities as a whole over risk free investments. This is an "ex-ante" concept. It is the expected premium and as such it is not an observable phenomenon. The historical premium is therefore used as a proxy measure. The premium earned historically by equity investments is calculated over a time period of many years, typically at least 30 years. This long time frame is used on the basis that short term numbers are highly volatile and that a long term average return would be a fair indication of what most investors would expect to earn in the future from an investment in equities with a 5-10 year time frame.

In the United States it is generally believed that the premium is in the range of 5-6% but there are widely varying assessments (from 3% to 9%). Australian studies have been more limited but indicate that the long run average premium has been in the order of 6% using a geometric average (and is in the order of 8% using an arithmetic average) measured over more than 100 years of data<sup>1</sup>. Even an estimate based over a very long period such as 100 years is subject to significant statistical error. Given the volatility of equity market returns it is only possible to state that the "true" figure lies within a range of approximately 2-10% at a 95% confidence level (using the geometric average).

In addition, the market risk premium is not constant and changes over time. At various stages of the market cycle investors perceive that equities are more risky than at other times and will increase or decrease their expected premium. Indeed, there are arguments being put forward at the present time that the risk premium is now lower than it has been historically. This view is reflected in the recent update of the Officer Study² which indicates that (based on the addition of 17 years of data to 2004) the long term arithmetic average has declined to 7.17% from 7.94%.

In practice, market risk premiums of 5-7% are typically adopted in Australia.

# Beta Factor

The beta factor is a measure of the expected covariance (i.e. volatility and correlation of returns) between the return on an investment and the return from the market as a whole. The expected beta factor cannot be observed. The conventional practice is to calculate an historical beta from past share price data and use it as a proxy for the future but it must be recognised that the expected beta is not necessarily the same as the historical beta. A company's relative risk does change over time.

See, for example, R.R. Officer in Ball, R., Brown, P., Finn, F. J. & Officer, R. R., "Share Market and Portfolio Theory: Readings and Australian Evidence" (second edition), University of Queensland Press, 1989 ("Officer Study"), which was based on data for the period 1883 to 1987 and therefore was undertaken prior to the introduction of dividend imputation in Australia.

Gray, S. and Officer, R.R., "A Review of the Market Risk Premium and Commentary on Two Recent Papers: A Report prepared for the Energy Networks Association", August 2005.

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The appropriate beta is the beta of the company being acquired rather than the beta of the acquirer (which may be in a different business with different risks). Betas for the particular subject company may be utilised. However, it is also appropriate (and may be necessary if the investment is not listed) to utilise betas for comparable companies and sector averages (particularly as those may be more reliable).

However, there are very significant measurement issues with betas which mean that only limited reliance can be placed on such statistics. Even measurement of historical betas is subject to considerable variation. There is no "correct" beta.

## ■ Debt/Equity Mix

The tax deductibility of the cost of debt means that the higher the proportion of debt the lower the WACC, although this would be offset, at least in part, by an increase in the beta factor as leverage increases.

The debt/equity mix assumed in calculating the discount rate should be consistent with the level implicit in the measurement of the beta factor. Typically, the debt/equity mix changes over time and there is significant diversity in the levels of leverage across companies in a sector. There is a tendency to calculate leverage at a point in time whereas the leverage should represent the average over the period the beta was measured. This can be difficult to assess with a meaningful degree of accuracy.

The measured beta factors for listed companies are "equity" betas and reflect the financial leverage of the individual companies. It is possible to unleverage beta factors to derive asset betas and releverage betas to reflect a more appropriate or comparable financial structure. In Grant Samuel's view this technique is subject to considerable estimation error. Deleveraging and releveraging betas exacerbates the estimation errors in the original beta calculation and gives a misleading impression as to the precision of the methodology. Deleveraging and releveraging is also incorrectly calculated based on debt levels at a single point in time.

In addition, the actual debt and equity structures of most companies are typically relatively complex. It is necessary to simplify this for practical purposes in this kind of analysis.

Finally, it should be noted that, for this purpose, the relevant measure of the debt/equity mix is based on market values not book values.

## Specific Risk

The WACC is designed to be applied to "expected cash flows", which are effectively a weighted average of the likely scenarios. To the extent that a business is perceived as being particularly risky, this specific risk should be dealt with by adjusting the cash flow scenarios. This avoids the need to make arbitrary adjustments to the discount rate which can dramatically affect estimated values, particularly when the cash flows are of extended duration or much of the business value reflects future growth in cash flows. In addition, risk adjusting the cash flows requires a more disciplined analysis of the risks that the valuer is trying to reflect in the valuation.

However, it is also common in practice to allow for certain classes of specific risk (particularly sovereign and other country specific risks) by adjusting the discount rate applied to forecast cash flows.

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## 3 Calculation of WACC for MMG's Mineral Assets

# 3.1 Cost of Equity Capital

The cost of equity capital has been estimated by reference to the CAPM. Grant Samuel has adopted a cost of equity capital in the range 10.2-11.4%.

#### ■ Risk-Free Rate

Grant Samuel has adopted a risk free rate of 3.0%. The risk free rate is slightly higher than the current yield to maturity on ten year United States Treasury Notes and reflects the view that it seems unlikely that potential acquirers of MMG's assets would have taken into account the recent decrease in risk free rates in the discount rate assumptions used for the purposes of valuing these assets.

## Market Risk Premium

Grant Samuel has consistently adopted a market risk premium of 6.0% and believes that, particularly in view of the general uncertainty, this continues to be a reasonable estimate. It is:

- not statistically significantly different to the premium suggested by the historical data;
- similar to that used by a wide variety of analysts and practitioners; and
- the same as that adopted by most regulatory authorities in Australia.

#### Beta Factor

Grant Samuel has adopted a beta factor in the range 1.2-1.4 for the purposes of valuing MMG's assets.

Grant Samuel has considered the beta factors for a wide range of mining companies in determining an appropriate beta range for MMG's assets. The betas have been calculated on two bases, relative to each company's home exchange index and relative to the Morgan Stanley Capital International Developed World Index ("MSCI"), an international equities market index that is widely used as a proxy for the global stock market as a whole.

Grant Samuel has also considered betas estimated on the basis of share market data over various periods of time. Betas are, conceptually, estimates of the expected systematic risk added to a diversified portfolio by an investment (although they are estimated by reference to historical share market data). Estimates based on historical data do not necessarily reflect investor expectations.

A summary of betas for selected comparable listed companies is set out in the table below:

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Eq	Equity Beta Factors for Selected Listed Mining Companies									
	Market Capital-		thly Observa over 4 years	tions	Weekly Observations over 2 years					
	isation	AGSM /	Bloor	mberg	Bloor	mberg				
Company	(USD millions)	LBS / Barra <sup>3</sup>	Local Index	MSCI <sup>4</sup>	Local Index	MSCI				
Diversified Mining	· ·									
Anglo American	61,429	1.58	1.84	1.73	1.91	2.05				
BHP	231,257	0.99	1.04	0.91	1.61	1.56				
Rio Tinto	162,676	1.43	1.30	1.09	1.53	1.33				
Vale	151,089	1.18	0.85	1.02	1.10	1.20				
Xstrata	59,605	1.36	1.68	1.56	2.88	3.06				
Median		1.36	1.30	1.09	1.61	1.56				
Weighted average		1.23	1.19	1.11	1.62	1.60				
Copper										
Aditya Birla	378	4.99	4.65	4.79	3.02	3.01				
Antofagasta	21,026	1.35	1.72	1.36	1.50	1.56				
Anvil Mining	702	1.79	2.30	2.09	3.02	2.90				
Equinox Minerals	3,887	1.97	2.52	1.97	1.55	1.54				
OZ Minerals	4,767	2.05	1.87	1.86	1.25	1.11				
PanAust	2,149	2.76	2.45	1.93	2.37	1.57				
Teck Resources	26,391	2.56	3.13	3.13	2.98	2.86				
Median		2.05	2.45	1.97	2.37	1.57				
Weighted average		2.06	2.46	2.28	2.20	2.12				
Zinc										
Boliden	4,743	1.39	2.06	1.74	1.46	1.39				
Kagara	539	4.05	3.28	3.57	2.80	2.01				
Lundin	3,709	2.03	3.27	3.19	1.76	2.02				
Perilya	284	3.16	3.19	3.35	2.23	2.54				
Median		2.60	3.23	3.27	1.99	2.01				
Weighted average		1.86	2.65	2.48	1.68	1.71				

Source: AGSM, Bloomberg, London Business School, Barra

The beta estimates in the above table suggest that pure play copper and zinc companies have betas of well over 1.0 (indicating more systematic riskiness than the overall market), although large diversified mining companies such as BHP, Rio Tinto, Anglo American and Xstrata (which have significant exposure to copper and other base metals and bulk commodities) appear to have betas closer to 1.0.

## It is also important to note:

- individual copper company betas and individual zinc company betas (for the same source/period) fall in a very wide range;
- some individual company betas vary significantly depending on which market index is utilised (Local or MSCI); and

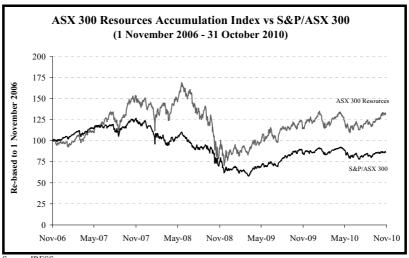
The Australian beta factors calculated by the Australian Graduate School of Management ("AGSM") as at 30 June 2010 over a period of 48 months using the Scholes-Williams technique. United Kingdom beta factors calculated by London Business School ("LBS") over a period of 60 months using ordinary least squares regression or the Scholes-Williams technique (including lag) where the stock is thinly traded and as reported in the July-September 2010 edition. Canadian and European beta factors are calculated by Barra, Inc. ("Barra") as at 30 September 2010 over a period of 60 months using ordinary least squares regression.

The MSCI beta factor is calculated using the MSCI Developed World Local Currency Index.

• gearing levels vary significantly but this is not always consistent with beta factors.

However, in Grant Samuel's view, it is not clear that beta calculations based exclusively on share market data for the last four years will provide reliable estimates of expected systematic riskiness.

Resources companies for some periods over the last four years have outperformed broader measures of equity market performance. This was largely the result of a substantial increase in prices for nearly all commodities, itself the result of the increasing impact of growing Chinese and other developing nations' demand for commodities, supply shortages, significantly increased production costs and other factors. The outperformance from March 2006 to September 2008 was reversed in October 2008 as commodity prices fell precipitously in response to the development of global recessionary conditions. Since November 2008 however, resource companies have again outperformed the broader market.



Source: IRESS

In Grant Samuel's view the estimation of betas based purely on data over the last four years will potentially yield inappropriate results. The share price performance of listed resources companies in the context of what now appears (with the benefit of hindsight) to have been a commodities "bubble" until mid-2008, followed by a sharp correction and another period of strong performance is not necessarily reflective of expectations of future resource company share price performance relative to broader measures of equity markets.

Accordingly, Grant Samuel has had regard to betas estimated over various time periods based on share market data over the last twelve years. These were estimated in the context of the Rio bid for North (July 2000), the Xstrata acquisition of MIM (April 2003) and the Xstrata bid for WMC (January 2005). This beta analysis is set out below:

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Beta Factors for Selected Listed Resources Companies July 2000									
	Equity	Beta Factor							
Company	Market Value	Bloom	berg <sup>5</sup>	AG	SM <sup>6</sup>				
Company	Millions US\$M	Home Exchange	MSCI <sup>7</sup>	OLS	Scholes- William				
Base Metals									
MIM Limited	1,024	1.40	0.99	1.91	1.49				
Pasminco Limited	612	1.32	0.98	1.76	1.73				
Cominco Limited	1,144	0.91	1.20	-	-				
Phelps Dodge	3,075	1.03	1.13	-	-				
Grupo Mexico	2,297	0.70	0.88	-	-				
Western Metals	49	1.06	0.82	1.15	1.02				
Asturiana de Zinc	407	1.08	1.41	-	-				
Antafagasto	1,137	0.81	1.10	-	-				
Union Miniere	960	0.81	1.10	-	-				
Freeport McMoran	1,412	1.23	1.48	-	-				
Teck Corporation	691	0.99	0.85	-	-				
Simple average		1.03	1.09	1.61	1.41				
Weighted average		0.99	1.10	1.83	1.56				
Median		1.03	1.10	1.76	1.49				

Source: AGSM, Bloomberg

Betas sourced from Bloomberg are calculated over a five year period to 30 June 2000 using monthly observations.

Betas sourced from AGSM are calculated over a four year period to 31 March 2000 using monthly observations. They are calculated relative to the All Ordinaries Index of the Australian Stock Exchange.

MSCI (Morgan Stanley Capital International All Countries World Index) calculated using the local currency of each company.

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	Equity	Beta Factor								
	Market		Bloom	berg <sup>8</sup>		AGSM <sup>9</sup>				
Company	Value Millions	Home Exchange		MSCI <sup>10</sup>			Scholes-			
	US\$M	Raw	Adj	Raw	Adj	OLS	William			
Base Metals										
Phelps Dodge Corporation	2,961	1.19	1.13	1.29	1.19	n.a.	n.a.			
Freeport McMoRan Copper and Gold Inc	2,468	1.16	1.11	1.35	1.23	n.a.	n.a.			
Xstrata plc	2,132	0.99	0.99	0.73	0.82	n.a.	n.a.			
Antofagasta plc	2,020	0.73	0.82	0.73	0.82	n.a.	n.a.			
Noranda Inc	2,001	0.59	0.72	0.69	0.80	n.a.	n.a.			
MIM Holdings Limited	1,752	1.40	1.27	0.77	0.85	1.80	1.85			
Teck Cominco Limited	1,409	0.61	0.74	0.59	0.73	n.a.	n.a.			
Southern Peru Copper Corporation	1,231	0.66	0.78	0.71	0.81	n.a.	n.a.			
Umicore SA	902	0.60	0.74	0.70	0.80	n.a.	n.a.			
Grupo Mexico SA de CV	758	0.79	0.86	0.72	0.81	n.a.	n.a.			
Boliden AB	181	0.78	0.85	1.42	1.28	n.a.	n.a.			
Simple average		0.86	0.91	0.88	0.92	1.80	1.85			
Weighted average		0.93	0.95	0.90	0.93	1.80	1.85			
Median		0.78	0.85	0.73	0.82	1.80	1.85			
Diversified										
BHP Billiton Limited	32,918	1.24	1.16	0.72	0.81	1.62	1.89			
Rio Tinto Limited	29,423	1.25	1.17	0.69	0.80	1.73	1.76			
Anglo American plc	21,314	1.36	1.24	1.13	1.09	n.a.	n.a.			
Simple average		1.28	1.19	0.85	0.90	1.68	1.83			
Weighted average		1.27	1.18	0.81	0.88	1.67	1.83			
Median		1.25	1.17	0.72	0.81	1.68	1.83			

Source: AGSM, Bloomberg

Betas sourced from Bloomberg are calculated over a five year period to 31 March 2003 using monthly observations.

Betas sourced from AGSM are calculated over a four year period to 31 December 2002 using monthly observations. They are calculated relative to the All Ordinaries Index of the Australian Stock Exchange.

MSCI (Morgan Stanley Capital International All Countries World Index) calculated using the local currency of each company.

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Beta Factors for	Selected Liste	d Resources	Companies	January 2	005				
	Equity	Beta Factor							
Company	Market Value	Bloom	berg <sup>11</sup>	AG	AGSM <sup>12</sup>				
Company	Millions US\$M	Home Exchange	MSCI <sup>13</sup>	OLS	Scholes- William				
Diversified Mining									
ВНР	70,676	1.17	0.60	1.38	2.02				
Rio Tinto	41,265	0.77	0.57	0.91	1.12				
Anglo American	33,042	1.10	1.05	n.a.	n.a.				
CVRD	27,657	0.28	0.11	n.a.	n.a.				
Xstrata	11,039	1.43	1.46	n.a.	n.a.				
Median		1.10	0.60	1.15	1.57				
Weighted Average		0.95	0.65	0.74	1.03				
Copper									
Phelps Dodge	10,281	1.64	1.70	1.4114	n.a.				
Freeport McMoRan	6,750	1.06	1.07	n.a.	n.a.				
Teck Cominco	5,683	1.43	1.22	n.a.	$0.63^{15}$				
Grupo Mexico	4,163	1.30	0.87	n.a.	n.a.				
Antofagasta	4,047	0.64	0.64	n.a.	n.a.				
Southern Peru Copper	3,720	0.79	0.81	$0.59^{1}$	n.a.				
Median		1.18	0.97	1.00	0.63				
Weighted Average		1.24	1.18	1.19	0.63				

Source: AGSM, Bloomberg

The evidence suggests a wide range of betas. However, for betas measured against the MSCI, the betas tend to be around 1 (and for some periods arguably appear somewhat lower than 1). Beta estimates are by their nature imprecise and judgmental, as highlighted by the shift in measured betas illustrated in the tables above.

In Grant Samuel's view, it is reasonable to adopt betas in the range 1.2-1.4. This range reflects beta estimates over a longer period of time than betas estimated over the last four years and appears broadly consistent with the views of market participants.

# 3.2 Cost of Debt

A cost of debt of 5.0% has been adopted (a margin of 2.0% over the risk free rate). This figure represents the expected future cost of borrowing over the duration of the cash flow model. Grant Samuel believes that this would be a reasonable estimate of an average interest rate, including a margin that would match the duration of the cash flows assuming that the operations were funded with a mixture of short term and long term debt.

# 3.3 Debt/Equity Mix

The selection of the appropriate debt/equity ratio involves perhaps the most subjectivity of all the elements of discount rate selection analysis. In determining an appropriate debt/equity mix, regard

Betas sourced from Bloomberg are calculated over a five year period to 30 November 2004 using monthly observations.

Betas sourced from AGSM are calculated over a four year period to 30 September 2004 using monthly observations. They are calculated relative to the All Ordinaries Index of the Australian Stock Exchange.

MSCI (Morgan Stanley Capital International All Countries World Index) calculated using the local currency of each company.

Sourced from Ibbotson.

Sourced from the Financial Post Data Group, calculated based on 60 months of monthly data.

was had to gearing levels of selected comparable listed Australian and international mining companies and the nature and quality of the cash flow streams from MMG's assets.

Gearing levels for these companies for the past four years are set out below:

Ge	aring Levels fo	r Selected L	isted Mini	ng Compai	nies	
		Net Debt/	(Net Debt +	Market Cap	italisation)	'
		Year 1	Ended			4 Year
Company	2006	2007	2008	2009	Current <sup>16</sup>	Average
Diversified Mining						
Anglo American	4.0%	5.8%	26.1%	15.4%	13.8%	12.8%
BHP	5.6%	3.5%	3.4%	1.8%	1.4%	3.6%
Rio Tinto	3.4%	22.7%	51.5%	11.9%	6.6%	22.4%
Vale	20.6%	10.7%	12.4%	10.1%	11.1%	13.5%
Xstrata	21.3%	14.4%	60.7%	15.9%	11.5%	28.1%
Median	5.6%	10.7%	26.1%	11.9%	11.1%	13.5%
Weighted average	9.7%	11.0%	24.4%	8.7%	6.9%	13.5%
Copper						
Aditya Birla	14.7%	(1.1)%	76.1%	1.5%	(6.3)%	22.8%
Antofagasta	(15.8)%	(15.1)%	(66.9)%	(10.3)%	(6.7)%	(27.0)%
Anvil Mining	(35.0)%	(33.8)%	n.m.	(35.7)%	(9.0)%	n.m. <sup>17</sup>
Equinox Minerals	(8.7)%	6.1%	45.7%	13.3%	6.8%	14.1%
OZ Minerals	(5.9)%	3.1%	9.2%	(35.5)%	(37.5)%	(7.3)%
PanAust	(24.4)%	10.6%	74.5%	0.9%	(0.2)%	15.4%
Teck Resources	(24.7)%	0.7%	79.8%	23.5%	17.8%	19.8%
Median	(15.8)%	0.7%	60.1%18	0.9%	(6.3)%	14.8%
Weighted average	(18.8)%	(4.4)%	18.6%18	4.4%	(2.8)%	0.2%
Zinc						
Boliden	(1.3)%	18.5%	54.5%	21.4%	18.8%	23.3%
Kagara	0.0%	6.7%	21.2%	(13.6)%	(8.3)%	3.5%
Lundin	(11.3)%	(0.9)%	23.4%	2.0%	(3.4)%	3.3%
Perilya	(37.0)%	(18.9)%	(39.7)%	(39.9)%	(26.5)%	(33.9)%
Median	(6.3)%	2.9%	22.3%	(5.8)%	(5.8)%	3.4%
Weighted average	(6.3)%	8.9%	37.2%	9.7%	7.0%	12.4%

Source: Bloomberg

The selection of gearing levels is highly judgemental. The table shows a very wide range of gearing levels. The debt levels should actually be the weighted average measured over the same period as the beta factor rather than just at the current point in time. Moreover, these do not always bear any relationship to the betas of the individual companies.

Having regard to the above, the debt/equity mix has been estimated as 15-25% debt and 85-75% equity.

<sup>6</sup> Current gearing levels are based on the most recent balance sheet information and on sharemarket prices as at 31 October 2010.

Not meaningful.

Anvil Mining is excluded from the median and weighted average calculation because it was a strong outlier.

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## 3.4 WACC

On the basis of the parameters outlined and assuming a corporate tax rate of 30%, the nominal WACC is calculated to be in the range 8.5-10.2%.

This is an after tax discount rate to be applied to nominal ungeared after tax cash flows. However, it must be recognised that this is a very crude calculation based on statistics of limited reliability and involving a multitude of assumptions.

Having regard to these matters, current volatility and market uncertainty, and the calculations and data set out above, Grant Samuel has adopted discount rates of 8.5-10.5% (US dollar cash flows) for the purpose of its DCF analysis. While the range is reasonably wide, Grant Samuel believes that the range of rates is reasonable having regard to current equity market conditions.

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# Appendix 2

# Overview of the Zinc and Copper Markets

#### 1 Zinc

#### Overview

Zinc, a hard silver-grey metal, is the third most commonly used non-ferrous metal after aluminium and copper. Zinc is chemically reactive and rapidly oxidising when exposed to air. It alloys readily with metals such as copper and aluminium, and has a relatively low melting point. These characteristics are the basis of its major applications in corrosion protection, brass and die-casting.

Zinc production is essentially a two stage process. Zinc miners mine zinc ore and treat the ore at mine site to yield zinc concentrates. Miners then sell the concentrates to smelters, which use hydrometallurgical or (less commonly) pyrometallurgical processes to produce refined zinc metal. A small amount of zinc slab (around 1% of production) is produced through recycling of scrap.

## **Applications**

#### Corrosion Protection

Zinc's most important application is in corrosion protection, which relies on zinc's reactive nature. Galvanising is the main method of protection against the corrosion of steel. Galvanising involves the deposition of a thin coat of zinc over steel. Galvanising provides a physical barrier to protect steel, with the galvanising process resulting in a zinc-iron compound that creates an unbreakable bond between the steel and the zinc. The surface of the zinc coating on galvanised steel rapidly oxidises, creating a dense and relatively impermeable layer of zinc oxide that protects the zinc surface and steel below from further corrosion. Moreover, the zinc and iron form an electrolytic cell, such that even if the physical zinc barrier is damaged, corrosion preferentially attacks the more chemically reactive zinc rather than the less reactive iron

Galvanising accounts for around 50% of global zinc usage. Galvanised steel is principally used in the construction and automotive industries. In construction, galvanised steel is used for steel girders and structures and smaller items such as nuts, bolts and washers. In the automotive industry, galvanised steel sheets are used extensively in the manufacture of rust-resistant car bodies. In addition, galvanised steel sheet is used in the production of consumer appliances (e.g. washing machines) and industrial machinery for which corrosion resistance is important.

## Brass

Brass is a copper-zinc alloy (commonly 65% copper and 35% zinc). Brasses have good corrosion-resistance properties, are machineable and malleable. Brasses have traditionally been used in marine applications, in engineering and for household fittings.

## Die-casting

Zinc's relatively low melting point (420 degrees C) makes it well suited for die-casting, in which molten metal is injected under high pressure into moulds or dies. Speciality zinc alloys, with small quantities of added aluminium, copper or magnesium, are used in die-casting applications. While die-casting has lost market share in some applications to plastics, die-casting is still used to manufacture precision components, for example in the automotive industry. Approximately 10% of zinc metal consumption relates to diecasting applications.

## Rolled Zinc

Zinc alloys are more malleable than pure zinc and can be rolled into sheets or extruded into bars. Zinc sheets are used in the building industry, particularly in continental Europe, for roofing, gutters and other applications for which corrosion resistance is important. Rolled and extruded products account for around 10% of zinc consumption.

#### Chemicals

Zinc oxides and chemicals represent around 10% of zinc consumption. Zinc oxide is used in the vulcanization of rubber, mainly for the manufacture of car tyres. Zinc oxide is also used in applications such as paints, ceramics, animal feed and fertilizers, and in various consumer applications.

#### The Zinc Market

The overall zinc market consists of two closely related but distinct sub-markets: the market for zinc concentrates, in which zinc miners are suppliers and smelters are consumers, and the market for zinc metal, in which smelters are suppliers and end users are consumers. Short term imbalances between the supply of and demand for concentrates (i.e. smelting capacity versus concentrate supply), as well as fluctuations in zinc prices, affect the treatment charges levied by smelters and the sharing of value between miners and smelters. The basis on which treatment charges are levied by smelters is discussed in more detail below. In the longer term, it appears reasonable to expect that smelter capacity will adjust to, on average, approximately match concentrate supply and that smelter charges will broadly reflect the rates of return required to justify the building of new smelters. Accordingly, in the longer term the major dynamics affecting the overall zinc market will be the factors affecting mine supply and end use demand for zinc, rather than factors relating to smelter arrangements. Statistics for the global refined zinc market are summarised as follows:

World Zinc Market									
	2005	2006	2007	2008	2009				
Zinc consumption (000's tonnes)									
Africa	201	199	211	197	172				
Americas	1,946	1,999	1,902	1,812	1,497				
Asia	5,423	5,866	6,169	6,383	6,381				
of which China	2,900	3,300	3,600	3,875	4,125				
Europe	2,682	2,709	2,714	2,514	2,023				
Australasia	253	267	251	216	156				
Total consumption	10,507	11,042	11,249	11,123	10,230				
Zinc production (000's tonnes)									
Africa	268	253	278	265	267				
Americas	1,879	1,871	1,868	1,835	1,659				
Asia	5,010	5,571	6,249	6,595	6,865				
of which China	2,790	3,220	3,835	3,970	4,400				
Europe	2,546	2,457	2,489	2,451	2,044				
Australia	457	463	498	498	526				
Total production	10,160	10,614	11,382	11,645	11,361				
World zinc stockpile (000's tonnes)	809	507	519	684	856				
LME Cash Average (US¢/lb)	63	148	147	85	75				

Source: MMG

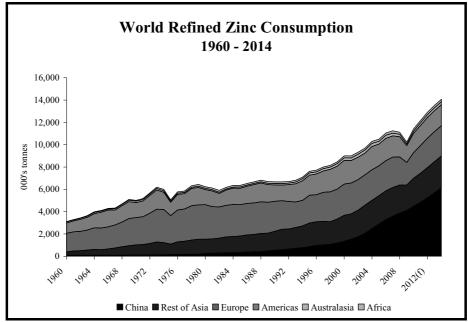
## Zinc Consumption

Demand for zinc is closely related to world GDP and industrial production growth. In addition, demand growth tends to slow as economies become wealthier and a greater proportion of GDP growth is contributed by services and high value-add activities.

Global refined zinc consumption approximately doubled between 1960-1980, growing at an annualised rate of around 3.5%. The growth rate moderated over the next two decades with consumption increasing at an annualised rate of less than 2% over the period 1981-2000. The second half of this period witnessed the emergence of developing nations and in particular China as a significant consumer of refined zinc. The rate accelerated again between 2001 and 2007 when world refined zinc consumption increased by around 25%. The growth was driven primarily by the rapid Chinese industrialisation, which resulted in China's zinc consumption almost tripling, consolidating its position as the dominant zinc consumer in the world. The

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consumption contracted in 2008 and 2009 declining by 1% and 8% respectively although China's consumption continued to grow at high single digit growth rates. The first half of 2010 saw a sharp rebound in worldwide consumption and market commentators are forecasting world zinc consumption to increase by over 10% compared to that in the previous year. Given the relatively slow rates of growth of demand for zinc in developed economies and the absolute size of the Chinese economy, growth in Chinese demand is expected to be the major determinant of aggregate demand growth.



Source: MMG

# Zinc Production

Mine supply of zinc (to be precise, of zinc concentrates) is a function both of factors relating to the discovery and development of new zinc deposits and of zinc prices, with higher zinc prices stimulating the development of zinc ore bodies that might otherwise not be developed.

World refined zinc production doubled between 1960 and 1980 keeping pace with global demand although zinc price in nominal terms increased by over 200%. Slow consumption growth between 1981 and 1992 resulted in zinc supply generally matching or exceeding demand, and with the exception of price spikes in 1989 and 1990, zinc prices were generally subdued. Between 1993 and 2000, world refined zinc consumption exceeded production in seven of the eight years but zinc price in nominal terms declined by approximately 9% during this period.

A steady increase in Chinese mine production during the 1990s and early 2000s resulted in China becoming the single largest producer of zinc concentrate. Much of Chinese production is believed to be from small scale artisanal mines, for which there is little accurate cost or production data. However, it appears that much of this artisanal production is relatively high cost and sensitive to changes in zinc prices.

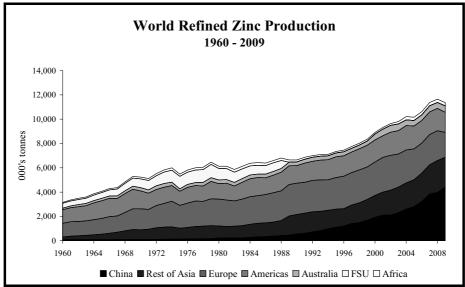
Low zinc prices for much of the 1990s and early 2000s and consequent modest investment in new zinc mine capacity meant that the industry had a limited ability to respond to the China-driven growth in demand over the period 2004-2006. LME stockpiles declined significantly and the zinc price rose to record levels, reaching a high of US\$4,619 per tonne (US\$2.10/lb) in November 2006.

The dramatic increase in the zinc price during 2006 resulted in a substantial expansion in zinc production, particularly from the Chinese small mine artisanal sector. Easing of supply pressures resulted in a sharp

Page 3

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fall in zinc prices, which ended 2007 at approximately US\$2,400/tonne (US\$1.10/lb). A rapid contraction in refined zinc consumption in 2008 and 2009 resulted in a substantial increase in zinc stocks and a further decline in zinc prices. As a consequence, zinc production was curtailed at several mines worldwide particularly by the marginal producers in China. The zinc inventory stabilised somewhat during the second half of 2009 and the zinc prices recovered from lows of approximately US\$1,050/tonne (US\$0.48/lb) witnessed in December 2008 to around US\$2,529/tonne (US\$1.15/lb) in December 2009. With the recovery in zinc price, most of the mines that had curtailed production in 2008-09 recommenced their operations by late 2009. Although the refined zinc demand also increased significantly during the first half of 2010, it has not keep pace with the increased supply and zinc stocks have increased again and the reported LME zinc stockpiles exceeded 600,000 tonnes in October 2010. The zinc price has continued to remain volatile reflecting the fluctuations in the zinc inventory levels and was around US\$2,450/tonne (US\$1.11/lb) in the second half of October 2010. In the absence of a dramatic increase in demand, market commentators and analysts are of the view that zinc prices will continue to remain under pressure in the near term until some of the large zinc mines cease production due to reserves exhaustion and inventory levels decline to more moderate levels.



Source: MMG

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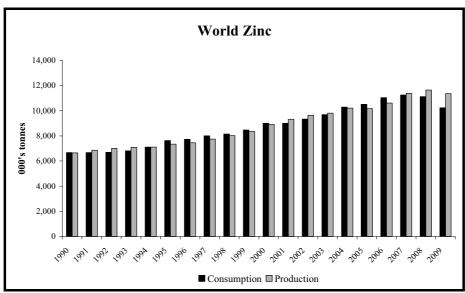
The following table shows reserves and annual production data for some of the world's largest zinc mines:

Zinc Mines										
				Re	serves		production			
Mine	Location	Date measured	Zinc (Mt)	Lead (Mt)	Silver (Moz)	Gold (Moz)	Zinc (kt)	Lead (kt)		
Rampura Agucha	India	31 Mar 10	10.8	1.5	-	-	613	55		
Red Dog	USA	31 Dec 09	9.3	2.4	-	-	582	132		
Century <sup>1</sup>	Australia	30 Jun 09	3.4	0.3	-	-	361	16		
Antamina <sup>2</sup>	Peru	31 Dec 09	3.4	-	-	-	456	-		
Lisheen	Ireland	31 Dec 09	0.8	0.1	-	-	172	19		
Skorpion	Namibia	31 Dec 09	0.9	-	-	-	150	-		
Golden Grove <sup>3</sup>	Australia	31 Jun 09	0.3	0.0	5.6	0.1	57	4		

Source: Company reports

# Zinc Inventories

Zinc production and consumption from 1990 to 2009 are shown below:



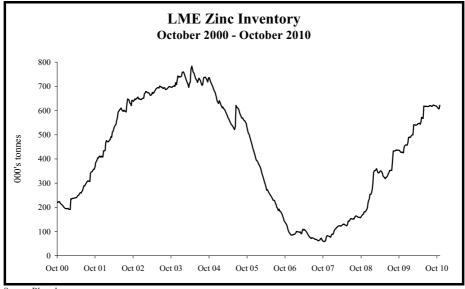
Source: MMG

Century Reserves are as of 30 June 2009 and the Production is for the period ending 31 December 2009

<sup>&</sup>lt;sup>2</sup> Antamina Reserves as of 31 December 2009 and Production is for the period ending 31 December 2009 as reported by Teck Cominco

<sup>&</sup>lt;sup>3</sup> Golden Grove Reserves are as of 30 June 2009 and the Production is for the period ending 31 December 2009

The following chart shows movements in zinc inventories between October 2000 and October 2010:

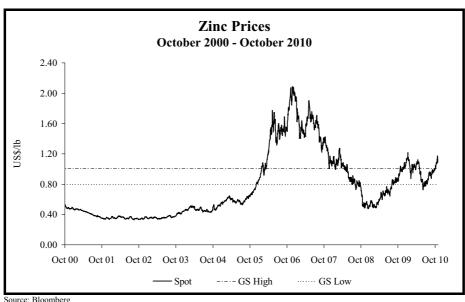


Source: Bloomberg

Zinc inventories reached a low in late 2006/early 2007 (corresponding to strong zinc prices). Inventories have since recovered and are approaching the highest levels witnessed in this decade.

# Zinc Prices

Historical zinc prices are compared to the long run zinc price assumptions adopted by Grant Samuel for valuation purposes below:

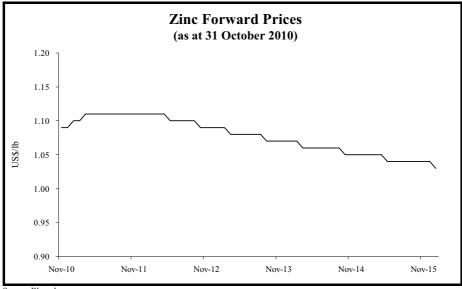


Source: Bloomberg

Page 6

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The following chart shows the pricing for zinc forward contracts for various time periods. The forward prices are broadly consistent with the long run zinc price assumptions adopted by Grant Samuel for valuation purposes:



Source: Bloomberg

While there is little consensus on the part of commodity and equity market analysts as to future zinc prices, Grant Samuel's long term price assumption of US\$0.80-1.00/lb for zinc is broadly consistent with the range of forecast price assumptions used by market analysts. The long term prices assumed are generally slightly lower than the spot prices prevailing in late October 2010. Although zinc stocks have increased in recent times and are approaching substantial levels, a number of major zinc mines face short to medium term reserve exhaustion and their contribution is unlikely to be replaced fully by the limited number of projects that are being developed in the near term. While cost pressures suggest that much supply (including supply from artisanal mining in China) will not be economic at significantly reduced zinc prices, the ability of the multitude of high cost Chinese producers to quickly ramp up production under a favourable pricing regime should limit zinc price appreciation. All these factors suggest that there are good grounds to expect zinc prices to remain under pressure over the near term with moderate upside potential over the medium to longer term.

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## 2 Copper

#### Overview

Copper is valued for its electrical and thermal conductive properties, its durability and its strength. Copper is the second most commonly used non-ferrous metal after aluminium. It readily alloys with other metals and is resistant to corrosion. These properties allow copper to be used in a wide range of applications in building and construction, electrical applications, electronics and communication, transportation, industrial machinery and equipment, consumer and general products.

Copper is mined in open pit and underground mines. The orebodies contain a percentage of copper that is generally less than 5% of the ore. The miners either produce a copper concentrate (which is sold to smelters or traders) or copper metal (which is sold to end users or traders). Over the past decade, the commissioning of large copper mines that produce copper metal using solvent extraction/electrowinning ("SX/EW") metallurgical processes has resulted in additional, low cost copper production.

Recycled copper is a significant secondary source of copper. Copper and its alloys have been recycled for hundreds of years and account for a substantial proportion of the copper produced and sold each year.

## **Applications**

Copper is one of the first metals to be used by humans though its role has evolved over time. Since the discovery of electricity and magnetism in the 18<sup>th</sup> and 19<sup>th</sup> centuries, copper has found widespread use in electrical goods and wires and is used across a wide range of industries. Copper can be easily recovered and recycled.

#### Building and Construction

The building and construction industry is the largest consumer of copper. Non-corrosive copper pipes have been used for plumbing in buildings for centuries because they can be easily joined metallurgically by brazing or soldering. Copper and its alloys are now extensively used in building construction for wiring, water piping, gas tubing, roofing, architectural building design, heating and air conditioning systems, interior and exterior artwork, doorknobs, lightning rods, faucets and fire sprinkler systems. Copper does not burn or support combustion and is therefore relatively safe.

## Electrical, Electronics and Communication

Copper is malleable, ductile and is a good conductor of electricity at room temperature. It is widely used in electric generators, household electrical wiring and wiring in appliances, lights, motors, radios and TV sets. Copper wires are used extensively in telecommunication networks for high speed transfer of voice and data. In the semiconductor industry, copper is used in microprocessor chips to transfer heat from the chip circuitry.

# Industrial Machinery and Equipment

Copper readily forms alloys with other metals. Some alloys are commonly used in industrial machinery and equipment. Copper and its alloys are preferred for making products such as gear sets, bearings, and turbine blades because of their durability, machinability and ease of casting with high precision and tolerance.

## Transportation

Copper is also used in the automobile, aerospace and railway industries. For many years, the radiator was the most important end use of copper in the automobile industry. However, the usage of copper in automotive electrical and electronic applications has grown rapidly while its use in the heat exchanger has declined. In the aerospace industry, the mechanical properties of copper alloys including their good strength-to-weight ratios, bearing strength and fatigue and corrosion resistance have favoured the use of these alloys in undercarriage components, aero engine bearings, bushings, display unit components, and helicopter motor spindles. A large amount of copper is used in railway systems for electrification and in the manufacture of switchgears and motor windings.

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#### General Products

Copper and its alloys are commonly used in home furnishing and kitchenware. Traditionally, copper has also been used in the manufacture of coins and medallions.

#### The Copper Market

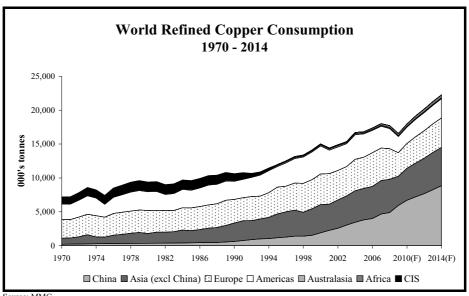
Demand for copper has increased substantially driven largely by increased consumption in China and the rest of Asia, which more than offset declines in Europe and America. Production has also increased with Asia contributing most of the growth. Copper prices were generally strong in recent years but fell to five-year lows in December 2008. Statistics for the global refined copper market are summarised as follows:

World Copper Market									
	2005	2006	2007	2008	2009				
Copper consumption (000's tonnes)									
Africa	179	216	258	306	322				
America	3,450	3,281	3,217	2,946	2,399				
Asia	8,437	8,745	9,607	9,794	10,261				
of which China	3,810	3,998	4,655	4,887	5,937				
Europe	4,622	4,990	4,805	4,538	3,458				
Australasia	133	136	138	134	112				
Total consumption	16,821	17,367	18,026	17,719	16,552				
Copper production (000's tonnes)									
Africa	551	623	713	597	625				
America	5,745	5,696	5,728	5,787	5,659				
Asia	6,421	7,047	7,670	7,796	8,057				
Europe	3,361	3,426	3,364	3,439	3,319				
Australasia	441	427	442	510	446				
Total production	16,518	17,218	17,924	18,130	18,122				
World copper stockpile (000's tonnes)	452	592	558	745	1,004				
LME Cash Average (US¢/lb)	167	305	323	315	234				

Source: MMG

# Copper Consumption

The demand for copper is heavily influenced by the level of economic activity and infrastructure development in the world. Between 1970 and 2009, world consumption of refined copper has increased consistently, except for some brief periods over the years and a sharp decline in 2009. It more than doubled from approximately 7.3 million tonnes in 1970 to 16.5 million tonnes in 2009. Market commentators are forecasting an increase in the world copper consumption over the next several years. A breakdown of historical and short term worldwide copper consumption is shown on the chart below:



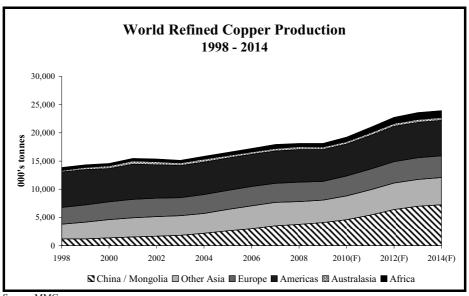
During the first half of the period, Europe and North America accounted for a large share of copper consumption. Since the early 1990s, consumption in those regions has generally remained flat while rising consumer demand and infrastructure development in China and other Asian developing nations have resulted in strong growth in demand. Consumption in China has grown at double digit rates in seven of the last ten years. This has been the result of strong growth in the use of wire and cable for telecommunications and information technology, despite substitution by improved alloys and the introduction of generally smaller, more efficient products in some applications.

In 2009 however, copper consumption is estimated to have declined by approximately 8% year on year. The approximately 15% increase in copper consumption in China was insufficient to offset the large decline in consumption in the developed nations with the consumption in North America declining by 20% and that in Europe by 23%.

## Copper Production

As shown in the chart below, world refined copper production has increased by approximately 40% since 1992, with the emergence of China/Mongolia as a major producer and the continued increase in production from the rest of Asia and South and Central America:

- - -



Source: MMG

Mined copper accounts for approximately 70% of the total refined copper produced. Recycling from scrap accounts for the remaining 30%. Copper miners produce either copper concentrate (generally from flotation treatment of primary copper deposits), which is treated and refined to produce refined copper, or copper metal (including by way of SX/EW treatment of copper oxide ore bodies).

A large proportion of production is from mines owned by large integrated international producers and industry consolidation continues to increase concentration. Copper mine production continues to be dominated by Chilean mines, which accounted for approximately one third of total production in 2009. Other major producing areas are Asia and Australasia. Production from many large existing mines is expected to decline due to falling ore grades and depletion of reserves. A number of major mines expected to be developed in the next five years are located in countries with higher levels of perceived risk, including the Democratic Republic of the Congo, Mongolia, Papua New Guinea and Zambia.

Although the share of direct metal production (largely through SX/EW processes) has been steadily increasing, copper concentrates still represent almost two thirds of refined copper production. The production of copper concentrate from mines has increased over the last few years, but has been outpaced by the growth in worldwide smelter capacity.

World Copper Concentrate Supply/Demand (000's tonnes contained copper)					
	2005	2006	2007	2008	2009
Mine production of concentrate	12,048	11,932	12,272	12,192	12,350
Smelter Production	12,407	12,797	13,010	13,085	13,171
Adjustment for secondary production & losses	(554)	(621)	(641)	(664)	(724)
Smelter consumption of concentrate	11,880	12,176	12,369	12,421	12,447
World Balance	168	(244)	(97)	(229)	(98)

Source: MMG

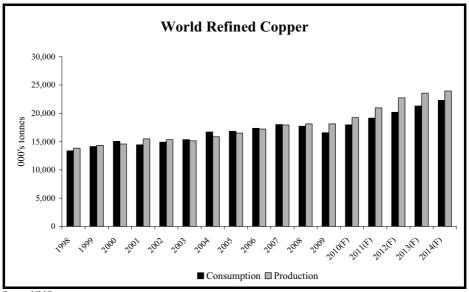
The resulting imbalance between the supply of and demand for concentrates has shifted smelting terms in favour of copper concentrate producers. They have been able to negotiate favourable treatment terms with low treatment charges and no price participation. With additional smelter capacity committed for the next

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couple of years, smelting terms are expected to remain favourable to miners in the short term. In the longer term, smelter capacity is expected to adjust to match concentrate supply and treatment charges should ultimately reflect smelter operating costs and the cost of capital.

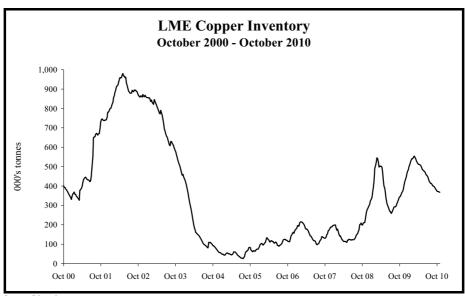
#### Copper Inventories

Copper production and consumption from 1998 to 2014 are shown below:



Source: MMG

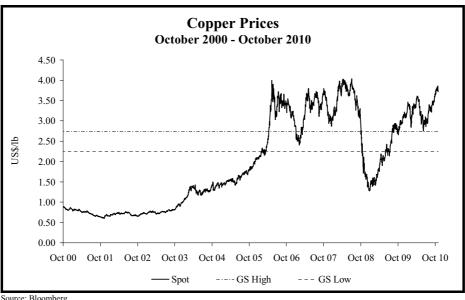
Between 1998 and 2002, worldwide copper production consistently exceeded consumption except in 2000. In 2003, consumption was slightly higher than production, but then jumped in 2004 and remained higher than production until 2007. Since then, copper production has been higher than consumption, which is expected to remain the case until 2014. As a result, copper inventories fell sharply from their highs of May 2002 to reach a low in July 2005. Copper stocks remained relatively low until late 2008 and have been very volatile since. The following chart shows movements in copper inventories between October 2000 and October 2010:



Source: Bloomberg

# Copper Prices

The LME spot copper price between October 2000 and October 2010 and the long run copper price assumptions in the range of US\$2.25-US\$2.75 per pound adopted by Grant Samuel for the valuation are shown on the chart below:

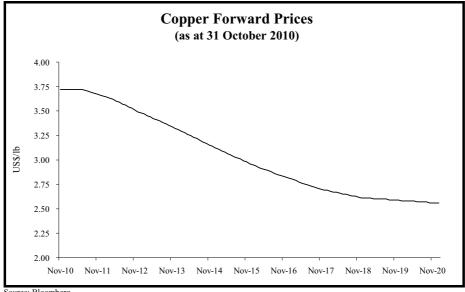


Source: Bloomberg

After trading below US\$1.00 per pound for a long period, the copper price strengthened steadily in 2004 and 2005, possibly as a result of sharply decreasing stocks, and closed at US\$2.06 per pound on 31 December 2005. 2006 saw a dramatic increase in the copper price, which peaked at US\$3.99 per pound on 11 May 2006. The copper price remained very high for the following two years, trading in the range

US\$2.40-4.00 per pound although volatility was higher than historically. In the second half of 2008, the copper price declined dramatically, reaching lows of US\$1.27 per pound on 24 December 2008. A strong recovery followed in 2009 and continued into 2010, although volatility remains high.

The following chart shows pricing for copper forwards contracts for various time periods:



Source: Bloomberg

The forward prices decline over time and are broadly consistent with the long run nominal copper price assumptions adopted by Grant Samuel. Similarly, while there is little consensus among market commentators as to future copper prices, Grant Samuel's long term copper forecast range of US\$2.25-US\$2.75 per pound is broadly consistent with the long term forecasts of market commentators and analysts.

#### 1. RESPONSIBILITY STATEMENT

This circular, for which the Directors collectively and individually accept full responsibility, includes particulars given in compliance with the Listing Rules for the purpose of giving information with regard to the Enlarged Group. The Directors, having made all reasonable enquiries, confirm that to the best of their knowledge and belief, the information contained in this circular is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement in this circular misleading.

#### 2. SHARE CAPITAL

Assuming no changes in the shareholding of the Company from the Latest Practicable Date other than those contemplated under the Share Sale Deed, the authorised and issued share capital of the Company (a) as at the Latest Practicable Date; (b) upon the increase in the authorised share capital of the Company; (c) immediately after Completion (assuming no conversion of the PSCS); and (d) immediately after Completion (assuming full conversion of the PSCS) and the issuance of all new Shares under the Specific Mandate is set out below:

## As at the Latest Practicable Date

Authorised:	HK\$
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6,000,000,000 Shares as at the Latest Practicable Date 300,000,000.00

Issued and fully paid, or credited as fully paid:

2,026,216,799 Shares as at the Latest Practicable Date 101,310,839.95

Upon the increase in the authorised share capital of the Company

Authorised:

18,000,000,000 Shares 900,000,000.00

Issued and fully paid, or credited as fully paid:

2,026,216,799 Shares as at the Latest Practicable Date 101,310,839.95

# Immediately after Completion (assuming no conversion of the PSCS)

Authorised:

18,000,000,000 Shares 900,000,000.00

Issued and fully paid, or credited as fully paid:

2,026,216,799	Shares as at the Latest Practicable Date	101,310,839.95
940,779,090	Consideration Shares	47,038,954.50
2,966,995,889		148,349,794.45

# Immediately after Completion (assuming full conversion of the PSCS) and the issuance of all the new Shares under the Specific Mandate

Authorised:

18,000,000,000 Shares 900,000,000.00

Issued and fully paid, or credited as fully paid:

2,026,216,799	Shares as at the Latest Practicable Date	101,310,839.95
940,779,090	Consideration Shares	47,038,954.50
1,560,000,000	Conversion Shares	78,000,000.00
2,700,000,000	New Shares under the Specific Mandate	135,000,000.00
7,226,995,889		361,349,794.45

The Consideration Shares and the Conversion Shares shall rank *pari passu* in all respects among themselves and with all other Shares in issue on the date of allotment and issue of such Shares.

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### 3. DISCLOSURE OF INTERESTS

# (a) Directors' interests and short positions in the Shares, underlying Shares and debentures of the Company or its associated corporations

As at the Latest Practicable Date, the interests and short positions of each of the Directors and the chief executive of the Company in the Shares, underlying Shares and debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) which were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they are taken or deemed to have under such provisions of the SFO), or which were required to be entered in the register required to be kept pursuant to Section 352 of the SFO or which were required to be notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") as set out in Appendix 10 of the Listing Rules were as follows:

Long position in the underlying Shares

			Approximate
			percentage of
			total number of
		Number of	issued Shares
	Nature of	underlying	as at the Latest
Name of Director	interest	Shares held	<b>Practicable Date</b>
		(Note 1)	(Note 2)
Li Fuli	Personal	1,300,000	0.06%
Hao Chuanfu	Personal	1,600,000	0.08%
Zhan Wei	Personal	1,200,000	0.06%
Shen Ling	Personal	1,000,000	0.05%
Zong Qingsheng	Personal	1,000,000	0.05%
Xu Jiqing	Personal	1,000,000	0.05%
Li Liangang	Personal	1,100,000	0.05%

# Notes:

- 1. The Directors' interests in the underlying shares are through share options granted by the Company pursuant to the share option scheme adopted by the Company on 28 May 2004.
- 2. The calculation is based on the number of underlying shares as a percentage of the total number of issued shares of the Company (i.e. 2,026,216,799 shares) as at the Latest Practicable Date.

Save as disclosed above, as at the Latest Practicable Date, none of the Directors or the chief executive of the Company had any interests or short positions in any Shares, underlying Shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) which were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they are taken or deemed to have under such provisions of the SFO), or which were required to be entered in the register required to be kept pursuant to Section 352 of the SFO or which were required to be notified to the Company and the Stock Exchange pursuant to the Model Code.

# (b) Substantial Shareholders' interests and short positions in the Shares, and underlying Shares

So far as is known to the Directors and chief executive of the Company, as at the Latest Practicable Date, the following persons had interests or short positions in the Shares or underlying Shares which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO, or, which were recorded in the register required to be kept by the Company under Section 336 of the SFO:

Long position in the shares of the Company

			Approximate percentage of total number of issued Shares
Name of Shareholder	Capacity	Number of Shares held	as at the Latest Practicable Date (Note 1)
СМС	Interest of controlled corporations ( <i>Note 2</i> )	1,284,467,826	63.39%
CMN	Interest of controlled corporation ( <i>Note 2</i> )	1,284,467,826	63.39%
Top Create	Beneficial owner (Note 2)	1,284,467,826	63.39%

### Notes:

- 1. The calculation is based on the number of shares held by each person (whether directly/indirectly interested or deemed to be interested) as a percentage of the total number of issued Shares as at the Latest Practicable Date.
- 2. Top Create is a wholly-owned subsidiary of CMN which in turn is owned as to approximately 91.57% by CMC. Accordingly, CMN and CMC were, by virtue of the SFO, deemed to be interested in the 1,284,467,826 Shares held by Top Create as at the Latest Practicable Date.

Save as disclosed above, as at the Latest Practicable Date, there were no other persons who were recorded in the register of the Company as having an interest or short positions in the Shares or underlying Shares which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO, or, which were recorded in the register required to be kept by the Company under Section 336 of the SFO.

Save as disclosed below, no other Directors or proposed Directors are directors or employees of CMC, CMN and/or Top Create.

Name of Director/proposed Director	Title	Company
Shen Ling	CFO	CMC
Li Fuli	Vice President	CMC
	Director	CMN
Zong Qingsheng	Assistant President	CMC
	Director	CMN
Jiao Jian	President	CMN
Xu Jiqing	Vice President and CFO	CMN

# 4. DIRECTORS' SERVICE CONTRACTS

As at the Latest Practicable Date, none of the Directors or proposed Directors had any existing service contract or proposed service contract with any member of the Enlarged Group which will not expire or be determinable by the Enlarged Group within one year without payment of compensation (other than statutory compensation).

# 5. DIRECTORS' INTERESTS IN THE ENLARGED GROUP'S ASSETS OR CONTRACTS OR ARRANGEMENTS SIGNIFICANT TO THE ENLARGED GROUP

As at the Latest Practicable Date, none of the Directors or proposed Directors had any direct or indirect interest in any assets which had since 31 December 2009 (being the date to which the latest published audited financial statements of the Group were made up) been acquired or disposed of by or leased to any member of the Enlarged Group, or were proposed to be acquired or disposed of by or leased to any member of the Enlarged Group.

There is no contract or arrangement subsisting as at the Latest Practicable Date, in which any of the Directors are materially interested and which is significant to the business of the Enlarged Group.

## 6. COMPETING INTERESTS

As at the Latest Practicable Date, none of the Directors and their respective associates had any interest in a business which competes or may compete with the businesses of the Enlarged Group (which would be required to be disclosed under Rule 8.10 of the Listing Rules if each of them was a controlling shareholder of the Company).

# 7. QUALIFICATIONS AND CONSENTS OF EXPERTS

The following are the qualifications of the experts who have given opinion or advice which are contained in this circular:

Name Qualification

AMC Consultants Pty Ltd Competent Person

Grant Samuel Competent Evaluator

Somerley Independent Financial Adviser
PricewaterhouseCoopers Certified Public Accountants

Each of the above experts has given and has not withdrawn its written consent to the issue of this circular with the inclusion of its letter and/or reference to its name or opinion in the form and context in which it appears.

As at the Latest Practicable Date, all the experts above were not beneficially interested in the share capital of any member of the Group nor did they have any right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for securities in any member of the Group.

As at the Latest Practicable Date, all the above experts did not have any direct or indirect interest in any assets which had since 31 December 2009 (being the date to which the latest published audited financial statements of the Group were made up) been acquired or disposed of by or leased to any member of the Enlarged Group, or were proposed to be acquired or disposed of by or leased to any member of the Enlarged Group.

#### 8. MATERIAL CONTRACTS

The Enlarged Group had entered into the following material contracts (not being contracts entered into in the ordinary course of business of the Enlarged Group) within two years immediately preceding the Latest Practicable Date:

# The Group

- (a) The Share Sale Deed:
- (b) The Loan Agreement pursuant to which All Glorious agreed to lend US\$694,161,888 (equivalent to approximately HK\$5,414,462,726) to Album Enterprises on the terms set out in the Loan Agreement and the Company agreed to guarantee the obligations of All Glorious under the Loan Agreement;

- (c) the Escrow Deed pursuant to which Freehills Singapore held the Loan Agreement in escrow;
- (d) the Share Transfer Agreement dated 1 April 2010 entered into between Goldfair Hong Kong Limited ("Goldfair"), a wholly-owned subsidiary of the Company, and 煙台國豐投資控股 有限公司 (Yantai Guofeng Investment Holding Company Limited) ("Yantai Guofeng"), pursuant to which Goldfair conditionally agreed to sell and Yantai Guofeng conditionally agreed to purchase a 42% equity interest in 煙台鵬暉銅業有限公司 (Yantai Penghui Copper Industry Company Limited) at a consideration of RMB85,590,000 (equivalent to approximately HK\$97,572,600) in accordance with the terms and conditions of the Share Transfer Agreement;
- (e) the Capital Injection Agreement dated 28 January 2010 entered into between 廣西華銀鋁業有限公司 (Guangxi Huayin Aluminium Company Limited) ("Guangxi Huayin") and its shareholders, such shareholders being 五礦鋁業有限公司(Minmetals Aluminium Company Limited), a wholly-owned subsidiary of the Company ("MMA"), 中國鋁業股份有限公司 (Aluminium Corporation of China Limited) and 廣西投資集團有限公司 (Guangxi Investment Group Co., Ltd.). Pursuant to the Capital Injection Agreement, each of the aforementioned shareholders of Guangxi Huayin agreed to subscribe for new capital of Guangxi Huayin in proportion to their respective shareholdings in Guangxi Huayin. MMA agreed to inject additional capital in the amount of RMB71,325,321 (equivalent to approximately HK\$81,310,866) into Guangxi Huayin. Upon completion of the Capital Injection Agreement, the equity interest in Guangxi Huayin held by MMA would remain unchanged at 33%; and
- (f) the Capital Increase Agreement dated 8 September 2009 entered into between 華北鋁業有限公司 (North China Aluminium Company Limited) ("North China Aluminium"), an indirect non-wholly owned subsidiary of the Company, and 涿州銀發運輸有限責任公司 (Zhuozhou Yin Fa Transportation Company Limited) ("Yin Fa Transportation"), pursuant to which North China Aluminium agreed to subscribe for new registered capital of Yin Fa Transportation in the amount of RMB1,567,642 (equivalent to approximately HK\$1,787,112). Pursuant to the aforementioned capital injection, the equity interest in Yin Fa Transportation held by North China Aluminium would increase from 48.5% to 65%.

# The Target Group

The Target Group did not enter into any material contracts (not being contracts entered into in the ordinary course of business of the Target Group) within two years immediately preceding the Latest Practicable Date.

# 9. LITIGATION

As at the Latest Practicable Date, no litigation or claims of material importance was known to the Directors to be pending or threatened against any member of the Enlarged Group. As at the Latest Practicable Date, no legal claims or proceedings that may have an influence on the mining and exploration rights of the Operating Mines, Development Projects and various exploration projects (which are currently held through the Target Company) are known to the Directors to be pending or threatened by any third party against any member of the Enlarged Group or vice versa.

#### 10. GENERAL

- (a) The address of the registered office of the Company is at 12th Floor, China Minmetals Tower, 79 Chatham Road South, Tsimshatsui, Kowloon, Hong Kong.
- (b) The company secretary of the Company is Ms. LEUNG Suet Kam, Lucia ("Ms. Leung"). She joined the Group in September 1993. Ms. Leung holds a Bachelor's degree in Economics from the University of London, the United Kingdom and a Postgraduate Diploma in Corporate Administration from the City University of Hong Kong. She is a fellow member of The Institute of Chartered Secretaries and Administrators in the United Kingdom and a fellow member of the Hong Kong Institute of Chartered Secretaries. Ms. Leung has over seventeen years of experience in company secretarial affairs and over 20 years of experience in administration.
- (c) In the event of any inconsistency, the English text of this circular shall prevail over the Chinese text.

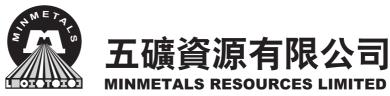
# 11. DOCUMENTS AVAILABLE FOR INSPECTION

Copies of the following documents will be available for inspection during business hours at the registered office of the Company at 12th Floor, China Minmetals Tower, 79 Chatham Road South, Tsimshatsui, Kowloon, Hong Kong from the date of this circular up to and including the date of the EGM:

- (a) the memorandum and articles of association of the Company;
- (b) the written consents from the experts referred to under the paragraph headed "General information Qualifications and consents of experts" in this appendix;
- (c) copies of each of the material contracts referred to under the paragraph headed "General information Material contracts" in this appendix;
- (d) a letter from Somerley as set out on pages 44 to 98 of this circular;
- (e) the published annual reports of the Company for each of the financial years ended 31 December 2008 and 31 December 2009;
- (f) the published interim report of the Company for the six months ended 30 June 2010;
- (g) the accountant's report of the Target Company as set out in Appendix I to this circular;

- (h) the report on unaudited pro forma financial information of the Enlarged Group as set out in Appendix III to this circular;
- (i) the Competent Person's as set out in Appendix IV to this circular;
- (j) the Valuation Report as set out in Appendix V to this circular; and
- (k) this circular.

## NOTICE OF EGM



(Incorporated in Hong Kong with limited liability)
(Stock code: 1208)

**NOTICE IS HEREBY GIVEN THAT** the extraordinary general meeting (the "Meeting") of Minmetals Resources Limited (the "Company") will be held at Fanling Room, Lower Level I, Kowloon Shangri-La Hotel, 64 Mody Road, Tsimshatsui East, Kowloon, Hong Kong on Thursday, 9 December 2010 at 10:30 a.m. for the purpose of considering and, if thought fit, passing, with or without modification, the following resolution as an ordinary resolution of the Company:

#### **ORDINARY RESOLUTION**

## 1. "**THAT**:

- (a) the conditional sale and purchase deed (the "Share Sale Deed") dated 19 October 2010 entered into between Album Enterprises Limited ("Album Enterprises") (as seller), All Glorious Limited ("All Glorious") (as buyer) and the Company (as guarantor and issuer of the Consideration Shares (as defined below) and the PSCS (as defined below)) in relation to the proposed acquisition of the entire issued share capital of Album Resources Private Limited (the "Sale Shares") at an aggregate consideration of US\$1,846,000,000 (the "Purchase Price"), a copy of which has been produced to the Meeting marked "A" and signed by the chairman of the Meeting for the purpose of identification, and all the transactions contemplated thereunder, including, but not limited to:
  - (i) the allotment and issuance by the Company of 940,779,090 new ordinary shares (the "Consideration Shares") of HK\$0.05 each in the issued share capital of the Company (each, a "Share") at an issue price of HK\$3.00 per Share to Album Enterprises or its nominee on completion of the sale and purchase of the Sale Shares pursuant to the terms and condition of the Share Sale Deed ("Completion"), to satisfy part of the Purchase Price;
  - (ii) the issuance by the Company of the perpetual subordinated convertible securities (the "PSCS") to Album Enterprises or its nominee pursuant to the terms and condition of the Share Sale Deed, such PSCS being convertible into 1,560,000,000 new Shares at an initial conversion price of HK\$3.45 per Share, on Completion, to satisfy part of the Purchase Price;
  - (iii) the increase in the authorised share capital of the Company from HK\$300,000,000 divided into 6,000,000,000 Shares to HK\$900,000,000 divided into 18,000,000,000 Shares by the creation of an additional 12,000,000,000 unissued Shares;

## NOTICE OF EGM

- (iv) the grant of a specific mandate for the board of directors of the Company ("**Directors**") to issue up to 2,700,000,000 new Shares at a discount of not more than 20% to the higher of:
  - (A) the closing price on the date of any relevant placing agreement or other agreement involving the proposed issue of securities under the specific mandate; and
  - (B) the average closing price in the five trading days immediately prior to the earlier of:
    - (1) the date of announcement of the placing or the proposed transaction or arrangement involving the proposed issue of securities under the specific mandate;
    - (2) the date of the placing agreement or other agreement involving the proposed issue of securities under the specific mandate; and
    - (3) the date on which the placing or subscription price is fixed,

and conditional upon Completion, for the period from the passing of this resolution at the Meeting up to the earlier of: (X) 31 July 2011 or (Y) the revocation or variation of the authority given under this resolution at the Meeting by ordinary resolutions of the relevant shareholders of the Company as required under the Rules Governing the Listing of Securities of The Stock Exchange of Hong Kong Limited in a general meeting of the Company; and

- (v) the application to the Government of the Commonwealth of Australia under the Foreign Acquisitions and Takeovers Act 1965 (Cth) seeking approval for the transactions contemplated under the Share Sale Deed and the negotiation and agreement by any one of the Directors, for and on behalf of the Company, to such undertakings as may be required to be given by the Company to the Government of the Commonwealth of Australia in order for the Company to obtain the aforementioned approval of the Government of the Commonwealth of Australia be and are hereby approved, confirmed and ratified; and
- (b) any one of the Directors be and is hereby authorised to sign, execute, perfect, deliver, negotiate, agree and do all such documents, deeds, acts, matters and things, as the case may be including, without limitation, negotiating and agreeing to such undertakings as may be required to be given by the Company to the Government of the Commonwealth of Australia in order for the Company to obtain the approval of the Government of the Commonwealth of Australia as referred to in paragraph 1(a)(v) of this resolution, as he may in his opinion or discretion consider reasonable, necessary, desirable or expedient to implement and/or give effect to the Share Sale Deed and all the transactions contemplated thereunder with any changes as such Director may consider reasonable, necessary desirable or expedient.

By Order of the Board **Hao Chuanfu**Executive Director and President

Hong Kong, 22 November 2010

## NOTICE OF EGM

## **Notes:**

- 1. A member entitled to attend and vote at the Meeting is entitled to appoint one or more (if the member is a holder of two or more shares) proxies to attend and vote on his/her behalf. A proxy need not be a member of the Company.
- 2. To be valid, the form of proxy and the power of attorney or other authority (if any) under which it is signed or a notarially certified copy of such power of attorney or authority, must be deposited with the share registrar of the Company, Computershare Hong Kong Investor Services Limited, at 17M Floor, Hopewell Centre, 183 Queen's Road East, Hong Kong as soon as possible and in any event not less than 48 hours before the time appointed for holding the Meeting or any adjournment thereof. Completion and return of a form of proxy will not preclude a member from attending in person and voting at the meeting or any adjournment thereof, should he so wish, and in such event, the form of proxy shall be deemed to be revoked.
- 3. The register of members of the Company will be closed from 7 December 2010 to 9 December 2010, both days inclusive, during which period no transfer of shares will be registered. In order to qualify for attending and voting at the Meeting, all completed transfer forms accompanied by the relevant share certificates must be lodged with the share registrar of the Company, Computershare Hong Kong Investor Services Limited, at Rooms 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Hong Kong not later than 4:30 p.m. on 6 December 2010.