THIS DOCUMENT IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION

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

If you have sold or transferred all your shares in CMC, you should at once hand this Scheme Document and the accompanying forms of proxy to the purchaser or the transferee or to the licensed securities dealer or registered institution in securities or other agent through whom the sale or transfer was effected for transmission to the purchaser or the transferee.

Hong Kong Exchanges and Clearing Limited, The Stock Exchange of Hong Kong Limited and Hong Kong Securities Clearing Company Limited take no responsibility for the contents of this Scheme Document, 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 Scheme Document.

CHINALCO-CMC

Aluminum Corporation of China Overseas Holdings Limited
(中鋁海外控股有限公司)
(Incorporated under the laws of Hong Kong with limited liability)

Chinalco Mining Corporation International
(中鋁礦業國際)
(Incorporated under the laws of the Cayman Islands with limited liability)
(Stock Code: 3668)

(1) PROPOSED PRIVATISATION OF CMC BY THE OFFEROR BY WAY OF A SCHEME OF ARRANGEMENT (UNDER SECTION 86 OF THE COMPANIES LAW) (2) PROPOSED WITHDRAWAL OF LISTING OF CMC SHARES (3) SPECIAL DEAL RELATING TO THE SPOT SALES ARRANGEMENTS (4) SPECIAL DEAL RELATING TO THE PROPOSED EQUITY TRANSFER

Financial Adviser to the Offeror

Morgan Stanley

CMC Independent Financial Adviser to the CMC Independent Board Committee

PLATINUM Securities

Unless the context requires otherwise, capitalised terms used in this Scheme Document are defined under the section headed "Definitions" in Part I of this Scheme Document.

A letter from the CMC Board is set out in Part IV of this Scheme Document. A letter from the CMC Independent Board Committee, containing its advice to the Independent CMC Shareholders in relation to the Scheme, the Proposal and the proposed Equity Transfer contemplated under the Heads of Agreement and to the Disinterested CMC Shareholders in relation to the Spot Sales Mechanism are set out in Part V of this Scheme Document. A letter from Platinum Securities Company Limited, being the CMC Independent Financial Adviser, containing its advice to the CMC Independent Board Committee in relation to the Scheme, the Proposal, the proposed Equity Transfer contemplated under the Heads of Agreement and the Spot Sales Mechanism are set out in Part VI of this Scheme Document. An Explanatory Memorandum regarding the Scheme is set out in Part VII of this Scheme Document.

The actions to be taken by the CMC Shareholders are set out in the Part II of this Scheme Document.

Notices convening the Court Meeting and the EGM to be held on Friday, 3 March 2017 are set out in Appendix VI and Appendix VII respectively to this Scheme Document. Whether or not you are able to attend the Court Meeting and/or the EGM or any adjournment thereof, you are strongly urged to complete and sign the enclosed **pink** form of proxy in respect of the Court Meeting and the enclosed **white** form of proxy in respect of the EGM, in accordance with the instructions printed thereon, and to lodge them at the office of CMC's Hong Kong share registrar, Computershare Hong Kong Investor Services Limited, at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, as soon as possible but in any event not later than the respective times and dates as stated under "Part II — Actions To Be Taken" of this Scheme Document. If the **pink** form of proxy is not so lodged, it may also be handed to the chairman of the Court Meeting at the Court Meeting who shall have absolute discretion as to whether or not to accept it.

This Scheme Document is issued jointly by the Offeror and CMC.

The English language text of this Scheme Document shall prevail over its Chinese language text.

3 February 2017

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In this Scheme Document, the following expressions have the meanings set out below unless the context requires otherwise:

"acting in concert"	has the meaning ascribed to it in the Takeovers Code
"Announcement"	the announcement dated 23 September 2016 jointly issued by CMC and the Offeror in relation to, among other things, the Proposal
"Announcement Date"	23 September 2016, being the date of the Announcement
"associate"	has the meaning ascribed to it in the Takeovers Code
"Authorisations"	all the necessary authorisations, registrations, filings, rulings, consents, permissions and approvals required in connection with the Proposal
"Beneficial Owner"	any beneficial owner of CMC Shares whose CMC Shares are registered in the name of a Registered Owner
"Cancellation Price"	the cancellation price of HK$1.39 per Scheme Share payable in cash by the Offeror to the Scheme Shareholders pursuant to the Scheme
"CCASS"	the Central Clearing and Settlement System established and operated by HKSCC
"CCASS Participant"	a person admitted to participate in CCASS as a participant
"Chalco Iron Ore"	Chalco Iron Ore Holdings Limited, a limited liability company which is held as to 65% by Chinalco through the Offeror and has a 47% interest in Simfer Jersey
"Chinalco"	Aluminum Corporation of China (中國鋁業公司), the parent of the Offeror
"Chinalco Peru"	Minera Chinalco Peru S.A., a wholly owned subsidiary of CMC in Peru
"CMC" or "Company"	Chinalco Mining Corporation International (中鋁礦業國際), a company incorporated in the Cayman Islands with limited liability, the shares of which are currently listed on the Main Board of the Stock Exchange (stock code: 3668)
"CMC Board"	the board of directors of CMC
"CMC Group"	CMC and its subsidiaries

"CMC Independent Board Committee"	the independent board committee of CMC, comprising all the independent non-executive directors of CMC, being Mr. Scott McKee Hand, Mr. Ronald Ashley Hall, Mr. Lai Yat Kwong Fred and Mr. Francisco Augusto Baertl Montori, established by the CMC Board to make a recommendation to the Independent CMC Shareholders in respect of the Scheme, the Proposal and the proposed Equity Transfer contemplated under the Heads of Agreement and to the Disinterested CMC Shareholders in respect of the Spot Sales Mechanism
"CMC Independent Financial Adviser"	Platinum Securities Company Limited, the independent financial adviser to the CMC Independent Board Committee in connection with the Scheme, the Proposal, the proposed Equity Transfer contemplated under the Heads of Agreement and the Spot Sales Mechanism. Platinum Securities Company Limited is a licensed corporation to carry out Type 1 (dealing in securities) and Type 6 (advising on corporate finance) regulated activities under the SFO
"CMC Share(s)"	ordinary share(s) of US$0.04 each in the share capital of CMC
"CMC Shareholder(s)"	registered holder(s) of CMC Shares
"Companies Law"	the Companies Law Cap. 22 (Law 3 of 1961), as consolidated and revised, of the Cayman Islands
"Conditions"	the conditions to the implementation of the Scheme and the Proposal as set out in the section headed "4. Conditions of the Scheme and the Proposal" of the Explanatory Memorandum
"Competent Evaluator"	Golder Associates Consulting Ltd., a company qualified to audit, review and opine on mining assets according to current international reporting standards (such as NI 43-101, JORC Code) and to perform valuation work according to current international standards including CIMVAL, the SAMVAL Code and the VALMIN Code
"Competent Persons Report"	the competent persons report prepared by the Competent Evaluator to provide technical assessment for the Toromocho Project, which is set out in Appendix II of this Scheme Document

"Court Meeting"	a meeting of the holders of Scheme Shares to be convened at the direction of the Grand Court at which the Scheme (with or without modification) will be voted upon, which is to be held at Bowen Room, Level 7, Conrad Hong Kong, Pacific Place, 88 Queensway, Hong Kong at 10:00 a.m. on Friday, 3 March 2017, notice of which is set out in Appendix VI of this Scheme Document, or any adjournment thereof
"Court Orders"	the orders of the Grand Court sanctioning the Scheme as required by the Companies Law and confirming the reduction of capital of CMC as required by the Companies Law
"Disclosure Period"	the period beginning from the date which is six months prior to the Announcement Date and ending with the Latest Practicable Date, both dates inclusive
"Disinterested CMC Shareholders"	CMC Shareholders other than the Offeror and the Offtake Shareholders
"DMT"	dry metric ton unit, a measurement unit used for copper concentrate and iron ore pricing
"Effective Date"	the date on which the Scheme, if approved and sanctioned by the Grand Court, becomes effective in accordance with its terms and the Companies Law, being the date on which a copy of the court order of the Grand Court sanctioning the Scheme is delivered to the Registrar of Companies in the Cayman Islands for registration pursuant to Section 86(3) of the Companies Law, and which is expected to be Monday, 13 March 2017 (Cayman Islands time)
"EGM"	the extraordinary general meeting of CMC to be held at Bowen Room, Level 7, Conrad Hong Kong, Pacific Place, 88 Queensway, Hong Kong at 10:30 a.m. on Friday, 3 March 2017 (or immediately following the conclusion or adjournment of the Court Meeting convened on the same day and place), notice of which is set out in Appendix VII of this Scheme Document, or any adjournment thereof

"Equity Transfer"	the transfer of Rio Tinto Simfer's 53% interest in Simfer Jersey and Simfer Jersey Finance to Chalco Iron Ore, Chinalco or an affiliate of Chinalco together with the shareholders loans extended by Simfer Jersey to Simfer S.A. through two finance affiliates (including Simfer Jersey Finance) contemplated under the Heads of Agreement
"Executive"	the Executive Director of the Corporate Finance Division of the Securities and Futures Commission or any delegate thereof
"Explanatory Memorandum"	the explanatory memorandum set out in Part VII of this Scheme Document and issued in compliance with the Rules of the Grand Court of the Cayman Islands 1995 (revised)
"Existing Spot Sales Contracts"	spot sales contracts entered into between CMC and Trafigura Pte. Ltd. and Louis Dreyfus Company Metals Trading S.A.C. and/or their respective affiliates prior to the Scheme and the Proposal were reasonably contemplated by CMC, which have not been fully performed
"Future Spot Sales Contract(s)"	spot sale contract(s) to be entered into between CMC and any Offtake Shareholders and/or their respective affiliates from the Announcement Date until six months after the Effective Date
"Grand Court"	the Grand Court of the Cayman Islands
"Guangxi Non-ferrous"	Guangxi Non-ferrous International Investment Limited, one of the Offtake Shareholders
"Heads of Agreement"	the non-binding heads of agreement dated 28 October 2016 which was entered into between Rio Tinto Simfer and Chalco Iron Ore in relation to the Simandou Project
"HK$"	Hong Kong dollar(s), the lawful currency of Hong Kong
"HKSCC"	Hong Kong Securities Clearing Company Limited
"Hongfan International"	Hongfan International Limited, one of the Offtake Shareholders, an affiliate of Hongfan Group Holdings Limited
"Hong Kong"	the Hong Kong Special Administrative Region of the PRC
"IFC"	International Finance Corporation, a financing arm of World Bank

"IFC Put Option Price"	the total consideration of US$192.7 million (as may be adjusted pursuant to the existing agreements between Simfer Jersey and IFC) payable by Simfer Jersey to the IFC for the acquisition of IFC's interest in Simfer S.A. as a result of the exercise of the put option by the IFC
"Independent CMC Shareholder(s)"	CMC Shareholder(s) other than the Offeror and the Offeror Concert Parties. For the avoidance of doubt, Independent CMC Shareholders include any member of the Morgan Stanley group acting in its capacity as a Registered Owner of Scheme Shares held on behalf of a Beneficial Owner where the Beneficial Owner (i) controls the voting rights attaching to those CMC Shares; (ii) if CMC Shares are voted, gives instructions as to how those CMC Shares are to be voted; and (iii) is not the Offeror or an Offeror Concert Party
"Investor Participant"	a person admitted to participate in CCASS as an investor participant
"Irrevocable Undertakings"	the irrevocable undertakings given by Louis Dreyfus, Hongfan International and Guangxi Non-ferrous, each dated 21 September 2016, Urion Holdings dated 22 September 2016, Tongling Nonferrous dated 30 September 2016, and Nice Ascent dated 25 January 2017 in respect of an aggregate of 1,078,492,000 CMC Shares in favour of the Offeror, each an "Irrevocable Undertaking"
"JORC Code"	the conventions of, the Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves (2012 Edition)
"Last Trading Day"	14 September 2016, being the last trading day of CMC Shares prior to the issuance of the Announcement
"Latest Practicable Date"	27 January 2017, being the latest practicable date prior to the printing of this Scheme Document for ascertaining certain information contained herein
"lb"	pound, a measurement unit used for determining the mass of copper
"Listing Rules"	Rules Governing the Listing of Securities on the Stock Exchange
"LME"	London Metal Exchange

"Long Stop Date"	means 22 March 2017, being the date which is 180 days after the Announcement Date
"Louis Dreyfus"	Louis Dreyfus Company Metals Investments Limited, one of the Offtake Shareholders, an affiliate of Louis Dreyfus Company Group
"Meeting Record Date"	Friday, 3 March 2017, or such other date as shall have been announced to the CMC Shareholders, being the record date for the purpose of determining the entitlement of the CMC Shareholders to attend and vote at the Court Meeting and the EGM
"Morgan Stanley"	Morgan Stanley Asia Limited, a registered institution under the SFO licensed to carry on business in Type 1 (dealing in securities), Type 4 (advising on securities), Type 5 (advising on futures contracts), Type 6 (advising on corporate finance) and Type 9 (asset management) regulated activities under the SFO, which is the financial adviser to the Offeror in connection with the Proposal
"Nice Ascent"	Nice Ascent Development Limited, who has interest in CMC Shares and has signed the Irrevocable Undertaking
"Offeror"	Aluminum Corporation of China Overseas Holdings Limited (中鋁海外控股有限公司)
"Offeror Concert Parties"	parties acting in concert with the Offeror in relation to CMC including Morgan Stanley (except members of the Morgan Stanley group which are exempt principal traders or exempt fund managers, in each case recognised by the Executive as such for the purposes of the Takeovers Code) and Rio Tinto International which is presumed to be acting in concert with the Offeror in relation to CMC
"Offtake Shareholders"	Urion Holdings, Hongfan International, Tongling Nonferrous, Louis Dreyfus and Guangxi Non-ferrous, who (i) have interest in CMC Shares and have signed the Irrevocable Undertakings, and (ii) have been engaged in sales of copper concentrates (either directly or through their respective affiliates) with CMC, each an "Offtake Shareholder"
"Offer Period"	the period from 23 September 2016 (being the Announcement Date) to the Effective Date, both dates inclusive

"ppm"	parts per million (for illustration purpose, 1,000 ppm equals to 0.1%)
"PRC"	the People's Republic of China, but for the purpose of this Scheme Document, excluding Hong Kong, Macau Special Administrative Region and Taiwan
"Project Expansion"	the expansion of the Toromocho Project as described in the announcement of CMC dated 17 June 2013
"Proposal"	the proposal for the privatisation of CMC by the Offeror by way of the Scheme
"Registered Owner"	any owner of CMC Shares (including, without limitation, a nominee, trustee, depository or any other authorised custodian or other party) whose name is entered in the register of members of CMC
"Relevant Authorities"	appropriate governments and/or governmental bodies, regulatory bodies, courts or institutions
"Rio Tinto Group"	an international mining group headquartered in the United Kingdom, the members of which include Rio Tinto International and Rio Tinto Simfer
"Rio Tinto International"	Rio Tinto International Holdings Limited, a member of Rio Tinto Group and a CMC Shareholder which is presumed to be acting in concert with the Offeror
"Rio Tinto Simfer"	Rio Tinto Simfer UK Limited, a wholly owned subsidiary of Rio Tinto International which has a 53% interest in Simfer Jersey and is a member of Rio Tinto Group
"SASAC"	State-owned Assets Supervision and Administration Commission of the PRC
"Scheme"	a scheme of arrangement under Section 86 of the Companies Law as set out in Appendix V to this Scheme Document (subject to any modifications or additions or conditions as may be approved or imposed by the Grand Court and agreed to by CMC and the Offeror) involving the cancellation of all the Scheme Shares and the restoration of the share capital of CMC to the amount immediately before the cancellation of the Scheme Shares

"Scheme Document"	this composite document, including each of the letters, statements, appendices and notices in it, as may be amended or supplemented from time to time
"Scheme Record Date"	Monday, 13 March 2017, or such other date as shall have been announced to the CMC Shareholders, being the record date for the purpose of determining the entitlements of Scheme Shareholders to the Cancellation Price under the Scheme
"Scheme Share(s)"	CMC Share(s) other than those held by the Offeror
"Scheme Shareholder(s)"	holder(s) of Scheme Shares as at the Scheme Record Date
"Securities and Futures Commission"	Securities and Futures Commission of Hong Kong
"SFO"	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong)
"Simandou Project"	an iron ore mining and infrastructure project in the Republic of Guinea
"Simfer Jersey"	Simfer Jersey Limited, a joint venture which is held as to 47% by Chalco Iron Ore and as to 53% by Rio Tinto Simfer
"Simfer Jersey Finance"	Simfer Jersey Finance 2 Limited, a joint venture which is held as to 47% by Chalco Iron Ore and as to 53% by Rio Tinto Simfer
"Simfer S.A."	the operating entity of the Simandou Project, which is currently held as to 80.75% by Simfer Jersey, 15% by the Government of Guinea and 4.25% by the IFC
"Spot Sales Mechanism"	a mechanism with a set of parameters with respect to quality, pricing and other material terms for spot sales between CMC and the Offtake Shareholders under the Future Spot Sales Contracts as set out under the sub-section headed "Spot Sales Mechanism" in the section headed "14. Spot Sales Arrangements" of the Explanatory Memorandum
"Stock Exchange"	The Stock Exchange of Hong Kong Limited
"Takeovers Code"	Code on Takeovers and Mergers in Hong Kong

"Tongling Nonferrous"	Tongling Nonferrous Metals Group Holdings Co., Ltd., one of the Offtake Shareholders, an affiliate of Tongling Nonferrous Metals Group Co., Ltd.
"Toromocho Project"	a copper mineral deposit located in central Peru in the core of the Morococha mining district, being the unique mining asset operated by the CMC Group
"trading day"	a day on which the Stock Exchange is open for the business of dealings in securities
"Urion Holdings"	Urion Holdings (Malta) Limited, one of the Offtake Shareholders, an affiliate of Trafigura Beheer B.V.
"US"	United States of America
"US$"	US dollar(s), the lawful currency of the US
"VALMIN Code"	the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports 2015 Edition
"Valuation Report"	the valuation report prepared for the Toromocho Project by the Competent Evaluator, which is set out in section A of Appendix III of this Scheme Document

All references in this Scheme Document to times and dates are references to Hong Kong times and dates, except as otherwise specified and other than references to the expected dates of the Grand Court hearing of the petition to sanction the Scheme and to confirm the capital reduction and the Effective Date, which are the relevant dates in the Cayman Islands. For reference only, Cayman Islands time is 13 hours behind Hong Kong time as at the date of this Scheme Document.

ACTIONS TO BE TAKEN BY CMC SHAREHOLDERS

A **pink** form of proxy for use at the Court Meeting and a **white** form of proxy for use at the EGM are enclosed with copies of this Scheme Document sent to the Registered Owners of CMC Shares. Subsequent purchasers of Scheme Shares will need to obtain a proxy form from the transferor.

Whether or not you are able to attend the Court Meeting and/or the EGM, if you are an Independent CMC Shareholder, you are strongly urged to complete and sign the enclosed **pink** form of proxy in respect of the Court Meeting, and if you are a CMC Shareholder, you are strongly urged to complete and sign the enclosed **white** form of proxy in respect of the EGM, in accordance with the instructions printed thereon, and to lodge them at the office of the Hong Kong share registrar of CMC, Computershare Hong Kong Investor Services Limited, at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong. In order to be valid, the **pink** form of proxy for use at the Court Meeting should be lodged not later than 10:00 a.m. (Hong Kong time) on Wednesday, 1 March 2017 or be handed to the chairman of the Court Meeting at the Court Meeting who shall have absolute discretion as to whether or not to accept it, and the **white** form of proxy for use at the EGM should be lodged not later than 10:30 a.m. (Hong Kong time) on Wednesday, 1 March 2017. The completion and return of a form of proxy for the Court Meeting and/or the EGM will not preclude you from attending and voting in person at the relevant meeting. In such event, the returned form of proxy will be deemed to have been revoked.

If you do not appoint a proxy and you do not attend and vote at the Court Meeting and/or the EGM, you will still be bound by the outcome of the Court Meeting and the EGM, if, among other things, the relevant resolutions are passed by the requisite majorities of the Independent CMC Shareholders or the CMC Shareholders (as the case may be). You are therefore strongly urged to attend and vote at the Court Meeting and/or the EGM in person or by proxy.

For the purpose of determining the entitlements of the Independent CMC Shareholders (who are also holders of Scheme Shares) to attend and vote at the Court Meeting and the entitlements of the CMC Shareholders to attend and vote at the EGM, the register of members of CMC will be closed from Tuesday, 28 February 2017 to Friday, 3 March 2017 (both days inclusive) and during such period, no transfer of CMC Shares will be effected. In order to qualify to vote at the Court Meeting and the EGM, all transfers accompanied by the relevant share certificates must be lodged with Computershare Hong Kong Investor Services Limited, the Hong Kong share registrar of CMC at Shops 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong before 4:30 p.m. (Hong Kong time) on Monday, 27 February 2017.

An announcement will be made by CMC in relation to the results of the Court Meeting and the EGM. If all the resolutions are passed at those meetings, further announcement(s) will be made of the results of the Grand Court hearing of the petition to sanction the Scheme and, if the Scheme is sanctioned, the Scheme Record Date, the Effective Date and the date of withdrawal of the listing of the CMC Shares on the Stock Exchange.

ACTIONS TO BE TAKEN BY HOLDERS THROUGH TRUST OR CCASS

CMC will not recognise any person as holding any CMC Shares upon any trust. If you are a Beneficial Owner whose CMC Shares are held upon trust by, and registered in the name of, a Registered Owner (other than HKSCC Nominees Limited), you should contact the Registered Owner and provide him, her or it with instructions or make arrangements with the Registered Owner in relation to the manner in which your CMC Shares should be voted at the Court Meeting and/or the EGM. Such instructions and/or arrangements should be given or made in advance of the aforementioned latest time for the lodgment of forms of proxy in respect of the Court Meeting and the EGM in order to provide the Registered Owner with sufficient time to accurately complete his, her or its proxy and to submit it by the deadline stated above. To the extent that any Registered Owner requires instructions from or arrangements to be made with any Beneficial Owner at a particular date or time in advance of the aforementioned latest time for the lodgment of forms of proxy in respect of the Court Meeting and the EGM, any such Beneficial Owner should comply with the requirements of the Registered Owner.

If you are a Beneficial Owner whose CMC Shares are deposited in CCASS and registered under the name of HKSCC Nominees Limited, you must, unless you are an Investor Participant, contact your broker, custodian, nominee, or other relevant person who has, in turn, deposited such CMC Shares with another CCASS Participant, regarding voting instructions to be given to such persons if you wish to vote at the Court Meeting and/or at the EGM. You should contact your broker, custodian, nominee or other relevant person in advance of the deadline in respect of the Court Meeting and the EGM set by them, in order to provide such broker, custodian, nominee or other relevant person with sufficient time to provide HKSCC Nominees Limited with instructions or make arrangements with HKSCC Nominees Limited in relation to the manner in which CMC Shares of the Beneficial Owner should be voted at the Court Meeting and/or the EGM.

HKSCC Nominees Limited may also vote for and against the Scheme in accordance with instructions received from CCASS Participants (as defined under the General Rules of CCASS). However, for the purpose of calculating the "majority in number", each such CCASS Participant who instructs HKSCC Nominees Limited to vote in favour of the Scheme shall be counted for the "majority in number" as a single CMC Shareholder voting in favour of the Scheme, and, if applicable, each such CCASS Participant who instructs HKSCC Nominees Limited to vote against the Scheme shall be counted for the "majority in number" as a single CMC Shareholder voting against the Scheme. HKSCC Nominees Limited itself, as opposed to instructing CCASS Participants, shall not be counted as a CMC Shareholder for the purpose of the calculation of the "majority in number".

If you are a Beneficial Owner whose CMC Shares are deposited in CCASS, you may also elect to become a CMC Shareholder of record, and thereby have the right to attend and vote at the Court Meeting (if you are an Independent CMC Shareholder) and the EGM (as a CMC Shareholder). You can become a CMC Shareholder of record by withdrawing all or any of your CMC Shares from CCASS and becoming a Registered Owner of such CMC Shares. For withdrawal of CMC Shares from CCASS and registration thereof, you will be required to pay to CCASS a

withdrawal fee per board lot withdrawn, a registration fee for each share certificate issued, stamp duty on each transfer instrument and, if your CMC Shares are held through a financial intermediary, any other relevant fees charged by your financial intermediary. You should contact your broker, custodian, nominee or other relevant person in advance of the relevant latest time for lodging transfers of CMC Shares into your name so as to qualify to attend and vote at the Court Meeting and the EGM, in order to provide such broker, custodian, nominee or other relevant person with sufficient time to withdraw CMC Shares from CCASS and register them in your name.

EXERCISE YOUR RIGHT TO VOTE

IF YOU ARE A CMC SHAREHOLDER OR A BENEFICIAL OWNER, CMC AND THE OFFEROR STRONGLY ENCOURAGE YOU TO EXERCISE YOUR RIGHT TO VOTE OR GIVE INSTRUCTIONS TO THE RELEVANT REGISTERED OWNER TO VOTE IN PERSON OR BY PROXY AT THE COURT MEETING AND AT THE EGM. IF YOU KEEP ANY CMC SHARES IN A SHARE LENDING PROGRAMME, WE URGE YOU TO RECALL ANY OUTSTANDING CMC SHARES ON LOAN TO AVOID MARKET PARTICIPANTS USING BORROWED SECURITIES TO VOTE.

IF YOU ARE A BENEFICIAL OWNER WHOSE CMC SHARES ARE DEPOSITED IN CCASS, WE ENCOURAGE YOU TO PROVIDE HKSCC NOMINEES LIMITED WITH INSTRUCTIONS OR MAKE ARRANGEMENTS WITH HKSCC NOMINEES LIMITED IN RELATION TO THE MANNER IN WHICH THOSE CMC SHARES SHOULD BE VOTED AT THE COURT MEETING AND/OR THE EGM WITHOUT DELAY AND/OR WITHDRAWN FROM CCASS AND TRANSFERRED INTO YOUR NAME (AS DETAILED IN THE SECTION "ACTIONS TO BE TAKEN — ACTION TO BE TAKEN BY HOLDERS THROUGH TRUST OR CCASS" ABOVE).

IF YOU ARE A REGISTERED OWNER HOLDING CMC SHARES ON BEHALF OF BENEFICIAL OWNERS, WE WOULD BE GRATEFUL IF YOU WOULD INFORM THE RELEVANT BENEFICIAL OWNERS ABOUT THE IMPORTANCE OF EXERCISING THEIR VOTE.

IF YOU ARE IN ANY DOUBT AS TO THE ACTION TO BE TAKEN, YOU ARE ENCOURAGED TO CONSULT YOUR LICENSED SECURITIES DEALER, BANK MANAGER, SOLICITOR, PROFESSIONAL ACCOUNTANT OR OTHER PROFESSIONAL ADVISER.

Hong Kong Time
(unless otherwise stated)

Date of despatch of this Scheme Document	Friday, 3 February 2017
Latest time for lodging transfers of CMC Shares in order to qualify for attending and voting at the Court Meeting and the EGM	4:30 p.m. on Monday, 27 February 2017
Register of members of CMC closed for determination of entitlements of the Independent CMC Shareholders to attend and vote at the Court Meeting and the entitlements of the CMC Shareholders to attend and vote at the EGM *(Note 1)*	Tuesday, 28 February 2017 to Friday, 3 March 2017 (both days inclusive)
Latest time for lodging forms of proxy in respect of the Court Meeting *(Note 2)*	10:00 a.m. on Wednesday, 1 March 2017 (or be handed directly to the Chairman at the Court Meeting)
Latest time for lodging forms of proxy in respect of the EGM *(Note 2)*	10:30 a.m. on Wednesday, 1 March 2017
Meeting Record Date	Friday, 3 March 2017
Court Meeting *(Note 3)*	10:00 a.m. on Friday, 3 March 2017
EGM *(Note 3)*	10:30 a.m. on Friday, 3 March 2017 (or immediately after the conclusion or adjournment of the Court Meeting)
Announcement of the results of the Court Meeting and the EGM published on the website of the Stock Exchange and CMC	Friday, 3 March 2017

Expected last day for dealing in the CMC Shares on the Stock Exchange	4:00 p.m. on Monday, 6 March 2017
Latest time for lodging transfers of CMC Shares in order to qualify for entitlements under the Scheme	4:30 p.m. on Thursday, 9 March 2017
Register of members of CMC closed for determining entitlements to qualify under the Scheme *(Note 4)*	From Friday, 10 March 2017 onwards
Grand Court hearing of the petition to sanction the Scheme and to confirm the capital reduction	Friday, 10 March 2017 **(Cayman Islands Time)**
Announcement of the results of the Grand Court hearing of the petition to sanction the Scheme and to confirm the capital reduction, the expected Effective Date and the expected date of withdrawal of listing of CMC Shares on the Stock Exchange	Before 1:00 p.m. on Monday, 13 March 2017
Scheme Record Date	Monday, 13 March 2017
Effective Date *(Note 5)*	Monday, 13 March 2017 **(Cayman Islands Time)**
Announcement of the Effective Date and the withdrawal of the listing of the CMC Shares on the Stock Exchange	Before 8:30 a.m. on Tuesday, 14 March 2017
Expected withdrawal of the listing of CMC Shares on the Stock Exchange becomes effective *(Note 6)*	4:00 p.m. on Wednesday, 15 March 2017
Latest date to despatch cheques for cash payment under the Scheme	Wednesday, 22 March 2017

CMC Shareholders should note that the above timetable is subject to change. Further announcement(s) will be made in the event that there is any change.

Notes:

(1) The register of members of CMC will be closed during such period for the purpose of determining the entitlements of the Independent CMC Shareholders to attend and vote at the Court Meeting and the entitlements of the CMC Shareholders to attend and vote at the EGM. This book closure period is not for determining entitlements under the Scheme.

(2) Forms of proxy should be lodged with the office of CMC's Hong Kong share registrar, Computershare Hong Kong Investor Services Limited, at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, as soon as possible and in any event no later than the times and dates stated above. If the **pink** form of proxy is not so lodged, it may also be handed to the chairman of the Court Meeting at the Court Meeting who shall have absolute discretion as to whether or not to accept it. In order to be valid, the **pink** form of proxy for the Court Meeting and the **white** form of proxy for the EGM must be lodged no later than the latest times and dates stated above. Completion and return of a form of proxy for the Court Meeting or the EGM will not preclude an Independent CMC Shareholder and a CMC Shareholder, respectively, from attending the relevant meeting and voting in person. In such event, the returned form of proxy will be deemed to have been revoked.

(3) The Court Meeting and the EGM will be held at Bowen Room, Level 7, Conrad Hong Kong, Pacific Place, 88 Queensway, Hong Kong at the times and dates specified above. Please see the Notice of Court Meeting set out in Appendix VI of this Scheme Document and the Notice of EGM set out in Appendix VII of this Scheme Document for details.

(4) The register of members of CMC will be closed during such period for the purpose of determining Scheme Shareholders who are qualified for entitlements under the Scheme.

(5) The Scheme shall become effective upon all the Conditions set out in the paragraph headed "4. Conditions of the Scheme and the Proposal" in the Explanatory Memorandum having been fulfilled or waived (as applicable).

(6) If the Proposal becomes unconditional and the Scheme becomes effective, it is expected that the listing of the CMC Shares on the Stock Exchange will be withdrawn after 4:00 p.m. on Wednesday, 15 March 2017.

Chinalco Mining Corporation International
中鋁礦業國際

(Incorporated under the laws of the Cayman Islands with limited liability)

(Stock Code: 3668)

Non-executive directors:
Liu Jianping *(chairman)*
Luan Shuwei
Liu Hongjun
Wang Dongbo

Executive directors:
Liu Yuewei
Gao Lidong

Independent non-executive directors:
Scott McKee Hand
Ronald Ashley Hall
Lai Yat Kwong Fred
Francisco Augusto Baertl Montori

Registered office:
PO Box 309, Ugland House
Grand Cayman
KY1-1104, Cayman Islands

Headquarters:
No. 62, Xi Zhi Men Bei Da Jie
Haidian District, Beijing, PRC

Principal place of business in Hong Kong:
36/F, Tower Two, Times Square
1 Matheson Street
Causeway Bay
Hong Kong

3 February 2017

To: The CMC Shareholders

Dear Sir or Madam,

(1) PROPOSED PRIVATISATION OF CMC BY THE OFFEROR BY WAY OF A SCHEME OF ARRANGEMENT (UNDER SECTION 86 OF THE COMPANIES LAW) (2) PROPOSED WITHDRAWAL OF LISTING OF CMC SHARES (3) SPECIAL DEAL RELATING TO SPOT SALES ARRANGEMENTS (4) SPECIAL DEAL RELATING TO THE PROPOSED EQUITY TRANSFER

INTRODUCTION

On 14 September 2016, the Offeror requested the CMC Board to put forward the Proposal to the holders of Scheme Shares regarding the proposed privatisation of CMC by way of a scheme of arrangement under Section 86 of the Companies Law involving the cancellation of the Scheme

Shares and, in consideration thereof, the payment to the Scheme Shareholders of the Cancellation Price in cash for each Scheme Share, and the withdrawal of the listing of the CMC Shares on the Stock Exchange.

The purpose of this Scheme Document is to provide you with further information regarding the Proposal and the expected timetable and to give you notice of the Court Meeting and the EGM (together with proxy forms in relation thereto). Your attention is also drawn to the letter from the CMC Independent Board Committee set out in Part V of this Scheme Document, the letter from Platinum Securities Company Limited, being the CMC Independent Financial Adviser, set out in Part VI of this Scheme Document, the Explanatory Memorandum set out in Part VII of this Scheme Document and the terms of the Scheme set out in Appendix V to this Scheme Document.

TERMS OF THE PROPOSAL

The Scheme

Subject to the fulfilment or waiver (as applicable) of the Conditions as described in the Explanatory Memorandum, the Proposal will be implemented by way of the Scheme, pursuant to which the issued share capital of CMC will be reduced by cancelling and extinguishing the Scheme Shares. Upon such reduction, the issued share capital of CMC will be increased to its former amount by the issuance at par to the Offeror of the aggregate number of CMC Shares as is equal to the number of Scheme Shares cancelled. The reserve created in CMC's books of account as a result of the capital reduction will be applied in paying up in full at par the new CMC Shares so issued, credited as fully paid, to the Offeror. Upon the Scheme having become effective, the Offeror will hold 100% issued share capital in CMC.

The Scheme will provide that the Scheme Shares will be cancelled and, in consideration thereof, each Scheme Shareholder will be entitled to receive HK$1.39 in cash for each Scheme Share. The amount of cash required to implement the Proposal would be approximately HK$2,526,000,000.

Assuming that the Scheme becomes effective on Monday, 13 March 2017 (Cayman Islands time), cheques for cash entitlements under the Scheme are expected to be despatched to the Scheme Shareholders by ordinary mail at their own risk on or before Wednesday, 22 March 2017.

Comparison of values and financial effects

Cancellation Price

Under the Scheme, the Scheme Shareholders will receive from the Offeror the Cancellation Price of HK$1.39 in cash for every Scheme Share as consideration for the cancellation of the Scheme Shares held as at the Effective Date.

The Cancellation Price will not be increased, and the Offeror does not reserve the right to do so.

Comparison of value

The Cancellation Price of HK$1.39 per Scheme Share represents:

- a premium of approximately 2.2% over the closing price of HK$1.36 per CMC Shares as quoted on the Stock Exchange on the Latest Practicable Date;
- a premium of approximately 32.4% over the closing price of HK$1.05 per CMC Share as quoted on the Stock Exchange on the Last Trading Day;
- a premium of approximately 33.7% over the average closing price of approximately HK$1.04 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the 5 trading days up to and including the Last Trading Day;
- a premium of approximately 33.7% over the average closing price of approximately HK$1.04 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the 30 trading days up to and including the Last Trading Day;
- a premium of approximately 61.6% over the average closing price of approximately HK$0.86 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the 180 trading days up to and including the Last Trading Day;
- a premium of approximately 65.5% over the average closing price of approximately HK$0.84 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the one year up to and including the Last Trading Day; and
- a premium of approximately 239.0% over the unaudited consolidated net asset value per CMC Share of approximately HK$0.41*(note)* as at 30 June 2016.

Note: The unaudited consolidated net asset value per CMC Share is calculated based on the unaudited net asset value provided in the interim results announcement for the six months ended 30 June 2016 of CMC dated 23 August 2016. The translation between U.S. dollars and Hong Kong dollars were made at the rate of HK$7.75 to US$1.00.

Valuation of the Toromocho Project

In order to provide the CMC Shareholders independent expert assessments to reach a properly informed decision regarding the Proposal, CMC has engaged the Competent Evaluator to prepare the Competent Persons Report (as set out in Appendix II of this Scheme Document) and the Valuation Report (as set out in section A of Appendix III of this Scheme Document) for the Toromocho Project.

Under the Competent Persons Report, the Competent Evaluator has provided comments on, and assessment of, the Toromocho Project, including an assessment of the Mineral Resources and Ore Reserves in respect of the Toromocho Project as reported in the annual report of CMC for year 2015. As at the Latest Practicable Date, there has been no material change in the Mineral Resources and Ore Reserves since 31 December 2015, besides the normal operational reduction.

As provided in the Competent Persons Report, the Competent Evaluator has assessed the Toromocho Project against the JORC Code guidelines and the Competent Evaluator is of the opinion that the Mineral Resource and Ore Reserves quoted by CMC in its latest annual report for the year 2015 are a fair representation of the Toromocho Project. The Competent Persons Report is not a competent persons report prepared in full compliance with JORC Code or Chapter 18 of the Listing Rules (which is not applicable to the Competent Persons Report and the Valuation Report contained in this Scheme Document).

REASONS FOR, AND BENEFITS OF, THE PROPOSAL

You are urged to read carefully the section headed "11. Reasons for, and Benefits of, the Scheme and the Proposal" in the Explanatory Memorandum of this Scheme Document.

SPOT SALES ARRANGEMENTS

In the course of its normal business operation, CMC has been engaged in sales of copper concentrates to the Offtake Shareholders and/or their respective affiliates. Such sales are made under (i) offtake sales contracts with terms that are within the parameters set out in the existing offtake agreements which were entered into between 2012 and 2014, and (ii) spot sales contracts with terms that are outside the scope of the relevant offtake agreements. Prior to the Proposal and the Scheme were reasonably contemplated by CMC, it has entered into several Existing Spot Sales Contracts. It is expected that CMC will continue to engage in sales with the Offtake Shareholders and/or their respective affiliates under offtake sales contracts and spot sales contracts.

Sales under any offtake sales contracts to be entered into between CMC and any Offtake Shareholder and/or their respective affiliates would not be considered a special deal in view of the fact that (i) they will be entered into within the parameters set out in the existing offtake agreements, and (ii) they are an implementation of the relevant existing offtake agreement. Furthermore, should entering into such offtake sales contracts be deemed as special deals, CMC would be subject to certain restrictions on the performance of its obligations under the existing offtake agreements, which might lead to potential breach of certain terms of such agreements by CMC. In order to ensure that any offtake sales contract will be entered into within the parameters set out in the relevant existing offtake agreement, sales under offtake sales contracts would be supervised and overseen by the independent non-executive directors of CMC from the Announcement Date until six months after the Effective Date.

The Existing Spot Sales Contracts would not be considered a special deal in view of the fact that (i) they were entered into prior to the Proposal and the Scheme were reasonably contemplated by CMC, and (ii) they are merely an implementation of the existing contracts. Any Future Spot Sales Contract constitutes a special deal and requires the consent of the Executive under Rule 25 of the Takeovers Code, as they are not entered into pursuant to existing offtake agreements and will be only entered into by and between CMC and the Offtake Shareholders and/or their respective affiliates without involving or being offered to all the CMC Shareholders. The Offeror has made an application for consent from the Executive in relation to the Future Spot Sales Contracts that are within the Spot Sales Mechanism, such consent being conditional upon (i) the CMC Independent

Financial Adviser confirming that the terms of the Spot Sales Mechanism are fair and reasonable, and (ii) the passing of ordinary resolution(s) by the Disinterested CMC Shareholders at an extraordinary general meeting of CMC to approve the Spot Sales Mechanism. All of the Offtake Shareholders and the Offeror will be required to abstain from voting on the proposal for the Spot Sales Mechanism at the extraordinary general meeting of CMC.

Upon obtaining the consent of the Executive under Rule 25 of the Takeovers Code, any spot sales contract to be entered into between CMC and the Offtake Shareholders and/or their respective affiliates from the Announcement Date until six months after the Effective Date would be considered to have complied with the requirements under the Takeovers Code if the terms of the spot sales contract are within the Spot Sales Mechanism.

As disclosed in the letter of the CMC Independent Board Committee set out in Part V of this Scheme Document, the CMC Independent Board Committee (which comprises of all independent non-executive directors of CMC), having considered the terms of the Spot Sales Mechanism and having taken into account the advice of the CMC Independent Financial Adviser, considers that, as far as the Disinterested CMC Shareholders are concerned, the terms of the Spot Sales Mechanism are fair and reasonable. In addition, the independent non-executive directors of CMC will supervise and oversee the entering into of any spot sales contract by CMC to ensure that material terms of such contract would be within the Spot Sales Mechanism for a period of six months after the Effective Date.

Please see the section headed "14. Spot Sales Arrangements" in the Explanatory Memorandum for further details.

PROPOSED EQUITY TRANSFER REGARDING THE SIMANDOU PROJECT

The CMC Board was informed by the Offeror that on 28 October 2016, Rio Tinto Simfer and Chalco Iron Ore entered into the non-binding Heads of Agreement with the Government of Guinea signing as a witness, with a view to promoting both parties to reach a preliminary common understanding in relation to, among other things, the proposed Equity Transfer. The proposed Equity Transfer is also in line with the existing joint venture arrangements between Rio Tinto Simfer and Chalco Iron Ore which provide for the pre-emptive right of Chalco Iron Ore where Rio Tinto Simfer intends to dispose of any of its interest in Simfer Jersey.

The Simandou Project is an iron ore mining and infrastructure project in Guinea, West Africa which has been controlled and operated by Rio Tinto Group since 1997. Chalco Iron Ore formally participated in the Simandou Project by way of acquiring a 47% interest in Simfer Jersey in April 2012, an indirect holding company of the Simandou Project.

The Heads of Agreement provides that the terms of the definitive agreements will be consistent with the principles and key terms set out in the Heads of Agreement. In addition, completion of the Equity Transfer will be subject to certain conditions precedent set out in the Heads of Agreement and any other conditions precedent that may be agreed by Chalco Iron Ore and

Rio Tinto Simfer. Both parties will take all necessary steps to fulfill such conditions precedent no later than six months from the signing of the definitive agreements, or otherwise, any definitive agreements that may have been signed will terminate automatically.

The provisions of the Heads of Agreement in relation to the Equity Transfer form part of a proposal which is not legally binding. The Heads of Agreement shall automatically terminate if both parties fail to agree and enter into definitive agreements to give effect to the transactions contemplated thereunder by expiry of the six-month period following the date of the Heads of Agreement.

As the Heads of Agreement was entered into by and between the Chalco Iron Ore (a subsidiary of the Offeror) and Rio Tinto Simfer (a subsidiary of Rio Tinto International which is a CMC Shareholder), the proposed Equity Transfer contemplated under the Heads of Agreement constitutes a special deal and requires the consent of the Executive under Rule 25 of the Takeovers Code. The Offeror has made an application for consent from the Executive in relation to the proposed Equity Transfer contemplated under the Heads of Agreement conditional upon (i) the CMC Independent Financial Adviser confirming that the terms of the proposed Equity Transfer under the Heads of Agreement are fair and reasonable, and (ii) the passing of an ordinary resolution by the Independent CMC Shareholders at the EGM to approve the proposed Equity Transfer contemplated under the Heads of Agreement. The Offeror and Rio Tinto International will be required to abstain from voting on the proposal for the proposed Equity Transfer contemplated under the Heads of Agreement at the EGM.

Given the Heads of Agreement is non-binding and only sets out certain material terms agreed by Chalco Iron Ore and Rio Tinto Simfer, the definitive agreements in relation to the proposed Equity Transfer that the parties may enter into may contain additional details, terms and conditions.

Please see the section headed "15. Proposed Equity Transfer Regarding the Simandou Project" in the Explanatory Memorandum for further details. For the advice from the CMC Independent Financial Adviser and the CMC Independent Board Committee in relation to the proposed Equity Transfer contemplated under the Heads of Agreement, please see Part VI and Part V of this Scheme Document, respectively.

CMC INDEPENDENT BOARD COMMITTEE

The CMC Board has established the CMC Independent Board Committee, comprising all the independent non-executive directors, being Mr. Scott McKee Hand, Mr. Ronald Ashley Hall, Mr. Lai Yat Kwong Fred and Mr. Francisco Augusto Baertl Montori, to advise the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) as to (i) whether the Scheme, the Proposal, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement are, or are not, fair and reasonable and (ii) whether to vote in favour of the Scheme, the Proposal, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement at the Court Meeting and/or the EGM.

As Mr. Liu Jianping, Mr. Luan Shuwei, Dr. Liu Hongjun and Dr. Wang Dongbo are also personnel or senior management of Chinalco and/or its subsidiaries, all non-executive directors of CMC are regarded as being interested in the Proposal and therefore do not form part of the CMC Independent Board Committee.

The full text of the letter from the CMC Independent Board Committee is set out in Part V of this Scheme Document.

CMC INDEPENDENT FINANCIAL ADVISER

Platinum Securities Company Limited has been appointed as the CMC Independent Financial Adviser (with the approval of the CMC Independent Board Committee) to advise the CMC Independent Board Committee in connection with the Scheme, the Proposal, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement.

The full text of the letter from the CMC Independent Financial Adviser is set out in Part VI of this Scheme Document.

IRREVOCABLE UNDERTAKINGS

The Offeror received the Irrevocable Undertakings from (i) Louis Dreyfus, Hongfan International and Guangxi Non-ferrous on 21 September 2016, (ii) Urion Holdings on 22 September 2016 and (iii) Tongling Nonferrous on 30 September 2016, pursuant to which each of them irrevocably undertook to exercise (or procure the exercise) of all voting rights attached to the CMC Shares held or owned by it at the Court Meeting and the EGM in connection with the Proposal in favour of all the resolutions to approve the Proposal and any matters in connection with the Proposal. However, these Offtake Shareholders will be required to abstain from voting on the proposal for the Spot Sales Mechanism at the EGM.

The Offeror received the Irrevocable Undertaking from Nice Ascent on 25 January 2017, pursuant to which Nice Ascent irrevocably undertook to exercise (or procure the exercise) of all voting rights attached to the CMC Shares held or owned by it at the Court Meeting and the EGM in favour of all the resolutions to be proposed at such meetings (including, but not limited to, the resolutions to approve the Proposal, any special deal arrangements, and any matters in connection with the Proposal).

Please see the section headed "5. Irrevocable Undertakings" in the Explanatory Memorandum for further details.

INFORMATION ON CMC

CMC is a company incorporated in the Cayman Islands with limited liability, the shares of which have been listed on the Main Board of the Stock Exchange since January 2013 with the stock code 3668.

CMC is the core platform of Chinalco for the future acquisition, investment, development and operation of non-ferrous and non-aluminum mineral resources and projects outside the PRC with unaudited consolidated total assets of approximately US$5,398.9 million as at 30 June 2016.

Currently, CMC focuses on developing the Toromocho Project through Minera Chinalco Peru S.A. ("**Chinalco Peru**"), a wholly owned subsidiary of CMC in Peru. The Toromocho Project is located in the central Peru in the core of the Morococha mining district. The Environmental Impact Assessment of the Toromocho Project was approved by the Peruvian government in December 2010. Chinalco Peru obtained the construction permit and began the construction for the Toromocho Project in July 2011. The commissioning of Toromocho Project commenced in December 2013. The Toromocho Project has commenced commercial production since June 2015.

INFORMATION ON THE OFFEROR

The Offeror was incorporated in Hong Kong on 18 July 2007 as a limited liability company. It is an investment holding company and a wholly owned subsidiary of Chinalco, which is a state-owned enterprise administered by the SASAC. Chinalco principally engages in the mining, smelting and processing of non-ferrous metals and related trading, engineering and technological services.

INTENTIONS OF THE OFFEROR AND CMC

Your attention is drawn to the section headed "16. Intentions of the Offeror and CMC" in the Explanatory Memorandum.

WITHDRAWAL OF LISTING OF CMC SHARES

Upon the Scheme becoming effective, all Scheme Shares will be cancelled, the register of members of CMC will be updated accordingly and the share certificates in respect of the Scheme Shares will thereafter cease to have effect as documents or evidence of title.

CMC will apply to the Stock Exchange for the withdrawal of the listing of CMC Shares on the Stock Exchange, in accordance with Rule 6.15 of the Listing Rules, immediately following the Effective Date.

The Scheme Shareholders will be notified by way of an announcement of the exact dates of the last day for dealing in CMC Shares on the Stock Exchange and the day on which the Scheme and the withdrawal of the listing of CMC Shares on the Stock Exchange will become effective.

IF THE SCHEME IS NOT APPROVED OR THE PROPOSAL LAPSES

The Scheme will lapse if any of the Conditions has not been fulfilled or waived, as applicable, on or before the Long Stop Date. If the Scheme is not approved or the Proposal otherwise lapses, the listing of CMC Shares on the Stock Exchange will not be withdrawn.

If the Scheme is not approved or the Proposal otherwise lapses, there are restrictions under the Takeovers Code on making subsequent offers, to the effect that neither the Offeror nor any person who acted in concert with it in the course of the Proposal (nor any person who is subsequently acting in concert with any of them) may within 12 months from the date on which the Scheme is not approved or the Proposal otherwise lapses announce an offer or possible offer for CMC, except with the consent of the Executive.

CMC Shareholders and potential investors should exercise caution when dealing in the securities of CMC. Persons who are in doubt as to the action they should take should consult their stockbroker, bank manager, solicitor or other professional advisers.

COURT MEETING AND EGM

Court Meeting

In accordance with the directions of the Grand Court, the Court Meeting will be held for the purpose of considering and, if thought fit, passing a resolution to approve the Scheme (with or without modifications).

Holders of Scheme Shares whose names appear on the register of members of CMC as at the Meeting Record Date shall be entitled to attend and vote, in person or by proxy, at the Court Meeting. At the Court Meeting, the holders of Scheme Shares, present and voting either in person or by proxy, will be entitled to vote all of their respective Scheme Shares in favour of the Scheme or against it. HKSCC Nominees Limited may vote for and against the Scheme in accordance with the instructions received from CCASS Participants (as defined under the General Rules of CCASS). For the purpose of calculating the "majority in number" requirement at the Court Meeting, each holder of Scheme Shares (other than HKSCC Nominees Limited) shall be counted as one CMC Shareholder voting for or against the Scheme (as applicable) whilst each CCASS Participant who instructs HKSCC Nominees Limited to vote in favour of the Scheme shall be counted for the "majority in number" as a single CMC Shareholder voting in favour of the Scheme, and, if applicable, each such CCASS Participant who instructs HKSCC Nominees Limited to vote against the Scheme shall be counted for the "majority in number" as a single CMC Shareholder voting against the Scheme. HKSCC Nominees Limited itself, as opposed to instructing CCASS Participants, shall not be counted as a CMC Shareholder for the purpose of the calculation of the "majority in number".

The Scheme is conditional upon, among other things, approval of the Scheme (by way of poll) by a majority in number of the holders of Scheme Shares representing not less than 75% in value of the Scheme Shares held by the holders of Scheme Shares present and voting either in person or by proxy at the Court Meeting, provided that: (i) the Scheme is approved (by way of poll) by the Independent CMC Shareholders holding at least 75% of the votes attaching to the Scheme Shares held by the Independent CMC Shareholders that are cast either in person or by proxy at the Court Meeting; and (ii) the number of votes cast (by way of poll) against the resolution to approve the Scheme at the Court Meeting by the Independent CMC Shareholders is not more than 10% of the votes attaching to all Scheme Shares held by the Independent CMC Shareholders.

In accordance with the Companies Law, the "75% in value" requirement, as described above, will be met if the total value of the Scheme Shares being voted in favour of the Scheme is at least 75% of the total value of the Scheme Shares voted at the Court Meeting. In accordance with the Companies Law, the "majority in number" requirement, as described above, will be met if the number of holders of Scheme Shares voting in favour of the Scheme exceeds the number of holders of Scheme Shares voting against the Scheme. For the purpose of calculating the "majority in number" requirement, the number of holders of Scheme Shares, present and voting in person or by proxy, will be counted in the manner described above.

Notice of the Court Meeting is set out in Appendix VI to this Scheme Document. The Court Meeting will be held at 10:00 a.m. (Hong Kong time) on Friday, 3 March 2017 at Bowen Room, Level 7, Conrad Hong Kong, Pacific Place, 88 Queensway, Hong Kong.

EGM

The EGM will be held immediately following the Court Meeting.

All the CMC Shareholders (or the Disinterested CMC Shareholders, as the case may be) whose names appear on the register of members of CMC as at the Meeting Record Date shall be entitled to attend and vote, in person or by proxy, at the EGM with respect to (i) the special resolution by the CMC Shareholders to approve the reduction of the issued share capital of CMC by cancelling the Scheme Shares; (ii) the ordinary resolution by the CMC Shareholders to immediately thereafter increase the issued share capital of CMC to the amount prior to the cancellation of the Scheme Shares and apply the reserve created as a result of the aforesaid cancellation of the Scheme Shares to pay up in full at par such number of new CMC Shares as is equal to the number of Scheme Shares cancelled as a result of the Scheme, credited as fully paid, for issuance to the Offeror; (iii) the ordinary resolution by the Disinterested CMC Shareholders to approve the Spot Sales Mechanism; and (iv) the ordinary resolution by the Independent CMC Shareholders to approve the proposed Equity Transfer contemplated under the Heads of Agreement.

The special resolution described under (i) in the paragraph above will be passed if not less than 75% of the votes cast by the CMC Shareholders, present and voting in person or by proxy at the EGM, are in favour of the special resolution. The ordinary resolution described under (ii) in the paragraph above will be passed if more than 50% of the votes are cast in favour of the ordinary resolution by the CMC Shareholders, present and voting either in person or by proxy, at the EGM. The ordinary resolution described under (iii) in the paragraph above will be passed if more than 50% of the votes are cast in favour of the ordinary resolution by the Disinterested CMC Shareholders, present and voting either in person or by proxy, at the EGM. The ordinary resolution described under (iv) in the paragraph above will be passed if more than 50% of the votes are cast in favour of the ordinary resolution by the Independent CMC Shareholders, present and voting either in person or by proxy, at the EGM.

At the EGM, a poll will be taken and each CMC Shareholder present and voting, either in person or by proxy, will be entitled to vote all of his/her/its CMC Shares in favour of (or against) the special resolution and/or the ordinary resolutions, except that the Offeror and the Offtake

Shareholders will be required to abstain from voting on the proposal for the Spot Sales Mechanism at the EGM. Alternatively, such CMC Shareholder may vote some of their CMC Shares in favour of the special resolution and/or the ordinary resolutions and any or all of the balance of their CMC Shares against the special resolution and/or the ordinary resolutions (and vice versa), except that the Offeror and the Offtake Shareholders will be required to abstain from voting on the proposal for the Spot Sales Mechanism at the EGM.

The Offeror has indicated that the CMC Shares legally held by it will be voted in favour of the special and the ordinary resolutions to be proposed at the EGM to approve any matters in connection with the Proposal. The Offtake Shareholders and Nice Ascent have undertaken under the Irrevocable Undertakings to vote in favour of all the resolutions at the EGM to approve the Proposal and any matters in connection with the Proposal. However, the Offtake Shareholders and the Offeror will be required to abstain from voting on the proposal for the Spot Sales Mechanism at the EGM and the Offeror will also be required to abstain from voting on the proposal for the proposed Equity Transfer contemplated under the Heads of Agreement at the EGM.

Notice of EGM is set out in Appendix VII to this Scheme Document. The EGM will be held at 10:30 a.m. (Hong Kong time) (or immediately after the conclusion or adjournment of the Court Meeting convened on the same day and place) on Friday, 3 March 2017 at Bowen Room, Level 7, Conrad Hong Kong, Pacific Place, 88 Queensway, Hong Kong.

Assuming that the Conditions are fulfilled (or, as applicable, waived in whole or in part), it is expected that the Scheme will become effective on or before Monday, 13 March 2017 (Cayman Islands time). Further announcements will be made to give details of the results of the Court Meeting and the EGM and, if all the resolutions are passed at those meetings, the result of the hearing of the petition for the sanction of the Scheme by the Grand Court, the Scheme Record Date, the Effective Date, and the date of withdrawal of the listing of the CMC Shares on the Stock Exchange.

Your attention is drawn to the section headed "22. Court Meeting and EGM" in the Explanatory Memorandum.

OVERSEAS SHAREHOLDERS

Your attention is drawn to the section headed "19. Overseas CMC Shareholders" in the Explanatory Memorandum.

ACTIONS TO BE TAKEN

Your attention is drawn to "Part II — Actions to be Taken" of this Scheme Document and the section headed "25. Summary of Actions to be Taken" in the Explanatory Memorandum.

RECOMMENDATION

The CMC Independent Financial Adviser has advised the CMC Independent Board Committee that it considers the terms of the Proposal, the Scheme and the proposed Equity Transfer contemplated under the Heads of Agreement are fair and reasonable as far as the Independent CMC Shareholders are concerned, and the Spot Sales Mechanism are fair and reasonable as far as the Disinterested CMC Shareholders are concerned, and accordingly, it advises the CMC Independent Board Committee to recommend the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) to vote in favour of the relevant resolutions(s) to be proposed at the Court Meeting and the EGM to approve and implement the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement.

The CMC Independent Board Committee, having been so advised, considers that, as far as the Independent CMC Shareholders are concerned, the terms of the Scheme and the Proposal are fair and reasonable, and as far as the Disinterested CMC Shareholders are concerned, the Spot Sales Mechanism are fair and reasonable. Accordingly, the CMC Independent Board Committee recommends the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) to vote in favour of the relevant resolutions(s) to be proposed at the Court Meeting and the EGM to approve and implement the Proposal, the Scheme and the Spot Sales Mechanism.

The CMC Independent Board Committee, relying on the opinion of the CMC Independent Financial Adviser and the factors as contained in the letter from the CMC Independent Board Committee, assuming the terms of the proposed Equity Transfer contemplated under the Heads of Agreement were negotiated by the parties (who are assumed to be independent from each other) in good faith and on an arm's length basis, on the basis that nothing has come to their attention that the terms of the proposed Equity Transfer contemplated under the Heads of Agreement, as far as the Independent CMC Shareholders are concerned, are unfair or unreasonable, the CMC Independent Board Committee therefore considers, on the foregoing bases and assumption, that the terms of the proposed Equity Transfer contemplated under Heads of Agreement are fair and reasonable as far as the Independent CMC Shareholders are concerned. Accordingly, the CMC Independent Board Committee recommends the Independent CMC Shareholders to vote in favour of the relevant resolution to be proposed at the EGM to approve the proposed Equity Transfer contemplated under the Heads of Agreement.

REGISTRATION AND PAYMENT

Your attention is drawn to the section headed "20. Registration and Payment" in the Explanatory Memorandum.

TAXATION AND INDEPENDENT ADVICE

Your attention is drawn to the section headed "21. Taxation" in the Explanatory Memorandum.

It is emphasised that none of the Offeror, CMC and Morgan Stanley or any of their respective directors, officers or associates or any other person involved in the Scheme and the Proposal accepts responsibility for any taxation effects on, or liabilities of, any persons as a result of their acceptance or rejection of the Scheme. All holders of Scheme Share are recommended to consult their professional advisers if in any doubt as to the taxation implications of the Proposal.

FURTHER INFORMATION

You are urged to read carefully the letters from the CMC Independent Board Committee and from Platinum Securities Company Limited, the CMC Independent Financial Adviser, as set out in Parts V and VI of this Scheme Document, respectively, the Explanatory Memorandum as set out in Part VII of this Scheme Document, the Appendices to this Scheme Document, the Scheme as set out in Appendix V to this Scheme Document, the notice of Court Meeting as set out in Appendix VI to this Scheme Document and the notice of EGM as set out in Appendix VII to this Scheme Document. In addition, a pink form of proxy for the Court Meeting and a white form of proxy for the EGM are enclosed with copies of this Scheme Document sent to Registered Owners of CMC Shares.

Yours faithfully
For and on behalf of the board of
Chinalco Mining Corporation International
Liu Jianping
Chairman

Chinalco Mining Corporation International

中鋁礦業國際

(Incorporated under the laws of the Cayman Islands with limited liability)

(Stock Code: 3668)

Members of the
Independent Board Committee:
Mr. HAND, Scott McKee
Mr. HALL, Ronald Ashley
Mr. LAI, Yat Kwong Fred
Mr. BAERTL MONTORI, Francisco Augusto

Registered office:
P.O. Box 309,
Ugland House,
Grand Cayman,
KY1-1104,
Cayman Islands

3 February 2017

To: The Independent CMC Shareholders
and Disinterested CMC Shareholders

Dear Sir or Madam,

PROPOSED PRIVATISATION OF CMC BY THE OFFEROR BY WAY OF A SCHEME OF ARRANGEMENT (UNDER SECTION 86 OF THE COMPANIES LAW)

We refer to the document dated 3 February 2017 jointly issued by the Offeror and CMC in relation to the Proposal (the "**Scheme Document**"), of which this letter forms part. Terms defined in the Scheme Document shall have the same meanings in this letter unless the context otherwise requires.

We have been appointed by the CMC Board as the CMC Independent Board Committee to give a recommendation to the Independent CMC Shareholders and Disinterested CMC Shareholders in respect of the Scheme, the Proposal, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement, respectively, details of which are set out in "Part IV — Letter from the CMC Board" and "Part VII — Explanatory Memorandum" of this Scheme Document.

As all non-executive directors of CMC (Mr. Liu Jianping, Mr. Luan Shuwei, Dr. Liu Hongjun and Dr. Wang Dongbo) are personnel or senior management of Chinalco and/or its subsidiaries, they are regarded as being interested in the Proposal and therefore do not form part of the CMC Independent Board Committee.

Platinum Securities Company Limited, the CMC Independent Financial Adviser, has been appointed with our approval, to advise us in connection with the Scheme, the Proposal, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement. The details of its advice and the principal factors taken into consideration in arriving at its recommendations are set out in "Part VI — Letter from the CMC Independent Financial Adviser" of this Scheme Document.

In the letter from the CMC Independent Financial Adviser set out in Part VI of this Scheme Document, the CMC Independent Financial Adviser states that it considers the terms of the Proposal, the Scheme and the proposed Equity Transfer contemplated under the Heads of Agreement are fair and reasonable as far as the Independent CMC Shareholders are concerned and the Spot Sales Mechanism are fair and reasonable as far as the Disinterested CMC Shareholders are concerned, and advises the CMC Independent Board Committee to recommend the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) to vote in favour of the relevant resolution(s) to be proposed at the Court Meeting and the EGM to approve and implement the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement.

The CMC Independent Board Committee, having considered the terms of the Scheme, the Proposal and the Spot Sales Mechanism, and having taken into account the opinion of the CMC Independent Financial Adviser, and in particular the factors, reasons and recommendations set out in its letter in Part VI of this Scheme Document, considers that, as far as the Independent CMC Shareholders are concerned, the terms of the Scheme and the Proposal are fair and reasonable, and as far as the Disinterested CMC Shareholders are concerned, the Spot Sales Mechanism are fair and reasonable.

The CMC Independent Board Committee, having considered the terms of the proposed Equity Transfer contemplated under the Heads of Agreement, and having taken into account the opinion of the CMC Independent Financial Adviser, notes that (i) as the core platform of Chinalco for acquisition, investment, development and operation of non-ferrous and non-aluminum mineral resources and projects outside China, CMC would not engage in the acquisition of iron ore mines as is contemplated by the Heads of Agreement which are ferrous mineral resources; (ii) the proposed Equity Transfer contemplated under the Heads of Agreement is consistent with the pre-existing shareholder arrangements between Rio Tinto Simfer and Chalco Iron Ore and others, which provide a pre-emptive right to Chalco Iron Ore when Rio Tinto Simfer wishes to dispose of any of its interest in Simfer Jersey; (iii) Rio Tinto International, being an Offeror Concert Party, will abstain from voting on the Scheme at the Court Meeting; and (iv) the proposed Equity Transfer contemplated under the Heads of Agreement is not a Condition, so that whether the proposed Equity Transfer contemplated under the Heads of Agreement is approved at the EGM will not affect the voting on the Scheme at the Court Meeting. Assuming the terms of the proposed Equity

Transfer contemplated under the Heads of Agreement were negotiated by the parties (who are assumed to be independent from each other) in good faith and on an arm's length basis, relying on the opinion of the CMC Independent Financial Adviser that the proposed Equity Transfer contemplated under the Heads of Agreement is fair and reasonable to the Independent CMC Shareholders, and on the basis that nothing has come to our attention that the terms of the proposed Equity Transfer contemplated under the Heads of Agreement, as far as the Independent CMC Shareholders are concerned, are unfair or unreasonable, the CMC Independent Board Committee therefore considers, on the foregoing bases and assumption, that the terms of the proposed Equity Transfer contemplated under the Heads of Agreement are fair and reasonable as far as the Independent CMC Shareholders are concerned.

Accordingly, the CMC Independent Board Committee recommends:

(a) at the Court Meeting, the Independent CMC Shareholders to vote in favour of the Scheme; and

(b) at the EGM:

  (i) the CMC Shareholders to vote in favour of:

    (1) the special resolution to approve and give effect to the reduction of the issued share capital of CMC by cancelling the Scheme Shares;

    (2) the ordinary resolution to immediately thereafter increase the issued share capital of CMC to the amount prior to the cancellation of the Scheme Shares and apply the reserve created as a result of the aforesaid cancellation of the Scheme Shares to pay up in full at par such number of new CMC Shares as is equal to the number of Scheme Shares cancelled as a result of the Scheme for issue to the Offeror;

  (ii) the Disinterested CMC Shareholders to vote in favour of the Spot Sales Mechanism; and

  (iii) the Independent CMC Shareholders to vote in favour of the proposed Equity Transfer contemplated under the Heads of Agreement.

The CMC Independent Board Committee draws the attention of the Independent CMC Shareholders and the Disinterested CMC Shareholders to (i) the letter from the CMC Board set out in Part IV of the Scheme Document; (ii) the letter from the CMC Independent Financial Adviser, which sets out the factors and reasons taken into account in arriving at its recommendation to the CMC Independent Board Committee, set out in Part VI of this Scheme Document; and (iii) the Explanatory Memorandum set out in Part VII of this Scheme Document.

Yours faithfully,
The CMC Independent Board Committee

HAND, Scott McKee	**HALL, Ronald Ashley**	**LAI, Yat Kwong Fred**	**BAERTL MONTORI, Francisco Augusto**
Independent non-executive director of the Company	*Independent non-executive director of the Company*	*Independent non-executive director of the Company*	*Independent non-executive director of the Company*

The following is the text of the letter of advice from the CMC Independent Financial Adviser to the CMC Independent Board Committee and the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) in respect of the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement for the purpose of incorporation into this Scheme Document.

PLATINUM Securities Company Limited

21/F LHT Tower
31 Queen's Road Central
Hong Kong

Telephone (852) 2841 7000
Facsimile (852) 2522 2700
Website www.platinum-asia.com

3 February 2017

To the CMC Independent Board Committee and the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be)

Dear Sir or Madam,

(1) PROPOSED PRIVATISATION OF CMC BY THE OFFEROR BY WAY OF A SCHEME OF ARRANGEMENT (UNDER SECTION 86 OF THE COMPANIES LAW) (2) PROPOSED WITHDRAWAL OF LISTING OF CMC SHARES (3) SPECIAL DEAL RELATING TO SPOT SALES ARRANGEMENTS (4) SPECIAL DEAL RELATING TO THE PROPOSED EQUITY TRANSFER

INTRODUCTION

We refer to our engagement as the CMC Independent Financial Adviser to advise the CMC Independent Board Committee and the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) in relation to the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement. Details of the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement are set out in the Explanatory Memorandum contained in the Scheme Document dated 3 February 2017 of which this letter forms apart. In this letter, Chinalco Mining Corporation International is referred to as "the **Company**" or "**CMC**". Other terms used in this letter shall have the same meanings as defined in the Scheme Document unless the context requires otherwise.

The respective directors of the Offeror and CMC jointly announced that on 14 September 2016, the Offeror requested the board of directors of CMC to put forward the Proposal to the Scheme Shareholders regarding the proposed privatisation of CMC by way of a scheme of arrangement under Section 86 of the Companies Law. Subsequently, the respective directors of the Offeror and CMC jointly announced on 23 September 2016, that under the Proposal, the Scheme Shares will be cancelled in exchange for the payment by the Offeror to each Scheme Shareholder of the Cancellation Price of HK$1.39 in cash for each Scheme Share. The Cancellation Price will not be increased, and the Offeror does not reserve the right to do so.

On 19 October 2016, the Company announced that Platinum Securities Company Limited has been appointed as CMC Independent Financial Adviser and such appointment has been approved by the CMC Independent Board Committee.

In our capacity as the CMC Independent Financial Adviser, our role is to advise the CMC Independent Board Committee and the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) as to whether the terms of the Proposal, the Scheme and the proposed Equity Transfer contemplated under the Heads of Agreement are fair and reasonable so far as the Independent CMC Shareholders are concerned, and the Spot Sales Mechanism are fair and reasonable as far as the Disinterested CMC Shareholders are concerned, and are in the interests of the Company and the CMC Shareholders as a whole, and to give independent advice to the CMC independent Board Committee as to whether the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) should vote in favour of the relevant resolutions to be proposed at the Court Meeting and the EGM to approve and implement the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement.

In formulating our opinion, we have relied on the information and facts supplied to us by the directors (the "**Directors**") and/or management of the Company. We have reviewed, among other things:

(i) the announcement jointly issued by the Offeror and the Company on 23 September 2016 (the "**Joint Announcement**");

(ii) the announcement dated 17 June 2013 in relation to the proposed expansion of the Toromocho Project of the Company (the "**2013 Announcement**")

(iii) the Scheme Document;

(iv) the audited annual report of the Company for the year ended 31 December 2015 and the unaudited interim report of the Company for the six months ended 30 June 2016 (the "**2015 Annual Report**" and the "**2016 Interim Report**" respectively);

(v) the latest unaudited consolidated management accounts of the Company for the twelve months ended 31 December 2016 (the "**2016 Management Account**");

(vi) the independent valuation report dated 23 January 2017 (the "**Valuation Report**") prepared by Golder Associates Consulting Ltd (the "**Independent Valuer**");

(vii) the competent persons report dated 23 January 2017 (the "**Competent Persons Report**") prepared by the Independent Valuer;

(viii) the spot sales arrangements in relation to the existing offtake agreements (the "**Offtake Sales Contracts**") and the spot sales contracts (the "**Spot Sales Contracts**") of the CMC Group;

(ix) the Heads of Agreement; and

(x) other publicly available information related to the Company including regulatory filings where available.

We have assumed that all information, facts, opinions and representations contained in the Scheme Document are true, complete, accurate and not misleading at the time they were made and continue to be so in all material respects as at the Latest Practicable Date and we have relied on the same, and have confirmed, having made all reasonable inquiries, that to the best of their knowledge, opinions expressed in the Scheme Document by the CMC Group have been arrived at after due and careful consideration and there are no other facts not contained in the Scheme Document, the omission of which would make any statement in the Scheme Document misleading.

We have no reason to suspect that any material facts or information have been withheld or to doubt the truth, accuracy or completeness of all facts as set out in the Scheme Document and of the information and representations provided to us by the Directors and/or the management of the Company. Furthermore, we have no reason to suspect the reasonableness of the opinions and representations expressed by the Directors and/or the management of the Company, which have been provided to us. In line with normal practice, we have not, however, conducted a verification process of the information supplied to us, nor have we conducted any independent in-depth investigation into the business and affairs and underlying assets of the Company. We have also relied on information available to the public (such as the documents published by the Company), which we assumed to be accurate and reliable. We consider that we have reviewed sufficient information to enable us to reach an informed view and to provide a reasonable basis for our opinion regarding the terms of the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement.

As at the Latest Practicable Date, we are independent from, and are not associated with the Company or any other party to the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement, or their respective substantial shareholder(s), as defined under the Listing Rules, and there is no conflict of interest (within the meaning of the Takeovers Code, in particular Schedule VII thereto) existing or arising in relation to our appointment and accordingly, are considered eligible to give independent advice on the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement. We will receive a fee from the Company for our role as the CMC Independent Financial Adviser to the CMC Independent Board Committee and the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) in relation to the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement. Apart from the normal professional fee payable to us in connection with this appointment, no arrangements exist whereby we will receive any fees or benefits from the Company or any other party to the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement or their respective substantial shareholder(s) or connected person(s), as defined under the Listing Rules.

The CMC Independent Board Committee, comprising Mr. Scott McKee Hand, Mr. Ronald Ashley Hall, Mr. Lai Yat Kwong Fred and Mr. Francisco Augusto Baertl Montori, has been established to advise the Independent CMC Shareholders as to whether the terms of the Proposal, the Scheme and the proposed Equity Transfer contemplated under the Heads of Agreement are fair and reasonable so far as the Independent CMC Shareholders are concerned, and the Spot Sales Mechanism are fair and reasonable as far as the Disinterested CMC Shareholders are concerned, and whether the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement are in the interests of the Company and the CMC Shareholders as a whole, and to make recommendations as to whether the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) should vote in favour of the relevant resolutions to be proposed at the Court Meeting and the EGM to approve and implement the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement.

PRINCIPAL FACTORS AND REASONS CONSIDERED

In arriving at our opinion and recommendation with regard to the Proposal, we have taken into account principal factors and reasons set out below:

1. Background of the Proposal

The respective directors of the Offeror and CMC jointly announced on 23 September 2016 that, on 14 September 2016, the Offeror requested the board of directors of CMC to put forward the Proposal to the Scheme Shareholders regarding the proposed privatisation of CMC by way of a scheme of arrangement under Section 86 of the Companies Law. Under the Proposal, the Scheme Shares will be cancelled in exchange for the payment by the Offeror to each Scheme Shareholder of the Cancellation Price of HK$1.39 in cash for each Scheme Share. The Cancellation Price will not be increased, and the Offeror does not reserve the right to do so.

2. Summary of the Proposal and the Scheme

Key terms : Under the Proposal, the Scheme Shares will be cancelled in exchange for the payment by the Offeror to each Scheme Shareholder of the Cancellation Price of HK$1.39 in cash for each Scheme Share.

The Scheme and the Proposal involve the cancellation of all the Scheme Shares in exchange for the Cancellation Price and the subsequent issuance of new CMC Shares to the Offeror, as a result of which it is intended that CMC will be wholly owned by the Offeror and the listing of the CMC Shares on the Stock Exchange will be withdrawn.

Under the Scheme, the Scheme Shares will be cancelled and, in consideration thereof, each Scheme Shareholder whose name appears on the register of members of CMC as at the Scheme Record Date will be entitled to receive the Cancellation Price. The Cancellation Price will not be increased, and the Offeror does not reserve the right to do so.

CMC Shareholders whose names appear on the register of members of CMC as at the record date for entitlement to a dividend (if any) declared by CMC on or before the Effective Date will be entitled to receive such dividend (if any). CMC does not expect to declare any dividend on or before the Effective Date.

The Scheme and the Proposal are conditional upon the fulfillment or waiver, as applicable, of the Conditions on or before the Long Stop Date (or such later date as the Offeror and CMC may agree or, to the extent applicable, as the Grand Court may direct and in all cases, as permitted by the Executive), failing which the Scheme and the Proposal will not proceed or lapse, as the case may be.

If the Scheme and the Proposal do not become unconditional, CMC has no intention to seek the immediate withdrawal of the listing of CMC Shares on the Stock Exchange.

Total Consideration Under the Proposal : Under the Proposal, the Scheme Shares will be cancelled in exchange for the payment by the Offeror to each Scheme Shareholder of the Cancellation Price of HK$1.39 in cash for each Scheme Share.

As at the Latest Practicable Date, the authorized share capital of CMC was US$1,000,000,000 divided into 25,000,000,000 CMC Shares of US$0.04 each, and the issued share capital of CMC was US$472,711,297.12 divided into 11,817,782,428 CMC Shares of US$0.04 each. All of the CMC Shares rank equally in all respects as regards to rights to capital, dividends and voting. As at the Latest Practicable Date, the CMC Shareholders (other than the Offeror) were interested in 1,816,611,000 CMC Shares, representing approximately 15.37% of the issued share capital of CMC.

Settlement of the Cancellation Price will be implemented in full in accordance with the terms of the Scheme and the Proposal, respectively, without regard to any lien, right of set-off, counterclaim or other analogous right to which the Offeror may otherwise be, or claim to be, entitled against any such Scheme Shareholder.

Conditions of the Scheme and the Proposal : The proposal is, and the Scheme will become, effective and binding on CMC and all CMC Shareholders, subject to the fulfillment or waiver (as applicable) of the following conditions:

(a) the approval of the Scheme (by way of poll) by a majority in number of the holders of Scheme Shares representing not less than 75% in value of the Scheme Shares held by the holders of Scheme Shares present and voting either in person or by proxy at the Court Meeting, provided that:

(i) the Scheme is approved (by way of poll) by at least 75% of the votes attaching to the Scheme Shares held by Independent CMC Shareholders that are cast either in person or by proxy at the Court Meeting; and

(ii) the number of votes cast (by way of poll) against the resolution to approve the Scheme at the Court Meeting is not more than 10% of the votes attaching to all Scheme Shares held by Independent CMC Shareholders;

(b) (i) the passing of a special resolution by a majority of not less than 75% of the votes cast by CMC Shareholders present and voting in person or by proxy at the EGM to approve and give effect to the reduction of the issued share capital of CMC by cancelling the Scheme Shares, and (ii) the passing of an ordinary resolution by CMC Shareholders at the EGM to increase immediately thereafter the issued share capital of CMC to the amount prior to the cancellation of the Scheme Shares and apply the reserve created as a result of the aforesaid cancellation of the Scheme Shares to pay up in full at par such number of new CMC Shares as is equal to the number of Scheme Shares cancelled as a result of the Scheme, credited as fully paid, for issuance to the Offeror;

(c) the sanction of the Scheme (with or without modifications) by the Grand Court and, to the extent necessary, the Grand Court's confirmation of the reduction of the share capital of CMC, and the registration of a copy of the Court Orders by the Registrar of Companies in the Cayman Islands;

(d) compliance by CMC, to the extent necessary, with the procedural requirements and conditions, if any, under Sections 15 and 16 of the Companies Law in relation to the reduction of the issued share capital of CMC;

(e) all Authorisations having been obtained or made from, with or by (as the case may be) the Relevant Authorities of the PRC, Cayman Islands, Hong Kong and any other relevant jurisdictions;

(f) all Authorisations remaining in full force and effect without variation, and all necessary statutory or regulatory obligations in all relevant jurisdictions having been complied with and no requirement having been imposed by any Relevant Authorities which is not expressly provided for, or is in addition to requirements expressly provided for, in any relevant laws, rules, regulations or codes in connection with the Proposal or any related matters, documents (including circulars) or things, in each case up to and at the time when the Scheme becomes effective;

(g) all necessary consents (including consents from the relevant lenders) in connection with the Proposal and the withdrawal of listing of the CMC Shares from the Stock Exchange which may be required under any existing contractual obligations of CMC being obtained and remaining in effect;

(h) if required, the obtaining by the Offeror of such other necessary consent, approval, authorisation, permission, waiver or exemption which may be required from any Relevant Authorities or other third parties which are necessary or desirable for the performance of the Scheme under the applicable laws and regulations;

(i) no government, governmental, quasi-governmental, statutory or regulatory body, court or agency in any jurisdiction having taken or instituted any action, proceeding, suit, investigation or enquiry (or enacted, made or proposed, and there not continuing to be outstanding, any statute, regulation, demand or order) that would make the Proposal or the Scheme or its implementation in accordance with its terms void, unenforceable, illegal or impracticable (or which would impose any material and adverse conditions or obligations with respect to the Proposal or the Scheme or its implementation in accordance with its terms);

(j) since the Announcement Date, there having been no adverse change in the business, assets, financial or trading positions, profits or prospects of any member of CMC Group (to an extent which is material in the context of CMC Group taken as a whole or in the context of the Proposal); and

(k) since the Announcement Date, there not having been instituted or remaining outstanding any litigation, arbitration proceedings, prosecution or other legal proceedings to which any member of CMC Group is a party (whether as plaintiff, defendant or otherwise) and no such proceedings having been threatened in writing against any such member (and no investigation by any government or quasi-governmental, supranational, regulatory or investigative body or court against or in respect of any such member or the business carried on by any such member having been threatened in writing, announced, instituted or remaining outstanding by, against or in respect of any such member), in each case which is material and adverse in the context of CMC Group taken as a whole or in the context of the Proposal.

Completion	:	Subject to the fulfillment (or, where relevant, the waiver) of the conditions precedent to the Proposal, it is currently expected that the Proposal will be completed by March of 2017. If the Scheme becomes effective, the expected last date for trading in the CMC Shares on the Stock Exchange will be on 6 March 2017.

3. Reasons for, and benefits of, the Scheme and the Proposal

We understand from the management of the Company that the Offeror wishes to privatise CMC in order to ensure the continued normal operation of the Toromocho Project given the significant financial pressures facing CMC as an independent listed company. We have reviewed the 2013 Announcement and noted that the Company plans to implement a series of long-term growth strategies in respect of its Project Expansion, given that the capacity of the Toromocho Project could be increased by 45%. We concur with the Directors' view that the completion of the Project Expansion should enhance the operation efficiency of the Toromocho Project. Nevertheless, we think that the financial challenges and additional debt burden for the expansion will have a negative impact on the capital structure and the value of the Company in the short-term. As such, it may result in an adverse effect against the interests of minority shareholders of the Company.

Since CMC's listing in January 2013 on the Stock Exchange, the Company's share price performance has been lacklustre. Following our discussion under the section headed "Outlook for metals produced by the Toromocho Project", since the outlook for the copper price in the near future remains uncertain, we consider that the Company has been experiencing a harsh business environment. Copper prices as quoted by the London Metal Exchange ("**LME**") have decreased approximately 41.5% from US$8,128.5 per tonne on 31 January 2013 to US$4,754.5 per tonne on the Last Trading Day, which might directly result in a negative impact on the trading prices of CMC Shares. In such a challenging business environment with an uncertain outlook for the copper industry, we concur with the management of the Company that it would be difficult to proceed with any equity fund raising activities at present due to the recent unsatisfactory operational performance and the highly leveraged capital structure of the Company. Moreover, the uncertain prospect of the copper industry and the current lower copper price might lead the potential investors to be more hesitant and cautious over investing in the shares of the Company under current market conditions.

With the reference made to the 2013 Announcement, the total estimated capital expenditure for the Project Expansion was approximately US$1.32 billion. However, we note from the Company that a substantial part of such future capital expenditure remains unfunded as at the Latest Practicable Date. According to the 2016 Interim Report, the Company has financed its continuing operations and the expansion using loans (including shareholder loans) and borrowings, which amounted to approximately US$4.3 billion and the current ratio (being the current assets divided by the current liabilities) recorded approximately 0.2 as at 30 June 2016. After discussions with the Company, we think that the Company is facing financial pressures and to secure additional debt financing under the current capital structure of the Company might be challenging. Since the mining operations of the Company are still in an early stage, we note from the management of the Company that privatising the Company would provide a way for the Offeror to reorganise the

capital structure of the Company to enhance its ability for obtain funding in the future. In addition, we consider that the listing of the Shares requires the Company to bear administrative, compliance and other listing-related costs and expenses, which could be avoided. Once these costs and expenses are eliminated, the funds saved could be used for the Company's business operations and debt repayment.

Furthermore, we note from the Company that the Proposal would provide current shareholders with a reasonable way to exit their investment in CMC and one that is attractive in the light of current market conditions. We believe that the Scheme offers an opportunity for the Independent CMC Shareholders to dispose of their Shares expeditiously and receive a cash price above the prevailing market price. In particular the Proposal is attractive in the light of the underperformance of the share price since the Company's listing in 2013. According to the shareholding structure of the Company set out in Part VII of Explanatory Memorandum contained in the Scheme Document, the Offeror and the Offeror Concert Parties, being the controlling shareholders of the Company, held combined of 10,134,081,428 Shares representing approximately of 85.75 % of the Company's total issued shares as at the Latest Practicable Date. Given that the Independent CMC Shareholders only hold approximately of 14.25 % of the entire issued share capital of the Company, we are of the view that any third party investor would be unlikely to pay such a premium for the Scheme Shares (other than those held by the Offeror Concert Parties) since a controlling stake in the Company would not be obtained by a third party after acquiring all the Scheme Shares (other than those held by the Offeror Concert Parties).

In light of the above and given that (i) the foreseeable large capital expenditure required for Project Expansion of the Company; (ii) since the existing operational challenges resulting in lower copper recoveries, based on information in the 2015 Annual Report, are which could lead the Company to delay or stop the Project Expansion; (iii) the Company is under continuing financial pressure; (iv) the difficulty of raising funds in the equity market under the current market conditions and (v) the Proposal constitutes an offer at a considerable premium above the prevailing market price of the Shares to the Independent CMC Shareholders, we are of the view that the Proposal and the Scheme are in the interests of the Company and the Independent CMC Shareholders as a whole.

4. Information on the Company and the Offeror, and the shareholding structure of the Company and the Scheme Shares

4.1 *Information on the Company*

The Company is incorporated in the Cayman Islands with limited liability, the shares of which have been listed on the Main Board of the Stock Exchange since January 2013.

The Company is the core platform of Chinalco and was established for the purpose for the future acquisition, investment, development and operation of non-ferrous and non-aluminium mineral resources and projects located outside the PRC.

Currently, the Company is focusing on developing the Toromocho Project through Chinalco Peru. The Toromocho Project is located in the central Peru in the core of the Morococha mining district. The Environmental Impact Assessment of the Toromocho Project was approved by the Peruvian government in December 2010. Chinalco Peru obtained a construction permit and began construction for the Toromocho Project in July 2011. The commissioning of the Toromocho Project commenced in December 2013. The Toromocho Project commenced commercial production in June 2015.

Set out below are the financial highlights of the Company's consolidated financial statements in accordance with the Hong Kong Financial Reporting Standards:

	For the year ended 31 December 2014 *(US$'000)* *(audited)*	**For the year ended 31 December 2015** *(US$'000)* *(audited)*	**For the six months ended 30 June 2016** *(US$'000)* *(unaudited)*
Cash and cash equivalents	75,173	122,111	53,537
Total assets	4,966,412	5,245,367	5,398,858
Total equity attributable to the Company's equity holders	701,546	672,644	629,862
Total debts	3,704,428	4,160,258	4,298,134
Revenue	—	426,630	242,844
Profit/(loss) attributable to the equity holders of the Company	(13,213)	(13,671)	(46,043)

Source: 2015 Annual Report and 2016 Interim Report

We note that the cash and cash equivalents of the Company increased from approximately US$75.2 million (as of 31 December 2014) to approximately US$122.1 million (as of 31 December 2015) and thereafter dropped to approximately US$53.5 million (as of 30 June 2016). The decrease in cash was due to operational losses, expenses on the Project Expansion and debt repayment.

The increase in total assets from approximately US$4,966.4 million as at 31 December 2014 to approximately US$5,398.9 million as at 30 June 2016 was a result of increases in the Company's property, plant and equipment, and its inventories since the Company officially commenced commercial production on 17 June 2015. However, the total equity attributable to the Company's equity holders has decreased from approximately US$672.6 million as at 31 December 2015 to approximately US$629.9 million as at 30 June 2016, which has been mainly due to an increase of approximately 3.3% in the total debt of the Company from approximately US$4,160.3 million as at 31 December 2015 to approximately US$4,298.1 million as at 30 June 2016.

The revenue represents sales generated from the sales of mining products. There was no income for the year ended 31 December 2014 since the Toromocho Project commenced commercial production on 17 June 2015. The Company's revenue for the year ended 31 December 2015 was approximately US$426.6 million, and was approximately US$242.8 million for the six months ended 30 June 2016. As production of the Toromocho Project increases and sales are made under the off-take contracts signed by the Company with Offtake Shareholders, and other independent third parties, the revenue of the Company is expected to increase steadily.

Nevertheless, the Company has experienced a loss attributable to the equity holders of the Company for the past four financial years. The loss attributable to the equity holders of the Company had a slight increase from approximately US$13.2 million for the year ended 31 December 2014 to approximately US$13.7 million for the year ended 31 December 2015, while the loss attributable to the equity shareholders recorded approximately US$46.0 million for the six months ended 30 June 2016. We understand from the Company that such significant increase in the loss attributable to the equity shareholders for the six months ended 30 June 2016 was mainly due to the global copper price still remained at a low level as well as the recessional commodity industry had led to a harsh business environment for the Company. Moreover, since the Company officially commenced its commercial production on 17 June 2015, most expenses and costs incurred by the Company prior to the official date of commencement of the commercial production had been capitalised in its audited accounts for the year ended 31 December 2015, which we consider was one of the reasons led to a reflection of a sharp increase in the loss attributable to the equity shareholders for the six months ended 30 June 2016 of the Company.

4.2 ***Information on the Offeror***

The Offeror was incorporated in Hong Kong on 18 July 2007 as a limited liability company. It is an investment holding company and a wholly owned subsidiary of Chinalco, which is a state-owned enterprise administered by the SASAC. Chinalco principally engages in the mining, smelting and processing of non-ferrous metals and related trading, engineering and technological services.

4.3 *Shareholding Structure of the Company and the Scheme Shares*

Based on the assumption that there is no change in shareholdings of the Company before the completion of the Proposal, the table below sets out the shareholding structure of the Company as at the Latest Practicable Date and immediately upon the completion of the Proposal:

CMC Shareholders	**As at the Latest Practicable Date**		**Immediately upon completion of the Proposal** *(Note 4)*	
	Number of CMC Shares	*% (Note 6)*	*Number of CMC Shares*	*% (Note 6)*
Offeror *(Note 1)*	10,001,171,428	84.63	11,817,782,428	100.00
Offeror Concert Parties				
CMC Shares held subject to the Scheme:				
— Rio Tinto International Holdings Limited *(Note 2)*	132,910,000	1.12	—	—
Total number of CMC Shares held by the Offeror and the Offeror Concert Parties	10,134,081,428	85.75	11,817,782,428 *(Note 5)*	100.00
Independent CMC Shareholders	1,683,701,000	14.25	—	—
Total number of CMC Shares	11,817,782,428	100.00	11,817,782,428	100.00
Total number of Scheme Shares *(Note 3)*	1,816,611,000	15.37	—	—

Notes:

1. CMC Shares in which the Offeror is interested will not form part of the Scheme Shares and will not be cancelled. The number 10,001,171,428 excludes a 0.58 fractional CMC Share held by the Offeror which is non-tradable and which will also not form part of the Scheme Shares and will not be cancelled.

2. Rio Tinto Group (including Rio Tinto International Holdings Limited) owns or controls more than 20% of the voting rights in joint ventures with Chinalco. Therefore, Rio Tinto International Holdings Limited is presumed to be acting in concert with the Offeror in relation to CMC in accordance with class 1 of the definition of "acting in concert" under the Takeovers Code.

3. The total numbers of CMC Shares (assuming that there is no other change in shareholding of CMC before completion of the Proposal) minus the aggregate number of CMC Shares held by the Offeror equals the total number of Scheme Shares (on the same assumptions).

4. Under the Scheme, the issued share capital of CMC will, on the Effective Date, be reduced by cancelling the Scheme Shares. On the assumption that there is no other change in shareholding of CMC before completion of the Proposal, forthwith upon such reduction, the issued share capital of CMC will be increased to its former amount by the issue at par to the Offeror, credited as fully paid, of the same number of CMC Shares as the number of the Scheme Shares cancelled. The reserve created in CMC's books of account as a result of the capital reduction will be applied in paying up in full at par the new CMC Shares so issued to the Offeror.

5. All of the CMC Shares held by the Offeror Concert Parties will form part of the Scheme Shares and will be cancelled upon the Scheme becoming effective. Accordingly, immediately upon completion of the Proposal, the Offeror will then hold all the issued share capital in CMC.

6. All percentages in the above table are approximations.

5. Outlook for metals produced by the Toromocho Project

The Company's principal asset is the Toromocho Project, a copper mine located in central Peru in the Morococha mining district. The Toromocho Project commenced commercial production on 17 June 2015. The ore produced by the Toromocho Project is converted into a copper concentrate on site. The concentrate is either sold to buyers in Peru for export or is exported by the Company to China and sold to buyers in China for refining into pure copper, widely known as 'copper cathode'. Physical copper is traded worldwide between producing and consuming countries. The largest markets for copper cathode are in Asia, followed by Europe. Copper spot, forward, and futures contracts are traded on commodity markets around the world.

The Company's business is likely to be materially influenced by business conditions and government policy in the Peruvian copper mining industry. In 2010, a survey compiled by the Fraser Institute[1] found that Peru was viewed as the second best jurisdiction in South America for the mining industry. The survey found that Peru was regarded by mining companies as having a favourable investment environment. Since 2004 the Peruvian government has imposed a royalty tax on extractive industries of between 1% and 3% based on gross concentrate sales after operating costs. Peru was ranked third in the world by reserves of copper with 68 million tonnes of copper reserves in 2015. Peru was ranked third in the world by production of copper with 1.7 million tonnes production in 2015. We note from the Company that they had experienced some labour disputes at its mining operations and with local communities near its plant which to date has not commenced operations, but such disputes are considered to be not material and should be resolved in time.

1 The University of Pennsylvania has conducted research into policy research institutes, commonly known as "think tanks", for approximately twenty years. The Fraser Institute, a policy research institute based in Vancouver BC, Canada, was rated in 2015 as in the top twenty of the 6,846 think tanks around the world graded by the University of Pennsylvania. We believe the Fraser Institute could be considered as an expert on mining jurisdictions. The Fraser Institute's annual survey of mining and exploration companies has been carried out annually since 2012. The 2015 Survey was based on a survey that received 449 responses providing data to evaluate 109 jurisdictions and was carried out between 15 September 2015 and 27 November 2015. The responses were used to rank provinces, states, and countries according to the extent that public policy factors encourage or discourage investment in mineral exploration and extraction. *(Source: The Fraser Institute's web page and the University of Pennsylvania's web page)*

Pure copper is used in the electrical industries and is also combined with other metals to form alloys. The major uses of copper are as electrical wire (approximately 60%), roofing and plumbing (approximately 20%), and industrial machinery (approximately 15%). Copper is used mostly as a pure metal but, when greater hardness is required, it is put into alloys, such as brass and bronze (approximately 5% of total use).

The most important driver of demand for copper is production of electrical wire, and roofing and plumbing products used in building construction. Worldwide demand for copper is therefore heavily reliant on activity in worldwide building construction and manufacturing of industrial machinery, both of which industries are considered cyclical and both of which are considered to be below peak levels of activity at present.

The worldwide supply of copper is largely dependent on the production and refining of copper ore from mines. Copper produced from scrap metal typically accounts for less than 20% of world supply. Worldwide copper usage in 2015 was approximately 22.9 million tonnes. Copper usage in 2016 is expected to increase by approximately 0.5% and to increase a further 1.8% in 2017. The total worldwide supply of copper from mine production was 19.2 million tonnes in 2015. Worldwide mine production is expected to increase approximately 3.6% in 2016 and a further 5.4% in 2017[2]. Based on the aforementioned forecasts, copper production is expected to grow faster than copper usage in 2016 and 2017.

Spot Copper prices traded on the London Metal Exchange ("**LME**") have declined from US$8,128.25 per tonne on 31 January 2013 to US$5,813.25 per tonne on 30 November 2016, a decline of 28.5%.

2 Copper usage and mine production estimates are from the International Copper Study Group's press release, dated 10 March 2016. The International Copper Study Group (ICSG) is an intergovernmental organization whose objective is to increase transparency in the copper market and to promote international discussions and cooperation on issues related to copper. Membership is open to any country involved in copper production, consumption, or international trade of copper and any international governmental organization competent to negotiate, conclude and implement international agreements, in particular those related to commodities. The ICSG describes itself as the only forum solely dedicated to the business of trading and producing copper where the industry, its associations and governments can meet and discuss common problems and objectives. Members of the ICSG include Australia, Japan, Belgium, Luxembourg, Chile, Mexico, China, Peru, European Union, Poland, Finland, Portugal, France, Russian Federation, Germany, Serbia, Greece, Spain, India, Sweden, Iran, United States, Italy and Zambia. The ICSG is based in Lisbon, Portugal. The ICSG publishes annually the World Copper Fact Book. *(Source: The ICSG's web page)*

Below showed as Chart 1 of LME copper spot prices from 30 November 2011 to 30 November 2016:

Chart 1: LME Copper Spot

Source: Bloomberg

As at market close on 30 November 2016, the price of the LME copper futures contract maturing in December 2017 was US$5,785.00 per tonne. After allowing for a cost of carry of US$222.73 per tonne, this futures price implies a spot price of US$5,561.27 per tonne in December 2017. The cost of carry is composed of the storage cost and the finance cost of one tonne of copper over the remaining life of the futures contract (385 days). The estimated daily storage cost of one tonne of copper of US$0.50 per day for 384 days between 30 November 2016 and 20 December 2017 is US$192.00. At 0.5% p.a. the finance cost for 385 days of one tonne of copper is US$30.06 at the spot price on 30 November 2016 of US$5,813.26 per tonne. The total cost of carry over the remaining life of the futures contract is therefore estimated to be US$222.60 per tonne. The theoretical price of one tonne of copper in December 2017 is therefore US$5784.00 minus US$222.60 per tonne, US$5,561.40 per tonne. Since the LME spot price of copper was US$5,813.25 per tonne on 30 November 2016, the theoretical spot price for December 2017 implies a decline in the spot price of copper over the next year of 4.3%. Based on information currently available, the outlook in 2017 for copper prices on world markets remains uncertain.

Silver and molybdenum are secondary products of the Toromocho Project. Silver and molybdenum are traded on leading commodity markets. On close of business 30 November 2016, the spot price of US$16.68 per ounce and US$14,862 per ounce of silver and molybdenum are 48% and 54%, respectively, below its highs of the last three years.

Silver is a precious metal. It resists corrosion and has the best thermal and electrical conductor of all the metals, consequently silver has a wide variety of uses in electronics manufacturing. Silver's antimicrobial, non-toxic qualities make it useful in medicine and consumer products. Its

high lustre and reflectivity are in demand by jewellery, and silverware manufacturers. Peru is the second largest producer of silver in the world, however, steady demand for silver and a limited increase in world supply may well keep silver prices firm over the next 12 months.

Below showed as Chart 2 of LBMA silver price from 30 November 2011 to 30 November 2016:

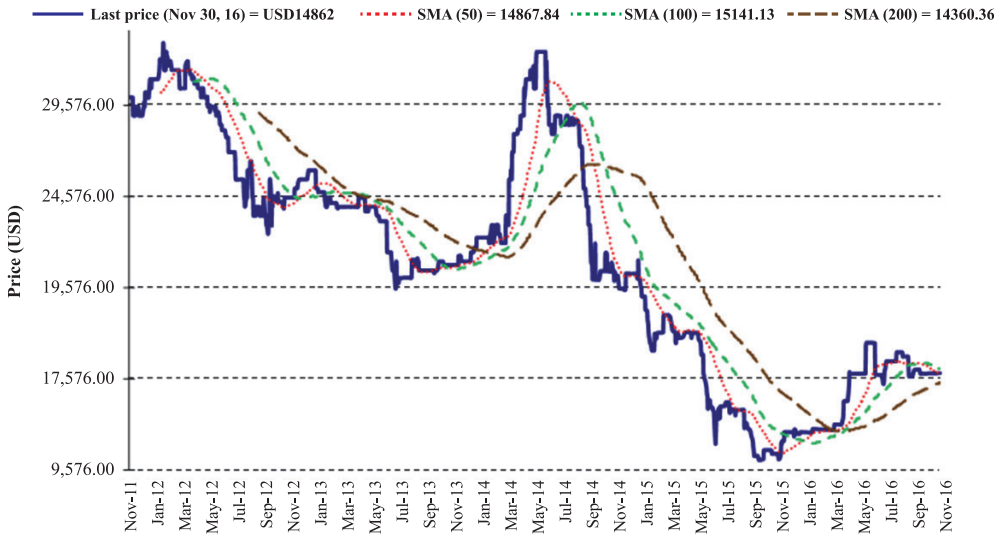
Chart 2: LBMA Silver Price

Source: Bloomberg

Molybdenum is the 54th most common element in the earth's crust and molybdenum ore is not considered rare. Approximately 80% of mined molybdenum is used in making special steel alloys. The price of molybdenum is therefore closely tied to manufacturing activity.

Below showed as Chart 3 of molybdenum spot price from 30 November 2011 to 30 November 2016:

Chart 3: LBMA Molybdenum Spot



Source: Bloomberg

6. Basis of Determination of the Cancellation Consideration

6.1 *Share price and trading liquidity analysis of the Company*

The Cancellation Price of HK$1.39 per Scheme Share represents:

- a premium of approximately 32.4% over the closing price of HK$1.05 per CMC Share as quoted on the Stock Exchange on the Last Trading Day;
- a premium of approximately 33.7% over the average closing price of approximately HK$1.04 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the 5 trading days up to and including the Last Trading Day;
- a premium of approximately 33.7% over the average closing price of approximately HK$1.04 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the 30 trading days up to and including the Last Trading Day;
- a premium of approximately 61.6% over the average closing price of approximately HK$0.86 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the 180 trading days up to and including the Last Trading Day;
- a premium of approximately 65.5% over the average closing price of approximately HK$0.84 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the one year up to and including the Last Trading Day;

- a premium of approximately 2.2% over the closing price of HK$1.36 per CMC Share as quoted on the Stock Exchange on the Latest Practicable Date; and

- a premium of approximately 239.0% over the unaudited consolidated net asset value per CMC Share of approximately HK$0.41(note) as at 30 June 2016.

Note: The unaudited consolidated net asset value per CMC Share is calculated based on the unaudited net asset value provided in the interim results announcement for the six months ended 30 June 2016 of CMC dated 23 August 2016. The translation between U.S. dollars and Hong Kong dollars were made at the rate of HK$7.75 to US$1.00.

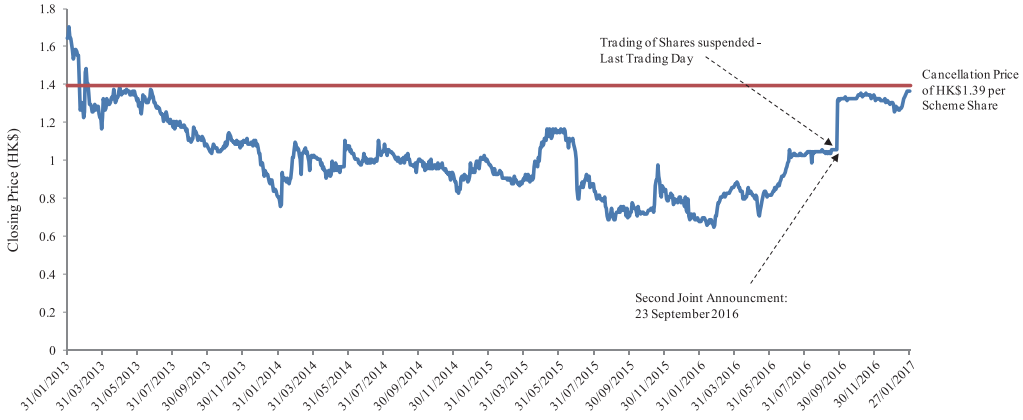
(a) *Analysis of share price*

On January 31, 2013, the Company completed its initial public offering ("**IPO**") and listed its Shares on the Stock Exchange with the IPO price of HK$1.75 per Share.

The share price chart in Exhibit 1 below illustrates the daily closing price of the Shares quoted on the Stock Exchange from 31 January 2013 (the "**First Trading Day**") up to and including the Latest Practicable Date (the "**Review Period I**").

Exhibit 1: Historical Share Price of the Company

Historical Share Price of the Company during the Review Period I



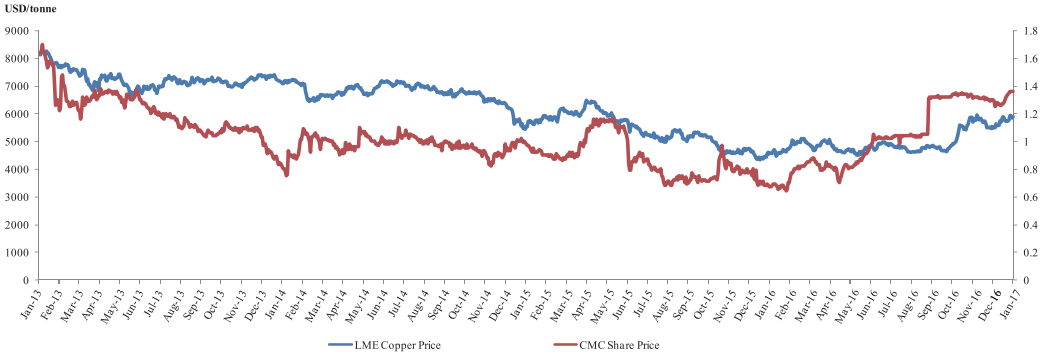
Source: Bloomberg

During the Review Period I, we note that the closing prices of Shares ranged from HK$0.64 to HK$1.70, with an average closing price of approximately HK$1.02. The Cancellation Price of HK$1.39 is within the range of the lowest and highest closing price of the Shares quoted on the Stock Exchange during the Review Period I, and represented a premium of approximately 117.2% over the lowest closing price of HK$0.64 recorded on 25 February 2016, and a discount of approximately 18.2% to the highest closing price of HK$1.70 recorded on 4 February 2013 shortly after the company completed its public offering and when copper prices were consistently higher than they are trading. Moreover, the Cancellation Price represents a premium of approximately 36.3% over the average closing price of approximately HK$1.02.

The share price of the Company recorded the highest closing price of HK$1.70 on 4 February 2013 being the third day from its First Trading Day on the Stock Exchange. The share price then experienced a prolonged decline during the Review Period I. We think that the decline of the share price was mainly attributed to the significant drop in the copper price and a faltering global economy during the Review Period I. Exhibit 2 below shows the CMC Share price performance since IPO corresponding to the copper price over January 2013 to October 2016.

Exhibit 2: CMC Share price performance corresponding to copper price

CMC Share Price Performance Since IPO Corresponding Copper Price



Source: Bloomberg

As depicted above, the performance trend of the CMC shares is consistent with the performance of the copper price in that CMC Shares had followed the decline in copper prices since the Company's IPO in January 2013. The copper price has decreased approximately 27.6% from approximately US$8,128.25 per tonne on 31 January 2013 to approximately US$5,883.50 per tonne on the Latest Practicable Date and the Company's share price declined by approximately 17.1% from 31 January 2013 to the Latest Practicable Date.

Furthermore, the Company's share price suffered a marked slump during the period from late May 2015 to February 2016 when the share price recorded a historical low of HK$0.64 on 25 February 2016. This slide was mainly due to the fact that the Hang Seng Index dropped nearly 8,500 points during the same period and we believe that such fluctuation of share price were due to the unstable economic indicators in China and poor overall market sentiment.

We also note that the share price of the Company rose to a closing price of HK$1.31 on 26 September 2016, being the first trading day after the Company released the Joint Announcement, which represented an increase of approximately 24.8% as compared with the closing price on the Last Trading Day. As we can see from Exhibit 1, the Share price closed in a range between HK$1.31 and HK$1.36 from the first trading day after the Joint Announcement to the Latest Practicable Date, prices which were significantly above most of the Share prices during the Review Period I. However, the

Independent CMC Shareholders should be aware that there is no assurance that the share price of the Company will remain at the current level if the Proposal and the Scheme lapse.

(b) *Analysis of trading volume of the Shares*

The table below sets out the monthly total trading volumes of the Shares, the average daily trading volumes of the Shares, and the percentages of the average daily trading volume to the total issued Shares and public float of the Company during the February 2013 to the Latest Practicable Date (the "**Review Period II**") (since in January 2013 the Shares traded one day only, the First Trading Day of the Company, the month of January 2013 is non-comparative and should be excluded):

Month	**Monthly total trading volume of Shares**	**Average daily trading volume of Shares** *(Note 1)*	**Percentage of average daily trading volume of Shares to total issued Shares** *(Note 2)*	**Percentage of average daily trading volume of Shares to public float of the Company** *(Note 3)*
2013				
February	408,570,000	24,033,529	0.204%	13.617%
March	119,884,000	5,994,200	0.051%	0.356%
April	64,357,000	3,217,850	0.027%	0.191%
May	37,600,000	1,790,476	0.015%	0.106%
June	53,164,000	2,798,105	0.024%	0.166%
July	14,025,000	637,500	0.005%	0.038%
August	23,557,000	1,121,762	0.009%	0.067%
September	17,472,000	873,600	0.007%	0.052%
October	19,384,000	923,048	0.008%	0.055%
November	24,606,000	1,171,714	0.010%	0.070%
December	15,582,000	779,100	0.007%	0.046%
2014				
January	21,549,000	1,026,143	0.009%	0.061%
February	35,322,000	1,859,053	0.016%	0.110%
March	66,996,468	3,190,308	0.027%	0.189%
April	14,460,000	723,000	0.006%	0.043%
May	16,006,000	842,421	0.007%	0.050%
June	7,232,000	361,600	0.003%	0.021%
July	19,682,000	894,636	0.008%	0.053%
August	13,850,000	659,524	0.006%	0.039%
September	9,306,000	443,143	0.004%	0.026%
October	6,346,000	302,190	0.003%	0.018%
November	24,880,404	1,244,020	0.011%	0.074%
December	19,709,060	938,527	0.008%	0.056%

Month	Monthly total trading volume of Shares	Average daily trading volume of Shares *(Note 1)*	Percentage of average daily trading volume of Shares to total issued Shares *(Note 2)*	Percentage of average daily trading volume of Shares to public float of the Company *(Note 3)*
2015				
January	18,038,000	858,952	0.007%	0.051%
February	8,226,000	483,882	0.004%	0.029%
March	10,152,000	461,455	0.004%	0.027%
April	92,508,940	4,868,892	0.041%	0.289%
May	127,494,000	6,710,211	0.057%	0.399%
June	65,640,900	2,983,677	0.025%	0.177%
July	15,040,000	683,636	0.006%	0.041%
August	10,770,000	538,500	0.005%	0.032%
September	2,386,000	132,556	0.001%	0.008%
October	3,888,000	204,632	0.002%	0.012%
November	11,130,000	585,789	0.005%	0.035%
December	5,592,000	310,667	0.003%	0.018%
2016				
January	17,350,301	867,515	0.007%	0.052%
February	1,360,000	113,333	0.001%	0.007%
March	13,079,000	622,810	0.005%	0.037%
April	10,164,000	534,947	0.005%	0.032%
May	21,784,000	1,037,333	0.009%	0.062%
June	34,670,000	1,650,952	0.014%	0.098%
July	16,622,000	831,100	0.007%	0.049%
August	11,960,000	543,636	0.005%	0.032%
September	91,378,000	6,091,867	0.052%	0.362%
October	191,022,000	10,053,789	0.085%	0.597%
November	59,532,900	2,706,041	0.023%	0.161%
December	71,712,000	3,585,600	0.030%	0.213%
2017				
January (up to the Latest Practicable Date)	143,244,000	7,539,158	0.064%	0.448%

Source: Bloomberg

Notes:

(1) Average daily trading volume is calculated by dividing the total trading volume of the Shares for the month/period by the number of trading days during the month/period

(2) The calculation is based on the average daily trading volumes of the Shares divided by the total issued share capital of the Company at the end of each month or as at the Latest Practicable Date, as applicable

(3) The total number of Shares held by the public is calculated based on the number of total issued Shares excluding those held by the Offeror and the Offeror Concert Parties

The average daily trading volume of the Shares as a percentage of the total issued Shares ranged from approximately 0.001% to approximately 0.204%, and the average daily trading volume of the Shares as a percentage of public float of the Company ranged from 0.007% to approximately 13.617% during the Review Period II. We note that the highest average daily trading volume of the Shares as a percentage of the total issued Shares and the highest average daily trading volume of the Shares as a percentage of public float were 0.204% and 13.617% respectively, and both of the abovesaid figures were occurred on the First Trading Day, which we consider to be a normal market phenomenon during the early period of a listing. The relatively high level of average daily trading volume in September 2016 subsequent to the Joint Announcement may not be sustainable if the Proposal and the Scheme subsequently lapse.

Based on the above information, we see trading in the Shares has been erratic during Review Period II and the trading volume of the Shares has been low, especially in parts of Review Period II which recorded an average daily trading volume of Shares to total issued Shares as low as approximately 0.001%. In this regard, we consider it is unlikely there will be a significant improvement in the liquidity of trading in Shares of the Company in the short term. The Independent CMC Shareholders may not be able to dispose of a significant number of the Shares in the short term without adversely affecting the market price of the Shares. The Proposal and the Scheme offer a good opportunity for the Independent CMC Shareholders to dispose of their shareholdings at the Cancellation Price for a cash premium to the share price prior to the Joint Announcement, and especially for those holding large blocks of Shares.

6.2 *Comparable companies analysis*

In order to assess the fairness and reasonableness of the Cancellation Price, we have attempted to compare the Company with similar copper mining companies (''the **Comparable Companies**''). CMC is focused on developing the Toromocho Project through Chinalco Peru with proven reserve of approximately 9.7 million tonnes of copper, 371,000 tonnes of molybdenum, and 15,300 tonnes of silver, according to the 2015 Annual Report. The Company's ore resources and reserves have been estimated under ''JORC'' (Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves) for the Toromocho Project as at 31 December 2015 and based on the same assumptions in the Competent Persons Report. In order to ensure comparability in terms of business and share trading regulatory environment we think it is appropriate to choose Comparable Companies that are: (i) currently listed on the Main Board of the Stock Exchange; (ii) with principal business focusing on copper mining and the sales of non-ferrous metals; and (iii) market capitalization of HK$10 billion or above.

The Comparable Companies have been selected exhaustively on the above criteria, which have been identified, to the best of our endeavours, in our research through public information. The Comparable Companies are also those which have published sufficient information on their reserves and resources to make a useful comparison with the Company.

In our assessment, we have considered price-to-earnings ratio ("**P/E**"), price-to-book value ratio ("**P/B**"), enterprise multiple ("**EV/EBITDA**"), enterprise value-to-copper reserve ratio ("**EV/Copper reserve ratio**"), and enterprise value-to-copper resources ratio ("**EV/Copper resources ratio**"), which are commonly used to assess the financial valuation of a company engaged in mining business. However, given that the Company recorded net losses historically, the P/E of the Company is not applicable and hence, should not be used for the purpose of the Comparable Companies analysis. In consideration of the above-mentioned financial valuation, we think that the EV/Copper reserve ratio and EV/Copper resources ratio are essential when evaluating the performance of mining companies. According to JORC, an 'ore reserve' is the economically mineable part of a measured and/or indicated mineral resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of modifying factors. There are two ore reserve categories, namely proved ore reserve and probable ore reserve whereas proved ore reserve stands for a higher level of confidence than the probable ore reserve. On the other hand, a 'mineral resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral resources are sub-divided, in order of increasing geological confidence, into inferred, indicated and measured categories. In our analysis, we have used the data provided by the respective Comparable Companies to calculate their copper reserve and copper resources at the most certain level which is the proved copper reserve and measured copper resources. The EV/Copper reserve ratio and EV/Copper resources ratio can be interpreted as the value of the enterprise allocated to each tonne of proved copper reserve and measured copper resources. It is useful in measuring mining companies because it highlights how much investors are paying for the companies' core assets. The higher the ratio implies that the current investors are spending more to pay for the copper reserve and resources and it shows that the company is likely to be overvalued in terms of the copper reserves and resources it owns. The detailed analysis of Comparable Companies and the Company based on the Cancellation Price is shown in Exhibit 3 below.

Exhibit 3: Comparable Companies Analysis

Company Name	Stock Code	Market Capitalisation *in HK$ billion (Note 1)*	P/B *(x) (Note 2)*	EV/EBITDA *(x) (Note 3)*	EV/Copper reserve ratio *US$/tonne (Note 4)*	EV/Copper resources ratio *US$/tonne (Note 5)*
KAZ Minerals	847	11.4	7.8	26.4	1,258	720
Jiangxi Copper	358	46.7	1.2	17.7	621	N/A
MMG	1208	21.8	1.2	10.4	5,811 *(Note 6)*	5,433 *(Note 6)*
Average			3.4	18.2	940	N/A
Maximum			7.8	26.4	1,258	N/A
Minimum			1.2	10.4	621	N/A
The Company at Cancellation Price			3.2 *(Note 7)*	40.0 *(Note 8)*	1,826	3,309

Source: Stock Exchange, Bloomberg and the respective companies' latest annual reports

Notes:

(1) The market capitalisation as at the Latest Practicable Date extracted from Bloomberg.

(2) P/B Ratio is calculated based on the market capitalisation of the respective Comparable Companies as at the Latest Practicable Date divided by the latest published net assets attributable to shareholders of the respective Comparable Companies as extracted from Bloomberg.

(3) EV/EBITDA ratio is calculated based on the enterprise value of the respective Comparable Companies as at the Latest Practicable Date divided by earnings before interest, taxes, depreciation and amortization of the respective Comparable Companies as extracted from Bloomberg.

(4) Copper reserve of Comparable Companies are extracted from the respective company's latest annual reports, the copper reserve used are classified as proven copper reserve instead of probable copper reserve.

(5) Copper resources of Comparable Companies are extracted from the respective company's latest annual reports, the copper resources used are classified as measured copper resources instead of indicated or inferred copper resources. The copper resources of Jiangxi Copper are not available in its latest annual report.

(6) EV/Copper reserve ratio and EV/Copper resources ratio for MMG are outliers in this analysis and are therefore excluded in calculating the respective ratios' average, maximum and minimum. Please see below for detailed explanation.

(7) The P/B Ratio implied by the Cancellation Price is calculated by multiplying the Cancellation Price of HK$1.39 per Scheme Share by the total number of issued Shares as at the Latest Practicable Date, then divided by the net assets attributable to Shareholders of the Company.

(8) The EV/EBITDA ratio is calculated based on the enterprise value of the Company taking into consideration the Cancellation Price of HK$1.39 per Scheme Share, then divided by earnings before interest, taxes, depreciation and amortization of the respective Comparable Companies as extracted from Bloomberg.

The Comparable Companies that we have selected include KAZ Minerals PLC, Jiangxi Copper Company Limited, and MMG Limited. We understand that the number of the Comparable Companies may be limited, we consider they are suitable base on our selecting criteria as there are only three companies listed on the Main Board of Hong Kong Stock Exchange with market capitalisations of more than HK$10 billion as of the Latest Practicable Date and are engaged in the copper mining as their principal business with the selling of copper goods contributing at least 50% of their revenue as stated in their latest annual reports. In addition, during the process of selecting the Comparable Companies, we are aware that there are companies involved in the copper industry but listed on other stock exchanges such as the Australian Securities Exchange, London Stock Exchange, and Toronto Stock Exchange. As part of our review, we have reviewed information on such companies and analyzed their data in order to compare it with CMC. We are of the view that the results from analyzing those foreign listed companies are in line with the conclusions we have reached in our analysis for the Comparable Companies. As such, we consider these three companies are the most appropriate Comparable Companies in order to assess the fairness and reasonableness of the Cancellation Price.

After calculating the ratios for the Comparable Companies as shown in Exhibit 3, we noticed that there is an outlier for the EV/Copper reserve ratio. KAZ Minerals has US$1,258 of enterprise value for every tonne of copper reserve. Jiangxi Copper has US$621 of enterprise value for every tonne of copper reserve while MMG's ratio was US$5,811 per tonne. The reason for MMG having such a high EV/Copper reserve ratio is that it has the lowest copper reserve among the three Comparable Companies at approximately 2.5 million tonnes and the highest enterprise value among the three companies at approximately US$14.3 billion. We note from the MMG's latest annual report that MMG has most of its copper reserve categorized as probable instead of the more certain proven reserves, which we have used. To compare KAZ Minerals and Jiangxi Copper have approximately 4 million tonnes and 15 million tonnes of proven copper reserves, respectively, while both of them have a much lower enterprise value than that of MMG. For the similar reason, we believe MMG's EV/Copper resources ratio is also an outlier as MMG's measured copper resources amounted to approximately 2.6 million tonnes while KAZ Minerals' were approximately 7 million tonnes. We have also found out that more than 70% of MMG's copper resources are classified as indicated or inferred which is excluded from our calculations for the reason of uncertainty in the actual potential output. However, due to the lack of Jiangxi Copper's information on copper resources, we are not able to calculate the EV/Copper resources ratio for Jiangxi Copper. Therefore, we believe it is reasonable to consider MMG's EV/Copper reserve ratio of US$5,811/tonne and EV/Cooper resources ratio of US$5,433/tonne are outliers in this analysis and thus exclude them from our Comparable Companies analysis for this particular ratio.

To summarize the ratios as shown in Exhibit 3 above, (i) the P/B of the Comparable Companies ranged from approximately 1.2 to 7.8 ("**P/B Range**") with an average of 3.4 ("**P/B Average**"); (ii) the EV/EBITDA of the Comparable Companies ranged from 10.4 to 26.4 ("**EV/EBITDA Range**") with an average of 18.2 ("**EV/EBITDA Average**"); (iii) the EV/Copper reserve ratio of the Comparable Companies ranged from approximately 621 to

1,258 US$/tonne ("**EV/Copper reserve ratio Range**") with an average of approximately 940 USD$/tonne ("**EV/Copper reserve ratio Average**") considering MMG as an outlier in this ratio of 5,811 US$/tonne; and (iv) KAZ's EV/Copper resources ratio is 720 US$/tonne considering that MMG is also as an outlier in this ratio of 5,433 US$/tonne and lack of information from Jiangxi Copper.

We note that (i) the Cancellation Price amounts to a P/B of the Company of approximately 3.2 which is slightly below the P/B Average, nevertheless, it is within the P/B Range; (ii) although the EV/EBITDA of the Company of approximately 40.0 is above the EV/EBITDA Average and higher than the maximum EV/EBITDA of the Comparable Companies of 26.4, it is mainly due to the Company had a high leverage capital structure to implement and maintain the Toromocho Project. As the Toromocho Project is still at an early stage, we think that it has a significant effect in expanding the Company's enterprise value. We therefore consider that it is justifiable to compare with the Comparable Companies as no other Comparable Companies has a similar size of project implemented recently; (iii) the EV/Copper reserve ratio of the Company of approximately US$1,826/tonne is above the EV/Copper reserve ratio Average and the EV/Copper reserve ratio Range; and (iv) the EV/Copper resources ratio of the Company of approximately US$3,309/tonne is much higher than that of KAZ Minerals, which is US$720/tonne. However, we consider the EV/Copper resources ratio in this case to be for reference only as there is not sufficient data to allow a proper comparison as Jiangxi Copper does not reveal such information in their latest annual report and MMG is considered to be an outlier. Therefore, neither the Comparable Companies' EV/Copper resources ratio average nor range is available for us to compare with.

We further note that the Comparable Companies may exhibit differences such as location of mines, mine life, metals, business models, risk associated with the type of mineralization and extraction, markets and customers as compared with the Company. However, we consider that the Comparable Companies, in general, serve as fair and representative samples for the purpose of comparison with the Company given that (i) the principal businesses of the Comparable Companies are similar to that of the Company, in that the Comparable Companies and the Company both encounter similar market conditions and exposures to government regulations; and (ii) the criteria for having principal business focus on copper mining implies that the type of the mining assets of the Comparable Companies are similar to that of the Company, which indicates that the commonly used copper mining industry parameter EV/copper reserve ratio is comparable.

In light of the above, we are of the view that the Cancellation Price is fair and reasonable as far as the Independent CMC Shareholders are concerned.

6.3 ***Successful privatisation precedents***

Exhibit 4 below shows a comparison of the Proposal to other privatisation proposals of companies listed on the Stock Exchange announced since 1 January 2015 up to the Latest Practicable Date, excluding privatisation proposals which were not approved (the "**Privatisation Precedents**"), which represents an exhaustive list of privatisation proposals

we were able to identify from the Hong Kong Stock Exchange. Exhibit 4 illustrates the premiums over the relevant last trading day, 30 days, 90 days, 120 days, and 180 days average share prices at which such privatisation proposals have been priced:

Exhibit 4: successful privatisation precedents

			Premium of offer/cancellation price over the share price prior to the announcement of privatisation proposals				
Date of initial announcement	**Company**	**Principle activities**	**Last trading day**	**30 days average share price**	**90 days average share price**	**120 days average share price**	**180 days average share price**
8 July 2016	Nirvana Asia Ltd (stock code: 1438) *(Note 1)*	sale of niches and burial plots, the provision of tomb design and construction services, the provision of cemetery and columbarium facilities maintenance services, and embalming, funeral and cremation services	22.4%	36.4%	36.4%	36.4%	36.4%
17 June 2016	Bracell Limited (stock code: 1768)	a leading player in the global specialty cellulose market	2.3%	81.1%	101.0%	104.6%	102.9%
13 June 2016	TCL Communication Technology Holdings Limited (stock code: 2618)	manufacturing and sale of mobile and internet products	34.7%	47.1%	42.0%	39.1%	36.4%
24 May 2016	Peak Sport Products Co., Limited (stock code: 1968)	manufacturing and distribution of sportswear including footwear, apparel and accessories	10.6%	15.6%	24.4%	27.5%	25.0%
30 March 2016	Dalian Wanda Commercial Properties Co., Ltd. (stock code: 3699)	property leasing and management, property development and hotel operation	3.0%	24.1%	33.2%	25.4%	18.2%
4 February 2016	Dongpeng Holdings Company Limited (stock code: 3386)	Design, develop, produce, market and sell a wide variety of ceramic tile products and bathroom products	31.8%	47.1%	54.5%	50.1%	35.6%
6 January 2016	New World China Land Limited (stock code: 917)	Property development and investment in the PRC	25.6%	40.8%	54.0%	57.7%	57.0%
20 October 2015	Wumart Stores, Inc. (stock code: 1025)	Operation of superstores and minimarts in the PRC	90.2%	68.8%	31.8%	18.8%	15.4%

Date of initial announcement	Company	Principle activities	Premium of offer/cancellation price over the share price prior to the announcement of privatisation proposals: Last trading day	30 days average share price	90 days average share price	120 days average share price	180 days average share price
13 August 2015	Jingwei Textile Machinery Company Limited (stock code: 350) *(Note 2)*	Manufacturing and sale of textile machinery and the provision of trust and fiduciary services in the PRC	22.7%	14.0%	7.4%	12.1%	19.2%
27 May 2015	Dorsett Hospitality International Limited (stock code: 2266)	Hotel development, ownership and management	32.4%	41.3%	42.4%	39.7%	34.3%
26 February 2015	econtext Asia Limited (stock code: 1390)	Provision of online payment services, advertising related services and other e-commerce solutions	41.0%	59.9%	51.3%	49.9%	43.2%
		Maximum	90.2%	81.1%	101.0%	104.6%	102.9%
		Minimum	2.3%	14.0%	7.4%	12.1%	15.4%
		Average	28.8%	43.3%	43.5%	41.9%	38.5%
		Median	25.6%	41.3%	42.0%	39.1%	35.6%
The Proposal and the Scheme			32.4%	33.7%	46.9%	51.5%	61.6%

Source: Stock Exchange and Bloomberg

Notes:

(1) The premiums were calculated based on the Cash Alternative offer price of the privatisation proposal (HK$3.00 for every Scheme Share) which the investors choose to receive cash in exchange for Nirvana Asia Ltd.'s shares instead of choosing the Holdco Shares Alternative which is to receive 2.100076 Holdco Preference Share(s) and 0.031501 Holdco Ordinary Share(s), plus cash of HK$1.37, for every scheme share whereas Holdco is Asia Memorial Group Limited.

(2) The premiums were calculated based on the offer price of the privatisation proposal over the share price of Jingwei Textile Machinery Company Limited ("Jingwei") prior to the announcement of Jingwei dated 28 July 2015 in respect of the possible offer to acquire all the issued H shares of Jingwei.

As indicated above, the premiums over the Cancellation Price over the Last Trading Day, 30 days, 90 days, 120 days and 180 days (i) fall within the range of the premiums of offer/cancellation prices for the Privatisation Precedents over such benchmarked days; and (ii) are near or higher than the average or median of the aforesaid premiums for the Privatisation Precedents. Exhibit 4 indicates that the premiums as offered by the Cancellation Price are in line with or higher than the premiums that have been offered by other Privatisation Precedents since 1 January 2015. As such, we are of the view that the Cancellation Price is fair and reasonable as far as the Independent CMC Shareholders are concerned.

6.4 ***The Valuation Report***

In order to assess the basis in determining fairness of the Cancellation Price of the Proposal, we have reviewed the Valuation Report and Competent Persons Report. We note that the reports are in compliance with the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the "**JORC Code**") 2012 edition that is suitable for public reporting and meets the reporting standards of Chapter 18 of the Listing Rules and the "Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (the "**VALMIN Code**"), 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". Besides, we have also reviewed and enquired the Independent Valuer's qualification and experience in relation to the performance of the valuation. We understand that the Independent Valuer has extensive experience in valuing similar assets over the years and they are independent from the Company and other related parties involved in the Proposal and the Scheme.

The valuation has been carried out on a fair market value basis. We understand that the fair market value is defined as "the amount of money (or the cash equivalent of some other consideration) determined by the expert in accordance with the provisions of the VALMIN Code for which the mineral or petroleum asset or security should change hands on the valuation date in an open and unrestricted market between a willing buyer and a willing seller in an arm's length transaction, with each party acting knowledgeably, prudently and without compulsion".

We note from the Independent Valuer that the valuation in the Valuation Report contains calculations and forecasts substantially based on data contained in the Competent Persons Report dated 23 January 2017, as well as the information provided directly by the Company. The aggregate fair market value of the Toromocho Project as at 2 December 2016 was determined to be US$4.79 billion based on the market-based approach, and to be US$4.47 billion based on the income-based approach (without considering the debt and cash it has loaded on the current balance sheet of the Company) which are the two approaches commonly used to determine fair market value.

Market-based approach

Following discussions with the Independent Valuer, we note that the Independent Valuer has used the market-based approach to look at comparable sales of copper mines to provide an estimate of the amounts received by other operating copper producers in recent sales and to provide a high level basis for the estimate of the price a buyer might pay for the Toromocho Project. The market-based approach is a method of determining the appraisal value of an asset based on the selling price of similar items.

Income-based approach

The Independent Valuer has also used the income based approach that focused on the economic benefits due to the income producing capability of the mineral asset, given the relative predictability and viability of future economic inflows.

In light of the above two approaches used by the Independent Valuer, we have reviewed and discussed with the Independent Valuer the methodology, the basis and the assumptions adopted for the valuation of the Toromocho Project. We understand that the Independent Valuer has considered i) the discounted cash flow ("**DCF**") approach — under the income-based approach and ii) the comparable transactions approach — under the market-based approach. The Independent Valuer considers that each of these two approaches is appropriate in one or more circumstances and sometimes may be used together. Nevertheless, considering the special features of the mining industry, in particular (1) different locations involving different country risks and political issues; (2) different sizes and mine lives; (3) exchange risk; and (4) the difficulties facing for the Independent Valuer when considering the details of the transactions recently completed on an arm's length basis where the subject businesses are sufficiently similar to the Company, we are of the view that the DCF approach is more appropriate on valuing the Toromocho Project.

Given the commencement of commercial production of the Toromocho Project last year, we think it would be better to value the Toromocho Project on a separate, stand-alone operational basis since on our view is that the DCF technique is particularly appropriate for mineral properties having defined resources and is the usual approach for the valuation of operating mines. It is also more appropriate for valuing assets such as mineral assets which are depleted over time and where significant capital expenditure might be required. The DCF approach involves the calculation of the net present values by discounting expected future cash flows using discount rates that take into account the time value of money and risks associated with the cash flows.

We note that the Independent Valuer has applied a discount rate of 7% based on the Company's projection of their Weighted Average Cost of Capital ("**WACC**"). We have discussed with the Independent Valuer and reviewed the detailed analysis in determining the discount rate. We understand that the discount rate is also made by reference to the publicly available data adjusted by the Company's capital structure and specific risk and

based on the professional judgment and internal research of the Independent Valuer. We concur with the view and their expertise of the Independent Valuer and are of the view that the discount rate adopted in the valuation is fair and reasonable. We further note that the Independent Valuer has included a forecast of the future copper price increasing to US$3.00/lb in 2020. After reviewing the historical performance of the global copper price, we consider the forecast of the future copper price to be fair and reasonable. We note the copper price forecast is a critical factor in the DCF approach used to estimate the fair value of the Toromocho Project.

Our view on the reasonableness of the Cancellation Price is also based on the net present value of the Toromocho Project given in the Valuation Report. We have done an adjustment in respect of the net asset value of the Company made to the latest published consolidated financial information statements of the Company as at 30 June 2016 provided in the 2016 Interim Report (the "**Existing NAV**"). However, we found the adjusted net asset value based on our calculation to be lower than the Existing NAV. We think that a detailed comparison of the Cancellation Price with an adjusted net asset value of the Company that is lower than the Existing NAV per CMC Share would be of limited value. The Existing NAV per CMC Share is approximately HK$0.41 and, the Cancellation Price represents a premium of approximately 239.0% over the Existing NAV per CMC Share. The premium of the Cancellation Price over the Existing NAV per CMC Share is substantial and we are of the view that the Cancellation Price is fair and reasonable as far as the Independent CMC Shareholders are concerned.

7. The Spot Sales Mechanism

7.1 *Background of the Spot Sales Mechanism*

We note from the Company that in the course of its normal business operations, it has been engaged in sales of copper concentrates to the Offtake Shareholders and/or their respective affiliates. Such sales are made under (i) offtake sales contracts with terms that are within the parameters set out in the existing offtake agreements which were entered into between 2012 and 2014, and (ii) spot sales contracts with terms that are outside the scope of the relevant offtake agreements. Prior to the time the Proposal and the Scheme were reasonably contemplated by the Company, it had entered into several Existing Spot Sales Contracts. It is expected that the Company will continue to engage in sales with the Offtake Shareholders and/or their respective affiliates under offtake sales contracts and spot sales contracts.

As stated under the section Part VII headed "Explanatory Memorandum" contained in the Scheme Document, we note from the Company that sales under any offtake sales contracts to be entered into between CMC and any Offtake Shareholder and/or their respective affiliates would not be considered a special deal in view of the fact that (i) they will be entered into within the parameters set out in the existing offtake agreements, and (ii) they are an implementation of the relevant existing offtake agreement. Furthermore, should entering into such offtake sales contracts be deemed as special deals as defined under Rule 25 of the

Takeovers Code, CMC would be subject to certain restrictions on the performance of its obligations under the existing offtake agreements, which might lead to potential breach of certain terms of such agreements by CMC. In order to ensure that any offtake sales contract will be entered into within the parameters set out in the relevant existing offtake agreement, sales under offtake sales contracts would be supervised and overseen by the independent non-executive directors of CMC from the Announcement Date until six months after the Effective Date.

We further note from the Company that the Existing Spot Sales Contracts would not be considered a special deal in view of the fact that (i) they were entered into prior to the Scheme and the Proposal were reasonably contemplated by CMC, and (ii) they are merely implementation of the existing contracts. Any Future Spot Sales Contract would constitute a special deal and requires the consent of the Executive under Rule 25 of the Takeovers Code, as it would not be entered into pursuant to existing offtake agreements and would be only entered into by and between CMC and the Offtake Shareholders and/or their respective affiliates without involving or being offered to all the CMC Shareholders. Upon obtaining the consent of the Executive under Rule 25 of the Takeovers Code, any spot sales contract to be entered into between CMC and the Offtake Shareholders and/or their respective affiliates from the Announcement Date until six months after the Effective Date would be considered to have complied with the requirements under the Takeovers Code if terms of the spot sales contract are within the Spot Sales Mechanism. Independent non-executive directors of CMC will (i) review the Spot Sales Mechanism to ensure it is fair and reasonable and (ii) supervise and oversee the entering into of any spot sales contract by CMC to ensure that the material terms of such contract would be within the Spot Sales Mechanism for a period of six months after the Effective Date.

Set out below are details of the Spot Sales Mechanism which are determined with reference to the historical sales of copper concentrates by CMC to the Offtake Shareholders and/or their respective affiliates and are in line with pricing mechanisms used within the industry.

A. *Product Quality*

The copper concentrates specifications will be based on the anticipated production quality of the Toromocho Project at the time each spot sales contract is entered into. However, the Offtake Shareholders and/or their respective affiliates will have the right to either reject the copper concentrates or accept the copper concentrates with sales price being subject to the pricing terms in this Spot Sales Mechanism if such copper concentrates have any of the following attributes:

(a) Arsenic ("**AS**") content exceeds 0.5%; or

(b) Zinc ("**ZN**") content equals to or exceeds 4.0%; or

(c) Fluorine ("**F**") content equals to or exceeds 0.13%; or

(d) Antimony ("**SB**") content equals to or exceeds 0.05%; or

(e) Bismuth ("**BI**") content equals to or exceeds 0.05%; or

(f) Magnesium Oxide ("**MgO**") content equals to or exceeds 5.0%.

B. *Pricing Terms*

The sales price of copper concentrates shall be the sum of the value of the payable metals contents calculated in accordance with part (A) below less the sum of the deductions calculated in accordance with part (B) below.

(A) *Pricing for Payable Metal Contents*

(a) Copper

The Offtake Shareholders and/or their respective affiliates shall pay for 96.65% or higher of the full copper content as per final copper assays at the LME Grade "A" copper settlement quotation, as published in the London Metal Bulletin and quoted in US$/DMT, averaged over Quotational Period (as defined in part (C) below), subject to

(i) a minimum deduction of no more than 1.00 units (1.0% for copper concentrates) per DMT if the copper content in concentrates is over 20%; and

(ii) a minimum deduction of no more than 1.30 units (1.3% for copper concentrates) if the copper content in concentrates is equal to or below 20%.

(b) Silver

The Offtake Shareholders and/or their respective affiliates shall pay for 90% of the full silver content subject to a minimum deduction of no more than 40.00 grams per DMT at the London Silver Price (CME Group & Thomson Reuters), quoted in US$/troy ounce, averaged over the Quotational Period (as defined in part (C) below).

(c) Gold

The Offtake Shareholders and/or their respective affiliates shall pay for 90% of the full gold content as per final assays subject to a minimum deduction of no more than 1.50 grams per DMT at the mean of the London AM/PM fix for gold, as published in Metal Bulletin and quoted in US$/troy ounce, averaged over the Quotational Period (as defined in part (C) below).

(B) *Deductions*

(a) Treatment Charge

If AS content is less than 0.5% and F content is less than 1,000 ppm (0.1%), the treatment charge shall be +/- 15% of the benchmark treatment charge for Far East/Asia published in Metal Bulletin/CRU (which is determined after negotiations among major copper producers and smelters at the beginning of each year, and for illustration purpose, Freeport-McMoRan and Jiangxi Copper had settled the annual TC/RC for the year of 2017 at US$92.50 per tonne as the 2017 benchmark rate for copper concentrate treatment and refining charges). Otherwise, the maximum treatment charge deduction shall be 300% of such benchmark treatment charge.

Freight allowance for CIP Basis (i.e. "Carriage and Insurance Paid to") shall be no more than US$40.00 per wet metric tonne of copper concentrates to be added in the treatment charge.

(b) Refining Charge

For copper, refining charge will be no more than the treatment charge divided by 1,000 per lb of payable copper.

For silver, refining charge will be no more than US$0.75 per troy ounce of payable silver.

For gold, refining charge will be no more than US$6.00 per troy ounce of payable gold.

(c) Penalties for Impurity Contents

The penalty for each impurity content varies with reference to the level of such impurity content in the copper concentrates. Also, each spot sales contract may apply the penalty of some or all impurity contents. However, the average penalty charged by the Offtake Shareholders and/or their respective affiliates across all levels of such impurity content under each spot sales contract shall not exceed the average penalty set out in the table below, notwithstanding penalty for a certain batch of copper concentrates under such spot sales contract may be lower or higher than the average penalty. Therefore, the average penalty set out in the table below shows the maximum penalty exposure for each spot sales contract with the Offtake Shareholders and/or their respective affiliates.

Content	Range in which penalties will apply	Average Penalty
AS*(note)*	>0.2%	US$10.0/DMT per 0.1%
SB*(note)*	>500 ppm (0.05%)	US$3.0/DMT for each 100 ppm (0.01%)
AS+SB*(note)*	>0.2%	US$11.0/DMT per 0.1%
ZN	>2.0%	US$3.0/DMT for each 1.0%
Lead ("**PB**")	>1.0%	US$3.0/DMT for each 1.0%
BI	>500 ppm (0.05%)	US$3.0/DMT for each 100 ppm (0.01%)
Mercury ("**HG**")	>20 ppm (0.002%)	US$2.4/DMT for each 10 ppm (0.001%)
Chlorine ("**CL**")	>400 ppm (0.04%)	US$2.4/DMT for each 100 ppm (0.01%)
F	>300 ppm (0.03%)	US$10.0/DMT for each 100 ppm (0.01%)
Nickel+Cobalt ("**Ni+Co**")	>0.5%	US$3.6/DMT for each 0.1%
MgO	>1.0%	US$8.0/DMT for each 1.0%
H_2O	>8%	US$2.5/DMT for each 1.0%

Note: For penalties for impurity contents of AS and SB, buyer has the option to choose to apply either (i) AS standalone penalty plus SB standalone penalty or (ii) AS+SB penalty as a whole.

Pro-rata penalties will apply to all fractions of impurity contents in the copper concentrate.

(C) *Quotational Period*

The Quotational Period will be either (a) the first month following the month of actual receipt by the buyer (M+1), or (b) the third or fourth month following the month of actual receipt by the buyer (M+3/M+4), declared at the option of the relevant Offtake Shareholder and/or its affiliate separately for each payable metal

before the earliest shipment according to delivery clause in each Future Spot Sales Contract. The declared Quotational Period should be available for the whole contractual shipment period.

C. *Other Miscellaneous Terms*

Other contractual terms, including delivery arrangement, payment terms, weighing, sampling and moisture determination for final settlement, assaying, will be based on terms that are conventional in the global copper industry, and will be materially the same with those in existing spot sales contracts of CMC.

7.2 ***Opinion on the Spot Sales Mechanism***

To consider whether the Spot Sales Mechanism is fair and reasonable, we have compared the detailed terms of the Spot Sales Mechanism against the spot sales contracts of the Company with independent third parties (other than the Offtake Shareholders (or their affiliates) and the Company's connected persons under the Listing Rules) ("**Independent Spot Sales Contracts**"). We confirm that the principal terms (such as the adoption of LME and LBMA as commodity pricing benchmarks, the specific discounts to benchmark commodity price, the treatment and the refining charges, and the adjustments and penalties on impurity contents) of the Spot Sales Mechanism are in line with our reviewed sample documents related to the Independent Spot Sales Contracts. After discussions with the management of the Company, we consider that the terms of the Spot Sales Mechanism are on normal commercial terms.

From our point of view, given that the pricing terms of Spot Sales Mechanism do not differ materially from the pricing terms of the Independent Spot Sales Contracts, it would be acceptable and reasonable to believe that the Company would have entered into the spot sales contracts that are within the parameters of the Spot Sales Mechanism as part of its normal course of business and irrespective of whether or not the Scheme and the Proposal will not proceed or lapse.

In light of the above after taking into account that, in particular, (i) the pricing terms of the Spot Sales Mechanism are primarily based on quotations by the LME and the LBMA, which are widely recognised bodies in the metals trading industry; (ii) the pricing terms of the Spot Sales Mechanism are materially consistent with the pricing terms of Independent Spot Sales Contracts; (iii) other principal terms of the Spot Sale Mechanism, including but not limited to the specific discounts to benchmark commodity price, treatment and refining charges and the penalties on impurities, are in line with our reviewed sample documents related to the Independent Spot Sale Contracts; and (iv) the independent non-executive directors of CMC will supervise and oversee the entering into of any spot sales contract by CMC to ensure that the material terms of such contract would be within the Spot Sales Mechanism for a period of six months after the completion of the Proposal, we are of the view that the terms of the Spot Sales Mechanism are fair and reasonable as far as the Disinterested CMC Shareholders are concerned.

8. Proposed Equity Transfer regarding the Simandou Project

8.1 *Background of the Proposed Equity Transfer*

We understand that the Simandou Project is an iron ore mining and infrastructure project in Guinea, West Africa which has been controlled and operated by Rio Tinto Group since 1997. Chalco Iron Ore formally participated in the Simandou Project by way of acquiring a 47% interest in Simfer Jersey in April 2012, an indirect holding company of the Simandou Project.

On 28 October 2016, Rio Tinto Simfer and Chalco Iron Ore entered into the non-binding Heads of Agreement with the Government of Guinea signing as a witness, with a view to promoting both parties to reach a preliminary common understanding in relation to, among other things, the proposed Equity Transfer. The proposed Equity Transfer is also in line with the joint venture arrangements between Rio Tinto Simfer and Chalco Iron Ore which provide for the preemptive right of Chalco Iron Ore where Rio Tinto Simfer intends to dispose of any of its interest in Simfer Jersey.

8.2 *Information on the Proposed Equity Transfer*

Pursuant to the Heads of Agreement, Rio Tinto Simfer and Chalco Iron Ore shall engage in good faith discussions and use their commercially reasonable endeavours to reach binding and definitive agreements on terms consistent with the principles and key terms of the Heads of Agreement within six months of the date of the Heads of Agreement to give effect, among other things, the Equity Transfer.

The consideration for the Equity Transfer shall be the aggregate amount of (i) Rio Tinto Group's total expenditure in relation to the Simandou Project (other than the IFC Put Option Price) at the time of completion with a 15% or 25% discount depending on the date on which the Simandou Project has its first shipment of iron ore in commercial quantities (the "**First Shipment Date**") and (ii) Rio Tinto Simfer's 53% share of the IFC Put Option Price. According to the Heads of Agreement, Rio Tinto Group's total historical expenditure in relation to the Simdandou Project amounted to approximately US$1,400 million as at 30 September 2016. The consideration will be updated and calculated to include Rio Tinto Group's actual total historical expenditure at the time of completion and shall be payable by Chalco Iron Ore to Rio Tinto Simfer from the First Shipment Date at a unit rate with reference to the quantity of iron ore loaded for shipment.

In addition, the completion of the Equity Transfer shall be subject to certain conditions precedent set out in the Heads of Agreement and any other conditions precedent that may be agreed by Chalco Iron Ore and Rio Tinto Simfer. Both parties shall take all necessary steps to fulfil such conditions precedent no later than six months from the signing of the definitive agreements, or otherwise, any definitive agreements that may have been signed will terminate automatically.

The Heads of Agreement provides that the terms of the definitive agreements shall be consistent with the principles and key terms set out in the Heads of Agreement.

The provisions of the Heads of Agreement in relation to the proposed Equity Transfer form part of a proposal which is not legally binding. The Heads of Agreement shall automatically terminate if both parties fail to agree and enter into definitive agreements to give effect to the transactions contemplated thereunder by expiry of the six-month period following the date of the Heads of Agreement.

As the Heads of Agreement was entered into by and between the Chalco Iron Ore (a subsidiary of the Offeror) and Rio Tinto Simfer (a subsidiary of Rio Tinto International which is a CMC Shareholder), the proposed Equity Transfer contemplated under the Heads of Agreement constitutes a special deal and requires the consent of the Executive under Rule 25 of the Takeovers Code. We, being the CMC Independent Financial Adviser, is to advise the Independent CMC Shareholders as to whether the terms of the proposed Equity Transfer contemplated under the Heads of Agreement are fair and reasonable so far as the Independent CMC Shareholders are concerned, and to give independent advice whether the Independent CMC Shareholders should vote in favour of the relevant resolutions to be proposed at the EGM.

8.3 ***Opinion on the proposed Equity Transfer***

To consider whether the terms of the proposed Equity Transfer contemplated under the Heads of Agreement are fair and reasonable, we have reviewed the Heads of Agreement and discussed with the management of the Offeror regarding the rationales and basis for entering into the Heads of Agreement between Chalco Iron Ore and Rio Tinto Simfer, including (i) China is still the biggest consumer of iron ore in the world and the Simandou Project has the potential to become one of the world's largest iron ore mines in term of resources; and (ii) Chalco Iron Ore has been a shareholder of Simfer Jersey since April 2012 and has the preemptive right. As such, we consider that it is reasonable for Chalco Iron Ore to enter into the proposed Equity Transfer contemplated under the Heads of Agreement.

In addition, we note that the Heads of Agreement is a non-binding agreement and the proposed Equity Transfer contemplated thereunder is subject to the fulfilment of certain conditions such as (i) Chalco Iron Ore and Rio Tinto Simfer need to enter into binding and definitive agreements within a six months period; and (ii) Chalco Iron Ore and the State of Guinea need to agree on certain revisions and updates to the legal framework of the Simandou Project. If such conditions are not fulfilled then the Heads of Agreement will expire at the end of the six months period and the proposed Equity Transfer will not proceed.

We further note that although the Heads of Agreement sets out certain principal terms for the proposed Equity Transfer and the basis on which Chalco Iron Ore and Rio Tinto Simfer intend to enter into definitive agreements for the proposed Equity Transfer, it is inherently subject to the various conditions precedent including respective board approvals and respective regulatory approvals in China and United Kingdom. Accordingly, we are of the view that the

principal terms of the proposed Equity Transfer contained in the Heads of Agreement are conditional and shall not be construed as an undertaking or irrevocable terms as no warranty is implied or expressed that the final definitive documentation will conform to the principal terms of the proposed Equity Transfer presented in the Heads of Agreement.

Moreover, we have reviewed terms in relation to the consideration of the proposed Equity Transfer as set out in the Heads of Agreement, which in principal is based on the total historical expenditure of Rio Tinto Simfer in relation to the Simandou Project and with certain discount. Although the exact amount of the consideration cannot be determined at this stage, we note that Chalco Iron Ore is conducting due diligence process in relation to the proposed Equity Transfer and it will appoint an independent auditor for the respective financial due diligence process. We are also taking into consideration that Chalco Iron Ore has been a shareholder of Simfer Jersey since April 2012 and has direct access to the historical financial data of Simfer Jersey including capital expenditure and investment costs. As such, we are of the view that there are sufficient mechanisms to safeguard the consideration will be determined on arm's length and on normal commercial terms. Nevertheless, given that the operational date or capability of the Simandou Project is not yet clear and the project has a history of delays, consideration (if any) would only be paid upon the first commercial shipment — reflecting the significant uncertainty and risk associated with the amount that will ultimately be paid and the ability to quantify that. We also understand that any valuation would involve significant time and expense from a party, and any result given the inherent uncertainty, would potentially be speculative or so wide as to be meaningless. Our analysis has also considered that (1) the rationale for entering into the Heads of Agreement is standalone and different from the CMC privatisation (involving iron ore mining business and not copper); (2) procedurally the Offeror has represented to us that the proposed Equity Transfer contemplated under the Heads of Agreement is a separate process from the privatisation of CMC; (3) there is little incentive for the Offeror to favour Rio Tinto in connection with privatisation of CMC as Rio Tinto is a concert party of the Offeror and not able to vote on the Scheme and (4) a pricing mechanism for the proposed Equity Transfer tied to historical contributed cost (applying a discount) is not an unusual methodology. In this regard, we are not able to opine on whether the amount of the consideration is fair and reasonable in relation to the proposed Equity Transfer contemplated under the Heads of Agreement and we think that it is unnecessary to conduct a valuation on the joint venture at the moment.

From our point of view, we consider that the proposed Equity Transfer contemplated under the Heads of Agreement is not intended to create any legally obligations on either party but, rather, is intended to facilitate discussions and explore the possibilities of the proposed Equity Transfer at the moment. In this regard, we have also reviewed the pre-existing shareholder agreement between Chalco Iron Ore and Rio Tinto Simfer and others, and we consider that the terms of the Equity Transfer set out under the Heads of Agreement are consistent with the pre-existing shareholder agreement which provides a preemptive right to Chalco Iron Ore when Rio Tinto Simfer wishes to dispose of any of its interest in Simfer Jersey.

Given CMC is the core platform of Chinalco for acquisition, investment, development and operation of non-ferrous and non-aluminum mineral resources and projects outside China, we understand from the management of the Company that CMC would not engage in the acquisition of iron ore mines as is contemplated by the Heads of Agreement which are ferrous mineral resources.

In light of the above, we consider that the terms of the proposed Equity Transfer contemplated under the Heads of Agreement have been made with due care and consideration and are arrived based on the arm's length negotiation and are on normal commercial terms. We are also of the view that the terms of the proposed Equity Transfer contemplated under the Heads of Agreement are fair and reasonable as far as the Independent CMC Shareholders are concerned. Therefore, we recommend the Independent CMC Shareholders to vote in favour of the relevant resolutions to be proposed at the EGM to approve the proposed Equity Transfer contemplated under the Heads of Agreement.

RECOMMENDATION

Having considered the above principal factors and reasons as summarized below, we consider that the terms of the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement are fair and reasonable as far as the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) are concerned:

(a) given the anticipated need for capital expenditures for the Toromocho Project, the Company faces ongoing financial pressures with the outstanding total indebtedness of approximately US$4.3 billion as at 30 June 2016 resulting in a continuing loss attributable to the shareholders of the Company for the past few years;

(b) it would be difficult for the Company to raise funds from the equity market using its listing under current market conditions and the current challenging outlook for the non-ferrous metal industry;

(c) the Cancellation Price represents a substantial premium of approximately 239.0% over the unaudited consolidated net asset value per CMC Share as at 30 June 2016;

(d) the overall trading volume of the Company has been relatively low during the Review Period and it is unlikely to expect any significant improvement in the liquidity of trading in Shares of the Company so that the Independent CMC Shareholders might not be able to dispose of a significant number of their Shares without adversely affecting the market price of the Shares;

(e) the Proposal and the Scheme offer an opportunity for the Independent CMC Shareholders to dispose of their shareholdings for a premium price in cash;

(f) the Cancellation Price offers premiums in line with the premiums as offered by other privatisation proposals in the market;

(g) the Spot Sale Mechanism is in the usual and ordinary course of the business of the CMC Group and its terms are normal commercial terms that are fair and reasonable; and

(h) the terms of the proposed Equity Transfer contemplated under the Heads of Agreement have been made with due care and consideration and are arrived based on the arm's length negotiation and are on normal commercial terms and are fair and reasonable.

Accordingly, we advise the CMC Independent Board Committee to recommend the Independent CMC Shareholders or the Disinterested CMC Shareholders (as the case may be) to vote in favour of the relevant resolutions(s) to be proposed at the Court Meeting and the EGM to approve and implement the Proposal, the Scheme, the Spot Sales Mechanism and the proposed Equity Transfer contemplated under the Heads of Agreement.

Last but not least, we would like to remind the Independent CMC Shareholders that the proposed Equity Transfer contemplated under the Heads of Agreement is not a Condition to the Proposal and the Scheme, so that whether the proposed Equity Transfer contemplated under the Heads of Agreement is approved at the EGM will not affect the voting on the Scheme at the Court Meeting.

Yours faithfully,
For and on behalf of
Platinum Securities Company Limited
Li Lan
Director and Co-Head of Corporate Finance

Mr. Li Lan is a licensed person registered with the Securities and Futures Commission and as a responsible officer of Platinum Securities Company Limited to carry out Type 1 (dealing in securities) and Type 6 (advising on corporate finance) regulated activities under the SFO and has over ten years of experience in the corporate finance industry.

This Explanatory Memorandum constitutes the statement required under Order 102, rule 20(4)(e) of the Rules of the Grand Court of the Cayman Islands 1995 (revised).

SCHEME OF ARRANGEMENT TO CANCEL ALL THE SCHEME SHARES IN CONSIDERATION OF THE OFFEROR AGREEING TO PAY THE CANCELLATION PRICE

1. INTRODUCTION

The Offeror and CMC jointly issued the Announcement, which stated that on 14 September 2016, the Offeror requested the CMC Board to put forward the Proposal to the holders of Scheme Shares regarding the proposed privatisation of CMC by way of a scheme of arrangement under Section 86 of the Companies Law.

The Scheme and the Proposal involve the cancellation of all the Scheme Shares in exchange for the Cancellation Price and the subsequent issuance of new CMC Shares to the Offeror, as a result of which it is intended that CMC will be wholly owned by the Offeror and the listing of the CMC Shares on the Stock Exchange will be withdrawn. If the Scheme becomes effective, the expected last date for trading in the CMC Shares on the Stock Exchange will be Monday, 6 March 2017.

The purpose of this Explanatory Memorandum is to explain the terms and effects of the Proposal, which are to be implemented by the Scheme, and to provide the CMC Shareholders with other relevant information in relation to the Scheme and the Proposal, in particular, to provide the intentions of the Offeror with regard to CMC and the shareholding structure of CMC before and after the Scheme and the Proposal.

Particular attention of the CMC Shareholders is drawn to the following sections of this Scheme Document: (a) the Letter from the CMC Board set out in Part IV of this Scheme Document; (b) the Letter from the CMC Independent Board Committee set out in Part V of this Scheme Document; (c) the Letter from the CMC Independent Financial Adviser set out in Part VI of this Scheme Document; and (d) the terms of the Scheme set out in Appendix V to this Scheme Document.

2. TERMS OF THE SCHEME AND THE PROPOSAL

The Proposal is to be implemented by way of a scheme of arrangement under Section 86 of the Companies Law.

Under the Scheme, the Scheme Shares will be cancelled and, in consideration thereof, each Scheme Shareholder whose name appears on the register of members of CMC as at the Scheme Record Date will be entitled to receive the Cancellation Price. The Cancellation Price will not be increased, and the Offeror does not reserve the right to do so.

CMC Shareholders whose names appear on the register of members of CMC as at the record date for entitlement to a dividend (if any) declared by CMC on or before the Effective Date will be entitled to receive such dividend (if any). CMC does not expect to declare any dividend on or before the Effective Date.

As at the Latest Practicable Date, the authorised share capital of CMC was US$1,000,000,000 divided into 25,000,000,000 CMC Shares of US$0.04 each, and the issued share capital of CMC was US$472,711,297.12 divided into 11,817,782,428 CMC Shares of US$0.04 each. All of the CMC Shares rank equally in all respects as regards to rights to capital, dividends and voting. As at the Latest Practicable Date, the CMC Shareholders (other than the Offeror) were interested in 1,816,611,000 CMC Shares, representing approximately 15.37% of the issued share capital of CMC.

After the Scheme becomes effective, the listing of the CMC Shares on the Stock Exchange will be withdrawn and CMC will be wholly owned by the Offeror. The Scheme and the Proposal are conditional upon the fulfillment or waiver, as applicable, of the Conditions as described in the paragraph headed "4. Conditions of the Scheme and the Proposal" below on or before the Long Stop Date (or such later date as the Offeror and CMC may agree or, to the extent applicable, as the Grand Court may direct and in all cases, as permitted by the Executive), failing which the Scheme and the Proposal will not proceed or will lapse, as the case may be. Further announcements on any changes regarding the timetable of the Scheme and the Proposal will be made as and when necessary.

If the Scheme and the Proposal do not become unconditional, CMC has no intention to seek the immediate withdrawal of the listing of the CMC Shares on the Stock Exchange.

Settlement of the Cancellation Price will be implemented in full in accordance with the terms of the Scheme and the Proposal, respectively, without regard to any lien, right of set-off, counterclaim or other analogous right to which the Offeror may otherwise be, or claim to be, entitled against any such Scheme Shareholder.

3. CANCELLATION CONSIDERATION

The Cancellation Price of HK$1.39 per Scheme Share represents:

- a premium of approximately 32.4% over the closing price of HK$1.05 per CMC Share as quoted on the Stock Exchange on the Last Trading Day;

- a premium of approximately 33.7% over the average closing price of approximately HK$1.04 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the 5 trading days up to and including the Last Trading Day;

- a premium of approximately 33.7% over the average closing price of approximately HK$1.04 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the 30 trading days up to and including the Last Trading Day;

- a premium of approximately 61.6% over the average closing price of approximately HK$0.86 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the 180 trading days up to and including the Last Trading Day;

- a premium of approximately 65.5% over the average closing price of approximately HK$0.84 per CMC Share based on the daily closing prices as quoted on the Stock Exchange for the one year up to and including the Last Trading Day;

- a premium of approximately 2.2% over the closing price of HK$1.36 per CMC Share as quoted on the Stock Exchange on the Latest Practicable Date; and

- a premium of approximately 239.0% over the unaudited consolidated net asset value per CMC Share of approximately HK$0.41[(note)] as at 30 June 2016.

Note: The unaudited consolidated net asset value per CMC Share is calculated based on the unaudited net asset value provided in the interim results announcement for the six months ended 30 June 2016 of CMC dated 23 August 2016. The translation between U.S. dollars and Hong Kong dollars were made at the rate of HK$7.75 to US$1.00.

4. CONDITIONS OF THE SCHEME AND THE PROPOSAL

The Proposal is, and the Scheme will become, effective and binding on CMC and all CMC Shareholders, subject to the fulfilment or waiver (as applicable) of the following conditions:

(a) the approval of the Scheme (by way of poll) by a majority in number of the holders of Scheme Shares representing not less than 75% in value of the Scheme Shares held by the holders of Scheme Shares present and voting either in person or by proxy at the Court Meeting, provided that:

  (i) the Scheme is approved (by way of poll) by at least 75% of the votes attaching to the Scheme Shares held by Independent CMC Shareholders that are cast either in person or by proxy at the Court Meeting; and

  (ii) the number of votes cast (by way of poll) against the resolution to approve the Scheme at the Court Meeting is not more than 10% of the votes attaching to all Scheme Shares held by Independent CMC Shareholders;

(b) (i) the passing of a special resolution by a majority of not less than 75% of the votes cast by CMC Shareholders present and voting in person or by proxy at the EGM to approve and give effect to the reduction of the issued share capital of CMC by cancelling the Scheme Shares, and (ii) the passing of an ordinary resolution by CMC Shareholders at the EGM to increase immediately thereafter the issued share capital of CMC to the amount prior to the cancellation of the Scheme Shares and apply the reserve created as a result of the aforesaid cancellation of the Scheme Shares to pay up in full at par such number of new CMC Shares as is equal to the number of Scheme Shares cancelled as a result of the Scheme, credited as fully paid, for issuance to the Offeror;

(c) the sanction of the Scheme (with or without modifications) by the Grand Court and, to the extent necessary, the Grand Court's confirmation of the reduction of the share capital of CMC, and the registration of a copy of the Court Orders by the Registrar of Companies in the Cayman Islands;

(d) compliance by CMC, to the extent necessary, with the procedural requirements and conditions, if any, under Sections 15 and 16 of the Companies Law in relation to the reduction of the issued share capital of CMC;

(e) all Authorisations having been obtained or made from, with or by (as the case may be) the Relevant Authorities of the PRC, Cayman Islands, Hong Kong and any other relevant jurisdictions;

(f) all Authorisations remaining in full force and effect without variation, and all necessary statutory or regulatory obligations in all relevant jurisdictions having been complied with and no requirement having been imposed by any Relevant Authorities which is not expressly provided for, or is in addition to requirements expressly provided for, in any relevant laws, rules, regulations or codes in connection with the Proposal or any related matters, documents (including circulars) or things, in each case up to and at the time when the Scheme becomes effective;

(g) all necessary consents (including consents from the relevant lenders) in connection with the Proposal and the withdrawal of listing of the CMC Shares from the Stock Exchange which may be required under any existing contractual obligations of CMC being obtained and remaining in effect;

(h) if required, the obtaining by the Offeror of such other necessary consent, approval, authorisation, permission, waiver or exemption which may be required from any Relevant Authorities or other third parties which are necessary or desirable for the performance of the Scheme under the applicable laws and regulations;

(i) no government, governmental, quasi-governmental, statutory or regulatory body, court or agency in any jurisdiction having taken or instituted any action, proceeding, suit, investigation or enquiry (or enacted, made or proposed, and there not continuing to be outstanding, any statute, regulation, demand or order) that would make the Proposal or the Scheme or its implementation in accordance with its terms void, unenforceable, illegal or impracticable (or which would impose any material and adverse conditions or obligations with respect to the Proposal or the Scheme or its implementation in accordance with its terms);

(j) since the Announcement Date, there having been no adverse change in the business, assets, financial or trading positions, profits or prospects of any member of CMC Group (to an extent which is material in the context of CMC Group taken as a whole or in the context of the Proposal); and

(k) since the Announcement Date, there not having been instituted or remaining outstanding any litigation, arbitration proceedings, prosecution or other legal proceedings to which any member of CMC Group is a party (whether as plaintiff, defendant or otherwise) and no such proceedings having been threatened in writing against any such member (and no investigation by any government or quasi-governmental, supranational, regulatory or investigative body or court against or in respect of any such member or the business carried on by any such member having been threatened in writing, announced, instituted or remaining outstanding by, against or in respect of any such member), in each case which is material and adverse in the context of CMC Group taken as a whole or in the context of the Proposal.

The Offeror reserves the right to waive conditions (e), (f), (g), (h), (i), (j) and (k) either in whole or in part, either generally or in respect of any particular matter. Conditions (a), (b), (c) and (d) cannot be waived in any event. Pursuant to Note 2 to Rule 30.1 of the Takeovers Code, the Offeror may only invoke any or all of the Conditions as a basis for not proceeding with the Scheme if the circumstances which give rise to a right to invoke any such Condition are of material significance to the Offeror in the context of the Proposal.

As at the Latest Practicable Date, none of the Conditions has been fulfilled or waived. In respect of condition (e), as at the Latest Practicable Date, the Offeror does not reasonably foresee any necessary Authorisations required for the Proposal from, with or by (as the case may be) the Relevant Authorities of the PRC, Cayman Islands, Hong Kong and any other relevant jurisdictions, save for the Authorisations already set out above as a condition, the sanction of the Grand Court and the registration by the Registrar of Companies in the Cayman Islands of a copy of the orders of the Grand Court. In respect of condition (h), as at the Latest Practicable Date, the Offeror is not aware of any consent, approval, authorisation, permission, waiver or exemption to be obtained by the Offeror from any Relevant Authorities or other third parties which are necessary or desirable for the performance of the Scheme under the applicable laws and regulations.

All of the Conditions will have to be fulfilled or waived, as applicable, on or before the Long Stop Date (or such later date as the Offeror and CMC may agree or, to the extent applicable, as the Grand Court may direct and in all cases, as permitted by the Executive), failing which the Scheme and the Proposal will lapse. CMC has no right to waive any of the Conditions.

Assuming that the above Conditions are fulfilled (or, as applicable, waived in whole or in part), it is expected that the Scheme will become effective on or about Monday, 13 March 2017 (Cayman Islands time). Further announcements will be made including, in particular, in relation to (i) the results of the Court Meeting and the EGM and, if the resolutions are passed at those meetings; (ii) the result of the Grand Court hearing of the petition to sanction the Scheme and to confirm the capital reduction; (iii) the Scheme Record Date; (iv) the Effective Date; and (v) the withdrawal of the listing of the CMC Shares on the Stock Exchange as further set out in "Part III — Expected Timetable" of this Scheme Document.

If the Scheme is not approved or the Proposal otherwise lapses, CMC has no intention to seek the immediate withdrawal of the listing of the CMC Shares on the Stock Exchange. An announcement will be made in due course in such event.

CMC Shareholders and potential investors should be aware that the implementation of the Scheme and the Proposal is subject to the Conditions being fulfilled or waived, as applicable, and thus the Proposal may or may not be implemented and the Scheme may or may not become effective. CMC Shareholders and potential investors should therefore exercise caution when dealing in the securities of CMC. Persons who are in doubt as to the action they should take should consult their licensed securities dealer or registered institution in securities, bank manager, solicitor or other professional advisers.

5. IRREVOCABLE UNDERTAKINGS

The Offeror received the Irrevocable Undertakings from (i) Louis Dreyfus, Hongfan International and Guangxi Non-ferrous on 21 September 2016, (ii) Urion Holdings on 22 September 2016, and (iii) Tongling Nonferrous on 30 September 2016, pursuant to which each of them irrevocably undertook to exercise (or procure the exercise) of all voting rights attached to the CMC Shares held or owned by it at the Court Meeting and the EGM in favour of all the resolutions to approve the Proposal and any matters in connection with the Proposal. However, these Offtake Shareholders will be required to abstain from voting on the proposal for the Spot Sales Mechanism at the EGM.

The Offeror received the Irrevocable Undertaking from Nice Ascent on 25 January 2017, pursuant to which Nice Ascent irrevocably undertook to exercise (or procure the exercise) of all voting rights attached to the CMC Shares held or owned by it at the Court Meeting and the EGM in favour of all the resolutions to be proposed at such meetings (including, but not limited to, the resolutions to approve the Proposal, any special deal arrangements, and any matters in connection with the Proposal).

Pursuant to the Irrevocable Undertakings, each of the Offtake Shareholders and Nice Ascent also irrevocably undertook to (a) exercise (or procure the exercise of) all voting rights attached the CMC Shares held or owned by it on any resolution (which, if it were passed or rejected at any meeting of CMC, may be necessary or desirable for the implementation of the Scheme and the Proposal) only in a manner consistent with the implementation of the Scheme; (b) requisite or join in the requisition of any meeting of CMC for the purpose of considering any such resolution; and (c) exercise (or procure the exercise) of all voting rights attached the CMC Shares held or owned by it against any resolution which (i) might reasonably be expected to restrict, impede or delay implementation of the Scheme and the Proposal; or (ii) approves or gives effect to (and will agree not to be bound by) a proposal by a person other than the Offeror, to acquire (or have issued to it) any CMC Shares or any assets of CMC.

Each of the Offtake Shareholders and Nice Ascent further irrevocably undertook that, among other things, it shall not (a) directly or indirectly sell, transfer, charge, encumber, grant any option over (or cause the same to be done) or otherwise dispose of any interest in the CMC Shares that it holds; (b) accept any other offer in respect of the CMC Shares that it holds; or (c) acquire directly or indirectly any additional shares, securities or other interests of CMC.

Furthermore, each of Louis Dreyfus, Hongfan International, Guangxi Non-ferrous, Tongling Nonferrous and Nice Ascent also undertook that it shall not take any action or enter into any agreement or arrangement or permit any agreement or arrangement to be entered into or authorize or incur any obligation which would otherwise be prejudicial to the terms of its Irrevocable Undertaking.

The Irrevocable Undertakings given by the Offtake Shareholders and Nice Ascent will be terminated and their obligations under the Irrevocable Undertakings shall lapse and terminate if the Scheme does not become effective, lapses or is withdrawn in accordance with its terms and no new, revised or replacement Scheme is announced by the Offeror and/or CMC at the same time.

Each of Louis Dreyfus, Hongfan International, Guangxi Non-ferrous and Tongling Nonferrous has confirmed to the Offeror that, pursuant to the Irrevocable Undertaking signed by each of them, it will vote in favor of the resolution relating to the Heads of Agreement and the transactions contemplated thereunder.

As at the Latest Practicable Date, Louis Dreyfus holds 66,768,000 CMC Shares (representing approximately 0.56% of the issued share capital of CMC); Hongfan International holds 100,000,000 CMC Shares (representing approximately 0.85% of the issued share capital of CMC); Guangxi Non-ferrous holds 132,900,000 CMC Shares (representing approximately 1.12% of the issued share capital of CMC); Urion Holdings holds 445,714,000 CMC Shares (representing approximately 3.77% of the issued share capital of CMC); Tongling Nonferrous holds 221,516,000 CMC Shares (representing approximately 1.87% of the issued share capital of CMC); and Nice Ascent holds 111,594,000 CMC Shares (representing approximately 0.94% of the issued share capital of CMC). The total number of CMC Shares held by the Offtake Shareholders and Nice Ascent which are the subject of the Irrevocable Undertakings are 1,078,492,000, representing approximately 64.05% of the CMC Shares held by the Independent CMC Shareholders and approximately 9.13% of the total issued share capital of CMC.

6. THE SCHEME AND THE COURT MEETING

Pursuant to Section 86 of the Companies Law, where an arrangement is proposed between a company and its members or any class of them, the Grand Court may, on the application of the company or any member of the company, order a meeting of the members of the company or class of members, as the case may be, to be summoned in such manner as the Grand Court directs.

It is expressly provided in Section 86 of the Companies Law that if a majority in number representing 75% in value of the members or class of members, as the case may be, present and voting either in person or by proxy at the meeting held as directed by the Grand Court as aforesaid,

agree to any arrangement, the arrangement shall, if sanctioned by the Grand Court, be binding on all members or class of members, as the case may be, and also on the company. For the avoidance of doubt, the Grand Court will be requested to order the convening of a meeting of a class of members being the holders of Scheme Shares.

7. ADDITIONAL REQUIREMENTS AS IMPOSED BY RULE 2.10 OF THE TAKEOVERS CODE

In addition to satisfying any requirements imposed by law as summarised above, other than with the consent of the Executive to dispense with compliance or strict compliance therewith, Rule 2.10 of the Takeovers Code requires that the Scheme may only be implemented if:

(a) the Scheme is approved by the Independent CMC Shareholders holding at least 75% of the votes attaching to the Scheme Shares held by the Independent CMC Shareholders that are cast either in person or by proxy at the Court Meeting; and

(b) the number of votes cast by the Independent CMC Shareholders present and voting either in person or by way of proxy at the Court Meeting against the resolution to approve the Scheme at the Court Meeting is not more than 10% of the votes attaching to all Scheme Shares held by all the Independent CMC Shareholders.

For the purpose of this vote, the Independent CMC Shareholders comprise all the CMC Shareholders as at the Meeting Record Date other than the Offeror and the Offeror Concert Parties. For the avoidance of doubt, the Independent CMC Shareholders include any member of the Morgan Stanley group acting in its capacity as a Registered Owner of Scheme Shares held on behalf of a Beneficial Owner where the Beneficial Owner (i) controls the voting rights attaching to those CMC Shares; (ii) if the CMC Shares are voted, gives instructions as to how those CMC Shares are to be voted; and (iii) is not the Offeror or an Offeror Concert Party. CMC Shareholders who are not Independent CMC Shareholders will be required to abstain from voting at the Court Meeting in accordance with the Takeovers Code.

As at the Latest Practicable Date, the Independent CMC Shareholders held in aggregate 1,683,701,000 Scheme Shares. On that basis, 10% of the votes attached to Scheme Shares held by all the Independent CMC Shareholders referred to in (b) above therefore represent approximately 168,370,100 CMC Shares as at the Latest Practicable Date.

8. BINDING EFFECT OF THE SCHEME AND THE PROPOSAL

Upon the Scheme and the Proposal becoming effective, it will be binding on CMC and all the CMC Shareholders, regardless of how they voted (or whether they voted) at the Court Meeting and the EGM.

9. SHAREHOLDING STRUCTURE OF CMC AND THE SCHEME SHARES

On the assumption that there is no change in shareholdings of CMC before completion of the Proposal, the table below sets out the shareholding structure of CMC as at the Latest Practicable Date and immediately upon completion of the Proposal:

CMC Shareholders	**As at the Latest Practicable Date**		**Immediately upon completion of the Proposal** *(Note 4)*	
	Number of CMC Shares	*% (Note 6)*	*Number of CMC Shares*	*% (Note 6)*
Offeror *(Note 1)*	10,001,171,428	84.63	11,817,782,428	100.00
Offeror Concert Parties				
CMC Shares held subject to the Scheme:				
— Rio Tinto International *(Note 2)*	132,910,000	1.12	—	—
Total number of CMC Shares held by the Offeror and the Offeror Concert Parties	10,134,081,428	85.75	11,817,782,428 *(Note 5)*	100.00
Independent CMC Shareholders	1,683,701,000	14.25	—	—
Total number of CMC Shares	11,817,782,428	100.00	11,817,782,428	100.00
Total number of Scheme Shares *(Note 3)*	1,816,611,000	15.37	—	—

Notes:

1. CMC Shares in which the Offeror is interested will not form part of the Scheme Shares and will not be cancelled. The number 10,001,171,428 excludes a 0.58 fractional CMC Share held by the Offeror which is non-tradable and which will also not form part of the Scheme Shares and will not be cancelled.

2. Rio Tinto Group (including Rio Tinto International) owns or controls more than 20% of the voting rights in joint ventures with Chinalco. Therefore, Rio Tinto International is presumed to be acting in concert with the Offeror in relation to CMC in accordance with class 1 of the definition of "acting in concert" under the Takeovers Code.

3. The total number of CMC Shares (assuming that there is no other change in shareholding of CMC before completion of the Proposal) minus the aggregate number of CMC Shares held by the Offeror equals the total number of Scheme Shares (on the same assumptions).

4. Under the Scheme, the issued share capital of CMC will, on the Effective Date, be reduced by cancelling the Scheme Shares. On the assumption that there is no other change in shareholding of CMC before completion of the Proposal, forthwith upon such reduction, the issued share capital of CMC will be increased to its former amount by the issue at par to the Offeror, credited as fully paid, of the same number of CMC Shares as the number of the Scheme Shares cancelled. The reserve created in CMC's books of account as a result of the capital reduction will be applied in paying up in full at par the new CMC Shares so issued to the Offeror.

5. All of the CMC Shares held by the Offeror Concert Parties will form part of the Scheme Shares and will be cancelled upon the Scheme becoming effective. Accordingly, immediately upon completion of the Proposal, the Offeror will then hold all the issued share capital in CMC.

6. All percentages in the above table are approximations.

Following the Effective Date and the withdrawal of listing of CMC Shares on the Stock Exchange, the Offeror will hold 100% of the issued share capital of CMC on the assumption that there is no other change in shareholding in CMC before completion of the Proposal.

As at the Latest Practicable Date, the authorised share capital of CMC was US$1,000,000,000 divided into 25,000,000,000 CMC Shares of US$0.04 each, and the issued share capital of CMC was US$472,711,297.12 divided into 11,817,782,428 CMC Shares of US$0.04 each.

As at the Latest Practicable Date, the Offeror holds, owns, controls or has direction over 10,001,171,428 CMC Shares representing approximately 84.63% of the issued share capital of CMC. Such CMC Shares will not form part of the Scheme Shares and will not be voted on the Scheme at the Court Meeting. As at the Latest Practicable Date, the Offeror Concert Parties held in aggregate 132,910,000 CMC Shares, representing approximately 1.12% of the issued share capital of CMC. All of the CMC Shares held by the Offeror Concert Parties will form part of the Scheme Shares and will be cancelled upon the Scheme becoming effective, but such Offeror Concert Parties will abstain from voting on the Scheme at the Court Meeting.

As at the Latest Practicable Date, (i) neither the Offeror nor any of the Offeror Concert Parties holds, owns, controls or has direction over any options, warrants or convertible securities in respect of CMC Shares, (ii) there are no outstanding derivatives in respect of CMC Shares entered into by the Offeror or the Offeror Concert Parties, and (iii) CMC did not have in issue any warrants, options, derivatives, convertible securities or other securities convertible into CMC Shares.

10. FINANCIAL RESOURCES

The amount of cash required to implement the Proposal would be approximately HK$2,526,000,000.

The Offeror intends to finance the cash required for the Proposal from existing cash in a bank account.

Morgan Stanley, the financial adviser to the Offeror in connection with the Proposal, is satisfied that sufficient financial resources are available to the Offeror for the payment in full of the cash consideration payable under the Proposal in accordance with its terms.

11. REASONS FOR, AND BENEFITS OF, THE SCHEME AND THE PROPOSAL

The Offeror wishes to privatise CMC in order to ensure the continued normal operation of the Toromocho Project given the significant financial pressures facing CMC as an independent listed company.

Since CMC's initial public offering in January 2013, copper prices as quoted by the LME have decreased approximately 43% from US$3.77/lb on 31 January 2013 to US$2.15/lb on the Last Trading Day. This has had a negative impact on the trading prices of CMC Shares, together with other copper producers and similar companies, and has also decreased the ability of CMC to raise equity funding for operations.

During the same period, CMC has and continues to experience several operational challenges resulting in (i) inefficiencies in both the mining and processing operations with lower recovery rates for copper and the production of copper concentrates, (ii) the production of copper concentrates with more than 0.5% arsenic content and other penalty elements (which make the sale of such products being subject to higher than industry standard penalties and renders such products unfit for sale to certain buyers) and (iii) a high rate of oxidation of ores mined (which affects ore recovery rates).

In June 2013, the CMC Board approved the Project Expansion with an anticipated capital expenditure of US$1.32 billion. The completion of the Project Expansion will enhance the operation efficiency of the Toromocho Project significantly. However, as at the Latest Practicable Date, a substantial part of such future capital expenditure remains unfunded.

Meanwhile, CMC has financed its continued operations and expansion using loans (including shareholder loans) and borrowings which total US$4.30 billion as at 30 June 2016. As at 30 June 2016, CMC's unaudited current liabilities exceeded its current assets by over US$1.0 billion. The CMC Group continued to adopt the going concern basis in preparing its financial statements after taking into consideration the debt funding secured by CMC and the fact that the Offeror has agreed not to demand the repayment of the shareholder loans due from the CMC Group until the CMC Group is financially capable to do so. The Offeror believes that it may be challenging for CMC to fund its expansion given the financial pressure CMC is under and the difficulty it faces in raising further equity funding in the current environment.

The Offeror believes that it is unsustainable in the long-term for the Offeror to maintain continuing financial support to CMC by way of shareholder loans and there are significant challenges in securing additional debt financing required for the Project Expansion under the current capital structure. By privatising CMC, the Offeror will be able to exercise greater flexibility

in reorganising the capital structure of CMC and in increasing funding to CMC. The Proposal would also provide current shareholders with a reasonable exit of their investment in CMC that is attractive in light of current market conditions.

12. INFORMATION ON CMC

CMC is an exempted company incorporated in the Cayman Islands with limited liability, the shares of which have been listed on the Main Board of the Stock Exchange since January 2013 with the stock code 3668.

CMC is the core platform of Chinalco for the future acquisition, investment, development and operation of non-ferrous and non-aluminum mineral resources and projects outside the PRC with unaudited consolidated total assets of approximately US$5,398.9 million as at 30 June 2016.

Currently, CMC focuses on developing the Toromocho Project through Chinalco Peru. The Toromocho Project is located in the central Peru in the core of the Morococha mining district. The Environmental Impact Assessment of the Toromocho Project was approved by the Peruvian government in December 2010. Chinalco Peru obtained the construction permit and began the construction for the Toromocho Project in July 2011. The commissioning of Toromocho Project commenced in December 2013. The Toromocho Project has commenced commercial production since June 2015.

13. INFORMATION ON THE OFFEROR

The Offeror was incorporated in Hong Kong on 18 July 2007 as a limited liability company. It is an investment holding company and a wholly owned subsidiary of Chinalco, which is a state-owned enterprise administered by the SASAC. Chinalco principally engages in the mining, smelting and processing of non-ferrous metals and related trading, engineering and technological services.

14. SPOT SALES ARRANGEMENTS

Background

In the course of its normal business operation, CMC has been engaged in sales of copper concentrates to the Offtake Shareholders and/or their respective affiliates. Such sales are made under (i) offtake sales contracts with terms that are within the parameters set out in the existing offtake agreements which were entered into between 2012 and 2014, and (ii) spot sales contracts with terms that are outside the scope of the relevant offtake agreements. Prior to the time the Scheme and the Proposal were reasonably contemplated by CMC, it had entered into several Existing Spot Sales Contracts. It is expected that CMC will continue to engage in sales with the Offtake Shareholders and/or their respective affiliates under offtake sales contracts and spot sales contracts.

Sales under any offtake sales contracts to be entered into between CMC and any Offtake Shareholders and/or their respective affiliates would not be considered a special deal in view of the fact that (i) they will be entered into within the parameters set out in the existing

offtake agreements, and (ii) they are an implementation of the relevant existing offtake agreement. Furthermore, should entering into such offtake sales contracts be deemed as special deals as defined under Rule 25 of the Takeovers Code, CMC would be subject to certain restrictions on the performance of its obligations under the existing offtake agreements, which might lead to potential breach of certain terms of such agreements by CMC. In order to ensure that any offtake sales contract will be entered into within the parameters set out in the relevant existing offtake agreement, sales under offtake sales contracts would be supervised and overseen by the independent non-executive directors of CMC from the Announcement Date until six months after the Effective Date.

The Existing Spot Sales Contracts would not be considered a special deal in view of the fact that (i) they were entered into prior to the Scheme and the Proposal were reasonably contemplated by CMC, and (ii) they are merely implementation of the existing contracts. Any Future Spot Sales Contract would constitute a special deal and requires the consent of the Executive under Rule 25 of the Takeovers Code, as they would not be entered into pursuant to existing offtake agreements and would be only entered into by and between CMC and the Offtake Shareholders and/or their respective affiliates without involving or being offered to all the CMC Shareholders. The Offeror has made an application for consent from the Executive in relation to the Future Spot Sales Contracts that are within the Spot Sales Mechanism (as set out below), such consent being conditional upon (i) the CMC Independent Financial Adviser confirming that the terms of the Spot Sales Mechanism are fair and reasonable, and (ii) the passing of ordinary resolution(s) by the Disinterested CMC Shareholders at the EGM to approve the Spot Sales Mechanism. All of the Offtake Shareholders and the Offeror will be required to abstain from voting on the proposal for the Spot Sales Mechanism at the EGM.

Upon obtaining the consent of the Executive under Rule 25 of the Takeovers Code, any spot sales contract to be entered into between CMC and the Offtake Shareholders and/or their respective affiliates from the Announcement Date until six months after the Effective Date would be considered to have complied with the requirements under the Takeovers Code if the terms of the spot sales contract are within the Spot Sales Mechanism.

As disclosed in the letter of the CMC Independent Board Committee set out in Part V of this Scheme Document, the CMC Independent Board Committee (which comprises of all independent non-executive directors of CMC), having considered the terms of the Spot Sales Mechanism and having taken into account the advice of the CMC Independent Financial Adviser, considers that, as far as the Disinterested CMC Shareholders are concerned, the terms of the Spot Sales Mechanism are fair and reasonable. In addition, the independent non-executive directors of CMC will supervise and oversee the entering into of any spot sales contract by CMC to ensure that the material terms of such contract would be within the Spot Sales Mechanism for a period of six months after the Effective Date.

Spot Sales Mechanism

Set out below are details of the Spot Sales Mechanism which are determined with reference to historical sales of copper concentrates by CMC to the Offtake Shareholders and/or their respective affiliates and are in line with pricing mechanisms used within the industry.

A. ***Product Quality***

The copper concentrates specifications will be based on the anticipated production quality of the Toromocho Project at the time each spot sales contract is entered into. However, the Offtake Shareholders and/or their respective affiliates will have the right to either reject the copper concentrates or accept the copper concentrates with sales price being subject to the pricing terms in this Spot Sales Mechanism if such copper concentrates have any of the following attributes:

(a) Arsenic ("**AS**") content exceeds 0.5%; or

(b) Zinc ("**ZN**") content equals to or exceeds 4.0%; or

(c) Fluorine ("**F**") content equals to or exceeds 0.13%; or

(d) Antimony ("**SB**") content equals to or exceeds 0.05%; or

(e) Bismuth ("**BI**") content equals to or exceeds 0.05%; or

(f) Magnesium Oxide ("**MgO**") content equals to or exceeds 5.0%.

B. ***Pricing Terms***

The sales price of copper concentrates shall be the sum of the value of the payable metals contents calculated in accordance with part (A) below less the sum of the deductions calculated in accordance with part (B) below.

(A) *Pricing for Payable Metal Contents*

(a) Copper

The Offtake Shareholders and/or their respective affiliates shall pay for 96.65% or higher of the full copper content as per final copper assays at the LME Grade "A" copper settlement quotation, as published in the London Metal Bulletin and quoted in US$/DMT, averaged over the Quotational Period (as defined in part (C) below), subject to

(i) a minimum deduction of no more than 1.00 units (1.0% for copper concentrates) per DMT if the copper content in concentrates is over 20%; and

(ii) a minimum deduction of no more than 1.30 units (1.3% for copper concentrates) if the copper content in concentrates is equal to or below 20%.

(b) Silver

The Offtake Shareholders and/or their respective affiliates shall pay for 90% of the full silver content subject to a minimum deduction of no more than 40.00 grams per DMT at the London Silver Price (CME Group & Thomson Reuters), quoted in US$/troy ounce, averaged over the Quotational Period (as defined in part (C) below).

(c) Gold

The Offtake Shareholders and/or their respective affiliates shall pay for 90% of the full gold content as per final assays subject to a minimum deduction of no more than 1.50 grams per DMT at the mean of the London AM/PM fix for gold, as published in Metal Bulletin and quoted in US$/troy ounce, averaged over the Quotational Period (as defined in part (C) below).

(B) *Deductions*

(a) Treatment Charge

If AS content is less than 0.5% and F content is less than 1,000 ppm (0.1%), the treatment charge shall be +/– 15% of the benchmark treatment charge for Far East/Asia published in Metal Bulletin/CRU (which is determined after negotiations among major copper producers and smelters at the beginning of each year). Otherwise, the maximum treatment charge deduction shall be 300% of such benchmark treatment charge.

Freight allowance for CIP Basis (i.e. ''Carriage and Insurance Paid to'') shall be no more than US$40.00 per wet metric tonne of copper concentrates to be added in the treatment charge.

(b) Refining Charge

For copper, refining charge will be no more than the treatment charge divided by 1,000 per lb of payable copper.

For silver, refining charge will be no more than US$0.75 per troy ounce of payable silver.

For gold, refining charge will be no more than US$6.00 per troy ounce of payable gold.

(c) Penalties for Impurity Contents

The penalty for each impurity content varies with reference to the level of such impurity content in the copper concentrates. Also, each spot sales contract may apply the penalty of some or all impurity contents. However, the average penalty charged by the Offtake Shareholders and/or their respective affiliates across all levels of such impurity content under each spot sales contract shall not exceed the average penalty set out in the table below, notwithstanding penalty for a certain batch of copper concentrates under such spot sales contract may be lower or higher than the average penalty. Therefore, the average penalty set out in the table below shows the maximum penalty exposure for each spot sales contract with the Offtake Shareholders and/or their respective affiliates.

Content	**Range in which penalties will apply**	**Average Penalty**
AS *(note)*	>0.2%	US$10.0/DMT per 0.1%
SB *(note)*	>500 ppm (0.05%)	US$3.0/DMT for each 100 ppm (0.01%)
AS+SB *(note)*	>0.2%	US$11.0/DMT per 0.1%
ZN	>2.0%	US$3.0/DMT for each 1.0%
Lead ("**PB**")	>1.0%	US$3.0/DMT for each 1.0%
BI	>500 ppm (0.05%)	US$3.0/DMT for each 100 ppm (0.01%)
Mercury ("**HG**")	>20 ppm (0.002%)	US$2.4/DMT for each 10 ppm (0.001%)
Chlorine ("**CL**")	>400 ppm (0.04%)	US$2.4/DMT for each 100 ppm (0.01%)
F	>300 ppm (0.03%)	US$10.0/DMT for each 100 ppm (0.01%)
Nickel+Cobalt ("**Ni+Co**")	>0.5%	US$3.6/DMT for each 0.1%
MgO	>1.0%	US$8.0/DMT for each 1.0%
H_2O	>8%	US$2.5/DMT for each 1.0%

Note: For penalties for impurity contents of AS and SB, buyer has the option to choose to apply either (i) AS standalone penalty plus SB standalone penalty or (ii) AS+SB penalty as a whole.

Pro-rata penalties will apply to all fractions of impurity contents in the copper concentrate.

(C) *Quotational Period*

The Quotational Period will be either (a) the first month following the month of actual receipt by the buyer (M+1), or (b) the third or fourth month following the month of actual receipt by the buyer (M+3/M+4), declared at the option of the relevant Offtake Shareholder and/or its affiliate separately for each payable metal before the earliest shipment according to delivery clause in each Future Spot Sales Contract. The declared Quotational Period should be available for the whole contractual shipment period.

C. *Other Miscellaneous Terms*

Other contractual terms, including delivery arrangement, payment terms, weighing, sampling and moisture determination for final settlement, assaying, will be based on terms that are conventional in the global copper industry, and will be materially the same with those in existing spot sales contracts of CMC.

15. PROPOSED EQUITY TRANSFER REGARDING THE SIMANDOU PROJECT

Background

The Simandou Project is an iron ore mining and infrastructure project in Guinea, West Africa which has been controlled and operated by Rio Tinto Group since 1997. Chalco Iron Ore formally participated in the Simandou Project by way of acquiring a 47% interest in Simfer Jersey in April 2012, an indirect holding company of the Simandou Project.

On 28 October 2016, Rio Tinto Simfer and Chalco Iron Ore entered into the non-binding Heads of Agreement with the Government of Guinea signing as a witness with a view to promoting both parties to reach a preliminary common understanding in relation to the potential transfer of control and management of the Simandou Project from Rio Tinto Group to Chalco Iron Ore. The proposed transfer is also in line with the existing joint venture arrangements between Rio Tinto Simfer and Chalco Iron Ore which provide for the preemptive right of Chalco Iron Ore where Rio Tinto Simfer intends to dispose of any of its interest in Simfer Jersey.

Proposed Equity Transfer

Pursuant to the Heads of Agreement, Rio Tinto Simfer and Chalco Iron Ore shall engage in good faith discussions and use their commercially reasonable endeavours to reach binding and definitive agreements on terms consistent with the principles and key terms of the Heads of Agreement within six months of the date of the Heads of Agreement to give effect to, among other things, the Equity Transfer.

The consideration for the Equity Transfer shall be the aggregate amount of (i) Rio Tinto Group's total historical expenditure in relation to the Simandou Project (other than the IFC Put Option Price) at the time of completion with a 15% or 25% discount depending on the date on which the Simandou Project has its first shipment of iron ore in commercial quantities (the

"**First Shipment Date**") and (ii) Rio Tinto Simfer's 53% share of the IFC Put Option Price. Such consideration shall be payable by Chalco Iron Ore to Rio Tinto Simfer from the First Shipment Date at a unit rate with reference to the quantity of iron ore loaded for shipment.

According to the Heads of Agreement, Rio Tinto Group's total historical expenditure in relation to the Simdandou Project amounted to approximately US$1,400 million as at 30 September 2016. The consideration will be updated and calculated to include Rio Tinto Group's actual total historical expenditure at the time of completion. The Heads of Agreement further provides that Rio Tinto Simfer shall, following execution of the Heads of Agreement, procure the relevant parties involved to provide Chalco Iron Ore with information and documents reasonably requested by Chalco Iron Ore for a limited reasonable due diligence and audit for the purpose of obtaining Chinese government regulatory approvals.

In addition, completion of the Equity Transfer shall be subject to certain conditions precedent set out in the Heads of Agreement and any other conditions precedent that may be agreed by Chalco Iron Ore and Rio Tinto Simfer. Both parties shall take all necessary steps to fulfill such conditions precedent no later than six months from the signing of the definitive agreements, or otherwise, any definitive agreements that may have been signed will terminate automatically.

The Heads of Agreement provides that the terms of the definitive agreements shall be consistent with the principles and key terms set out in the Heads of Agreement.

The provisions of the Heads of Agreement in relation to the Equity Transfer form part of a proposal which is not legally binding. The Heads of Agreement shall automatically terminate if both parties fail to agree and enter into definitive agreements to give effect to the transactions contemplated thereunder by expiry of the six-month period following the date of the Heads of Agreement.

Independent CMC Shareholders' Approval

As the Heads of Agreement was entered into by and between Chalco Iron Ore (a subsidiary of the Offeror) and Rio Tinto Simfer (a subsidiary of Rio Tinto International which is a CMC Shareholder), the proposed Equity Transfer contemplated under the Heads of Agreement constitutes a special deal and requires the consent of the Executive under Rule 25 of the Takeovers Code. The Offeror has made an application for consent from the Executive in relation to the proposed Equity Transfer contemplated under the Heads of Agreement conditional upon (i) the CMC Independent Financial Adviser confirming that the terms of the proposed Equity Transfer under the Heads of Agreement are fair and reasonable, and (ii) the passing of an ordinary resolution by the Independent CMC Shareholders at the EGM to approve the proposed Equity Transfer contemplated under the Heads of Agreement. The Offeror and Rio Tinto International will be required to abstain from voting on the proposal for the proposed Equity Transfer contemplated under the Heads of Agreement at the EGM.

Given the Heads of Agreement is non-binding and only sets out certain material terms agreed by Chalco Iron Ore and Rio Tinto Simfer, the definitive agreements in relation to the proposed Equity Transfer that the parties may enter into may contain additional details, terms and conditions. It is the intention of both parties to negotiate and enter into such definitive agreements in accordance with the principles and key terms for the proposed Equity Transfer set out in the Heads of Agreement. However, if in the unlikely event such definitive agreements will be materially different from what is contemplated and described in relation to the proposed Equity Transfer under the Heads of Agreement, the Offeror shall consult with the Executive at the time to determine whether there will be an issue under Rule 25 of the Takeovers Code in such a case and if so, what would be the appropriate course of action.

16. INTENTIONS OF THE OFFEROR AND CMC

The Offeror and CMC intend to continue the existing business of CMC upon successful implementation of the Scheme and the Proposal. The Offeror and CMC have no intention to make any major changes to the existing operation and business, or to discontinue the employment of the employees of the CMC Group nor do they have any plans to redeploy any of the fixed assets of the CMC Group after implementation of the Scheme and the Proposal. However, the Offeror and CMC will continue to assess business opportunities as they arise.

17. WITHDRAWAL OF LISTING OF CMC SHARES

Upon the Scheme becoming effective, all Scheme Shares will be cancelled, the register of members of CMC will be updated accordingly and the share certificates in respect of the Scheme Shares will thereafter cease to have effect as documents or evidence of title.

CMC will apply to the Stock Exchange for the withdrawal of the listing of CMC Shares on the Stock Exchange, in accordance with Rule 6.15 of the Listing Rules, immediately following the Effective Date.

The Scheme Shareholders will be notified by way of an announcement of the exact dates of the last day for dealing in CMC Shares on the Stock Exchange and the day on which the Scheme and the withdrawal of the listing of CMC Shares on the Stock Exchange will become effective. A detailed timetable of the Scheme has been included in "Part III — Expected Timetable" in this Scheme Document.

18. IF THE SCHEME IS NOT APPROVED OR THE PROPOSAL LAPSES

The Scheme will lapse if any of the Conditions has not been fulfilled or waived, as applicable, on or before the Long Stop Date. If the Scheme is not approved or the Proposal otherwise lapses, the listing of CMC Shares on the Stock Exchange will not be withdrawn.

If the Scheme is not approved or the Proposal otherwise lapses, there are restrictions under the Takeovers Code on making subsequent offers, to the effect that neither the Offeror nor any person who acted in concert with it in the course of the Proposal (nor any person who is subsequently

acting in concert with any of them) may within 12 months from the date on which the Scheme is not approved or the Proposal otherwise lapses announce an offer or possible offer for CMC, except with the consent of the Executive.

19. OVERSEAS CMC SHAREHOLDERS

The making of the Proposal to the Scheme Shareholders who are not resident in Hong Kong may be subject to the laws of the relevant jurisdictions in which such Scheme Shareholders are located. Such Scheme Shareholders should inform themselves about and observe any applicable legal, tax or regulatory requirements. It is the responsibility of any overseas Scheme Shareholders wishing to take any action in relation to the Proposal, to satisfy themselves as to the full observance of the laws of the relevant jurisdiction in connection therewith, including the obtaining of any governmental, exchange control or other consents which may be required, or the compliance with any other necessary formalities and the payment of any issue, transfer or other taxes due from such Scheme Shareholders in such jurisdiction. Any acceptance by such Scheme Shareholders will be deemed to constitute a representation and warranty from such persons to CMC, the Offeror, and their respective advisers, including Morgan Stanley, the financial adviser to the Offeror, that those local laws and regulatory requirements have been complied with. If you are in doubt as to your position, you should consult your professional advisers.

In the event that the despatch of the Scheme Document to overseas holders of Scheme Shares is prohibited by any relevant law or regulation or may only be effected after compliance with conditions or requirements that the directors of CMC regard as unduly onerous or burdensome (or otherwise not in the best interests of CMC or CMC Shareholders), the Scheme Document will not be despatched to such overseas holders of Scheme Shares. For that purpose, CMC may apply for any waivers as may be required by the Executive pursuant to Note 3 to Rule 8 of the Takeovers Code at such time. Any such waiver will only be granted if the Executive is satisfied that it would be unduly burdensome to despatch the Scheme Document to such overseas holders of Scheme Shares. In granting the waiver, the Executive will be concerned to see that all material information in the Scheme Document is made available to such overseas holders of Scheme Shares.

Scheme Shareholders are recommended to consult their own professional advisers if they are in any doubt as to the taxation implications of accepting the Proposal. It is emphasised that none of the Offeror, CMC and Morgan Stanley or any of their respective directors, officers or associates or any other person involved in the Proposal accepts responsibility for any taxation effects on, or liabilities of, any persons as a result of their acceptance or rejection of the Proposal.

20. REGISTRATION AND PAYMENT

Assuming that the Scheme Record Date falls on Monday, 13 March 2017, it is proposed that the register of members of CMC will be closed from Friday, 10 March 2017 (or such other date as the CMC Shareholders may be notified by way of an announcement) onwards in order to establish entitlements under the Scheme. In order to qualify for entitlements under the Scheme, the CMC Shareholders should ensure that their CMC Shares are lodged with the Hong Kong share registrar of CMC for registration in their names or in the names of their nominees before 4:30 p.m. on

Thursday, 9 March 2017. The Hong Kong share registrar of CMC is Computershare Hong Kong Investor Services Limited, which is located at Shops 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong.

Upon the Scheme becoming effective, payment of the Cancellation Price for the Scheme Shares will be made to the Scheme Shareholders whose names appear on the register of members of CMC as at the Scheme Record Date. On the basis that the Scheme becomes effective on or about Monday, 13 March 2017 (Cayman Islands time), cheques for payment of the Cancellation Price will be paid for by the Offeror as soon as possible but in any event within 7 business days (as defined in the Takeovers Code) following the Scheme having become effective and accordingly, the cheques are expected to be despatched on or before Wednesday, 22 March 2017. In the absence of any specific instructions to the contrary received in writing by Computershare Hong Kong Investor Services Limited, the Hong Kong share registrar of CMC, cheques will be sent by ordinary post addressed to the persons entitled thereto at their respective registered addresses or, in the case of joint holders, to the registered address of that joint holder whose name stands first in the register of members of CMC in respect of the joint holding. All such cheques will be sent at the risk of the person(s) entitled thereto and none of the Offeror, CMC and Morgan Stanley will be responsible for any loss or delay in despatch.

On or after the day being six calendar months after the posting of such cheques, the Offeror shall have the right to cause the cancellation of any cheque which has not been cashed or has been returned uncashed and shall place all monies represented by the cheque in a deposit or custodian account in the Offeror's name with a licensed bank in Hong Kong selected by CMC.

Before the expiry of six years from the Effective Date, the Offeror shall make payments from the deposit or custodian account of the sums, together with interest thereon, to persons who satisfy the Offeror that they are entitled thereto. On the expiry of six years from the Effective Date, the Offeror shall be released from any further obligation to make any payments under the Scheme and the Offeror shall be absolutely entitled to the balance (if any) of the sums then standing to the credit of the deposit or custodian account in its name, including accrued interest subject to any deduction required by law and expenses incurred.

Assuming that the Scheme becomes effective, the register of members of CMC will be updated accordingly to reflect the cancellation of all the Scheme Shares and all existing certificates representing the Scheme Shares will cease to have effect as documents or evidence of title as from the Effective Date, which is expected to be on or about Monday, 13 March 2017 (Cayman Islands time).

Settlement of the Cancellation Price to which the Scheme Shareholders are entitled under the Scheme will be implemented in full in accordance with the terms of the Scheme, without regard to any lien, right of set-off, counterclaim or other analogous right to which the Offeror may otherwise be, or claim to be, entitled against any such Scheme Shareholder.

21. TAXATION

As the Scheme does not involve the sale and purchase of Hong Kong stock, no Hong Kong stamp duty will be payable pursuant to the Stamp Duty Ordinance (Chapter 117 of the Laws of Hong Kong) on the cancellation of the Scheme Shares upon the Scheme becoming effective.

The Scheme Shareholders, whether in Hong Kong or in other jurisdictions, are recommended to consult their professional advisers if they are in any doubt as to the taxation implications of the Scheme and the Proposal and, in particular, whether the receipt of the Cancellation Price would make such Scheme Shareholder liable to taxation in Hong Kong or in other jurisdictions.

It is emphasised that none of the Offeror, CMC and Morgan Stanley or any of their respective directors, officers or associates or any other person involved in the Scheme and the Proposal accepts responsibility for any taxation effects on, or liabilities of, any persons as a result of their acceptance or rejection of the Scheme.

22. COURT MEETING AND EGM

In accordance with the directions of the Grand Court, the Court Meeting will be held for the purpose of considering and, if thought fit, passing a resolution to approve the Scheme (with or without modifications). Holders of Scheme Shares whose names appear on the register of members of CMC as at the Meeting Record Date will be entitled to attend and vote, in person or by proxy, at the Court Meeting. The Scheme will be subject to the approval by the Independent CMC Shareholders at the Court Meeting in the manner referred to in the paragraphs headed "4. Conditions of the Scheme and the Proposal" and "7. Additional Requirements as Imposed by Rule 2.10 of the Takeovers Code" in this Explanatory Memorandum.

For the avoidance of doubt, the Independent CMC Shareholders who may vote at the Court Meeting include any member of the Morgan Stanley group acting in its capacity as a Registered Owner of the Scheme Shares held on behalf of a Beneficial Owner where the Beneficial Owner (i) controls the voting rights attaching to those CMC Shares; (ii) if CMC Shares are voted, gives instructions as to how those CMC Shares are to be voted; and (iii) is not the Offeror or an Offeror Concert Party. As at the Latest Practicable Date, and so far as the Offeror is aware taking into account Note 1 to Rule 3.5 of the Takeovers Code, members of the Morgan Stanley group (except those which are exempt principal traders or exempt fund managers, in each case recognised by the Executive as such for the purposes of the Takeovers Code) which are presumed to be acting in concert with the Offeror in relation to CMC held no position in CMC Shares.

The EGM will be held after the Court Meeting for the purpose of considering and if thought fit passing (i) the special resolution by the CMC Shareholders to approve the reduction of the issued share capital of CMC by cancelling the Scheme Shares; (ii) the ordinary resolution by the CMC Shareholders to immediately restore the issued share capital of CMC to its former amount by the issue of the same number of the CMC Shares as the number of Scheme Shares cancelled, credited as fully paid, for issuance to the Offeror; (iii) the ordinary resolution by the Disinterested

CMC Shareholders to approve the Spot Sales Mechanism; and (iv) the ordinary resolution by the Independent CMC Shareholders to approve the proposed Equity Transfer contemplated under the Heads of Agreement.

An announcement will be made by CMC and the Offeror in relation to the results of the Court Meeting and the EGM in accordance with Rule 19.1 of the Takeovers Code to the extent applicable. Information on the number of votes cast in favour of the Scheme and the number of CCASS Participants on whose instructions they are cast and the number of votes cast against the Scheme and the number of CCASS Participants on whose instructions they are cast will be included in such announcement.

Court Meeting

Holders of Scheme Shares whose names appear on the register of members of CMC as at the Meeting Record Date shall be entitled to attend and vote, in person or by proxy, at the Court Meeting. At the Court Meeting, the holders of Scheme Shares, present and voting either in person or by proxy, will be entitled to vote all of their respective CMC Shares in favour of the Scheme or against it.

In accordance with the direction from the Grand Court, HKSCC Nominees Limited shall be permitted to vote both for and against the Scheme in accordance with instructions received by it from the Investor Participants and other CCASS Participants. For the purpose of calculating the "majority in number", HKSCC Nominees Limited shall be treated as a multi-headed CMC Shareholder. In this regard, HKSCC Nominees Limited shall be entitled to vote both for and against the Scheme in accordance with instructions received by it from the Investor Participants and other CCASS Participants. However, for the purpose of calculating the "majority in number", each such Investor Participant or other CCASS Participant who instructs HKSCC Nominees Limited to vote in favour of the Scheme shall be counted for the "majority in number" as a single CMC Shareholder voting in favour of the Scheme, and, if applicable, each such Investor Participant or other CCASS Participant who instructs HKSCC Nominees Limited to vote against the Scheme shall be counted for the "majority in number" as a single CMC Shareholder voting against the Scheme. HKSCC Nominees Limited itself, as opposed to instructing Investor Participants or other CCASS Participants, shall not be counted as a CMC Shareholder for the purpose of the calculation of the "majority in number".

The Scheme is conditional upon, among other things, approval of the Scheme (by way of poll) by a majority in number of the holders of Scheme Shares representing not less than 75% in value of the Scheme Shares held by the holders of Scheme Shares present and voting either in person or by proxy at the Court Meeting, provided that: (i) the Scheme is approved (by way of poll) by the Independent CMC Shareholders holding at least 75% of the votes attaching to the Scheme Shares held by the Independent CMC Shareholders that are cast either in person or by proxy at the Court Meeting; and (ii) the number of votes cast (by way of poll) against the resolution to approve the Scheme at the Court Meeting by the Independent CMC Shareholders is not more than 10% of the votes attaching to all Scheme Shares held by the Independent CMC Shareholders.

In accordance with the Companies Law, the "75% in value" requirement, as described above, will be met if the total value of the Scheme Shares being voted in favour of the Scheme is at least 75% of the total value of the Scheme Shares voted at the Court Meeting. In accordance with the Companies Law, the "majority in number" requirement, as described above, will be met if the number of holders of Scheme Shares voting in favour of the Scheme exceeds the number of holders of Scheme Shares voting against the Scheme. For the purpose of calculating the "majority in number" requirement, the number of holders of Scheme Shares, present and voting in person or by proxy, will be counted in the manner described above.

Notice of the Court Meeting is set out in Appendix VI to this Scheme Document. The Court Meeting will be held at 10:00 a.m. (Hong Kong time) on Friday, 3 March 2017 at Bowen Room, Level 7, Conrad Hong Kong, Pacific Place, 88 Queensway, Hong Kong.

EGM

All the CMC Shareholders (or the Disinterested CMC Shareholders or the Independent CMC Shareholders, as the case maybe) whose names appear on the register of members of CMC as at the Meeting Record Date shall be entitled to attend and vote, in person or by proxy, at the EGM with respect to (i) the special resolution by the CMC Shareholders to approve the reduction of the issued share capital of CMC by cancelling the Scheme Shares; (ii) the ordinary resolution by the CMC Shareholders to immediately thereafter increase the issued share capital of CMC to the amount prior to the cancellation of the Scheme Shares and apply the reserve created as a result of the aforesaid cancellation of the Scheme Shares to pay up in full at par such number of new CMC Shares as is equal to the number of Scheme Shares cancelled as a result of the Scheme, credited as fully paid, for issuance to the Offeror; (iii) the ordinary resolution by the Disinterested CMC Shareholders to approve the Spot Sales Mechanism; and (iv) the ordinary resolution by the Independent CMC Shareholders to approve the proposed Equity Transfer contemplated under the Heads of Agreement.

The special resolution described under (i) in the paragraph above will be passed if not less than 75% of the votes cast by the CMC Shareholders, present and voting in person or by proxy at the EGM, are in favour of the special resolution. The ordinary resolution described under (ii) in the paragraph above will be passed if more than 50% of the votes are cast in favour of the ordinary resolution by the CMC Shareholders, present and voting either in person or by proxy, at the EGM. The ordinary resolution described under (iii) in the paragraph above will be passed if more than 50% of the votes are cast in favour of the ordinary resolution by the Disinterested CMC Shareholders, present and voting either in person or by proxy, at the EGM. The ordinary resolution described under (iv) in the paragraph above will be passed if more than 50% of the votes are cast in favour of the ordinary resolution by the Independent CMC Shareholders, present and voting either in person or by proxy, at the EGM.

At the EGM, a poll will be taken and each CMC Shareholder present and voting, either in person or by proxy, will be entitled to vote all of his/her/its CMC Shares in favour of (or against) the special resolution and/or the ordinary resolutions. Alternatively, such CMC Shareholder may

vote some of their CMC Shares in favour of the special resolution and/or the ordinary resolutions and any or all of the balance of their CMC Shares against the special resolution and/or the ordinary resolutions (and vice versa).

The Offeror has indicated that the CMC Shares legally held by it will be voted in favour of the special and the ordinary resolutions to be proposed at the EGM to approve any matters in connection with the Proposal. The Offtake Shareholders and Nice Ascent have undertaken under the Irrevocable Undertakings to vote in favour of all the resolutions at the EGM to approve the Proposal and any matters in connection with the Proposal. However, the Offeror and the Offtake Shareholders will be required to abstain from voting on the proposal for the Spot Sales Mechanism at the EGM and the Offeror will also be required to abstain from voting on the proposal for the proposed Equity Transfer contemplated under the Heads of Agreement at the EGM.

At the EGM, the special and the ordinary resolutions will be put to the vote by way of poll as required under Rule 13.39(4) of the Listing Rules.

Notice of EGM is set out in Appendix VII to this Scheme Document. The EGM will be held at 10:30 a.m. (Hong Kong time) (or immediately after the conclusion or adjournment of the Court Meeting convened on the same day and place) on Friday, 3 March 2017 at Bowen Room, Level 7, Conrad Hong Kong, Pacific Place, 88 Queensway, Hong Kong.

Assuming that the Conditions are fulfilled (or, as applicable, waived in whole or in part), it is expected that the Scheme will become effective on or about Monday, 13 March 2017 (Cayman Islands time). Further announcements will be made including, in particular, in relation to (i) the results of the Court Meeting and the EGM and whether all the resolutions are passed at those meetings; (ii) the result of the hearing of the petition for the sanction of the Scheme by the Grand Court; (iii) the Scheme Record Date; (iv) the Effective Date; and (v) the date of withdrawal of the listing of the CMC Shares on the Stock Exchange as further set out in "Part III — Expected Timetable" of this Scheme Document.

23. BENEFICIAL OWNERS

Beneficial Owners are urged to have their names entered in the register of members of CMC as soon as possible for, among other things, the following reasons:

(a) to enable the Beneficial Owners to become CMC Shareholders so that they can attend the Court Meeting in the capacity as members of CMC or be represented by proxies to be appointed by them and to be included for the purpose of calculating the majority in number of CMC Shareholders as required under Section 86 of the Companies Law in their capacity as members of CMC;

(b) provided the Beneficial Owners have become CMC Shareholders, to enable CMC to properly classify such CMC Shareholders as Scheme Shareholders (being holders of CMC Shares other than those held by the Offeror) who are entitled to attend and vote at the Court Meeting for the purposes of the headcount test under Section 86 of the Companies Law; and

(c) to enable CMC and the Offeror to make arrangements to effect payments by way of the delivery of cheques to the most appropriate person when the Scheme becomes effective.

No person shall be recognised by CMC as holding any CMC Shares upon any trust. In the case of any Beneficial Owner whose CMC Shares are held upon trust by, and registered in the name of, a Registered Owner (other than HKSCC Nominees Limited), such Beneficial Owner should contact the Registered Owner and provide him, her or it with instructions or make arrangements with the Registered Owner in relation to the manner in which the CMC Shares of the Beneficial Owner should be voted at the Court Meeting and/or the EGM. Such instructions and/or arrangements should be given or made in advance of the relevant latest time for the lodgement of forms of proxy in respect of the Court Meeting and the EGM in order to provide the Registered Owner with sufficient time to accurately complete his, her or its proxy and to submit it by the deadline. To the extent that any Registered Owner requires instructions from or arrangements to be made with any Beneficial Owner at a particular date or time in advance of the relevant latest time for the lodgement of forms of proxy in respect of the Court Meeting and the EGM, then any such Beneficial Owner should comply with the requirements of such Registered Owner.

Any Beneficial Owner whose CMC Shares are deposited in CCASS and registered under the name of HKSCC Nominees Limited must, unless such Beneficial Owner is a person admitted to participate in CCASS as an Investor Participant, contact their broker, custodian, nominee or other relevant person who is, or has in turn deposited such CMC Shares with, another CCASS Participant regarding voting instructions to be given to such persons if they wish to vote in respect of the Scheme. Beneficial Owners should contact their broker, custodian, nominee or other relevant person in advance of the deadline in respect of the Court Meeting and the EGM set by them, in order to provide such broker, custodian, nominee or other relevant person with sufficient time to provide HKSCC Nominees Limited with instructions or make arrangements with HKSCC Nominees Limited in relation to the manner in which CMC Shares of the Beneficial Owner should be voted at the Court Meeting and/or the EGM. The procedure for voting in respect of the Scheme by HKSCC Nominees Limited with respect to the CMC Shares registered under the name of HKSCC Nominees Limited shall be in accordance with the "General Rules of CCASS" and the "CCASS Operational Procedures" in effect from time to time.

24. GENERAL

Morgan Stanley has been appointed as the financial adviser to the Offeror in connection with the Scheme and the Proposal.

All of the non-executive directors of CMC (being Mr. Liu Jianping, Mr. Luan Shuwei, Dr. Liu Hongjun and Dr. Wang Dongbo) and all of the executive director of CMC (being Mr. Liu Yuewei and Mr. Gao Lidong), who are personnel or senior management of Chinalco and/or its subsidiaries, are regarded as being interested in the Proposal, and therefore have abstained from voting in respect of the board resolutions of CMC pursuant to the meeting held on 21 September 2016 in relation to, among others, the Proposal.

The independent non-executive directors of CMC forming the CMC Independent Board Committee, namely Mr. Scott McKee Hand, Mr. Ronald Ashley Hall, Mr. Lai Yat Kwong Fred and Mr. Francisco Augusto Baertl Montori, have provided their recommendation in the letter from the CMC Independent Board Committee in Part V of this Scheme Document.

In light of the recommendation of the CMC Independent Board Committee as set out in Part V of this Scheme Document and the recommendation of the CMC Independent Financial Adviser as set out in Part VI of this Scheme Document, Rule 2.3 of the Takeovers Code is not applicable.

Associates of the Offeror, Chinalco and CMC (as defined in the Takeovers Code, including shareholders holding 5% or more of the relevant securities (as defined in paragraphs (a) to (d) in Note 4 to Rule 22 of the Takeovers Code) of the Offeror, Chinalco and CMC) are hereby reminded to disclose their dealings in any securities of CMC under Rule 22 of the Takeovers Code during the offer period. Neither the Offeror nor any of the Offeror Concert Parties had any dealings for value in CMC Shares during the period commencing six months prior to the Announcement Date.

25. SUMMARY OF ACTIONS TO BE TAKEN

Independent CMC Shareholders

A **pink** form of proxy for use at the Court Meeting and a **white** form of proxy for use at the EGM are enclosed with copies of this Scheme Document sent to Registered Owners of CMC. Subsequent purchasers of Scheme Shares will need to obtain a proxy from the transferor.

Whether or not you are able to attend the Court Meeting and/or the EGM, if you are a holder of Scheme Shares, you are strongly urged to complete and sign the enclosed **pink** form of proxy in respect of the Court Meeting, and the CMC Shareholders are strongly urged to complete and sign the enclosed **white** form of proxy in respect of the EGM, in accordance with the instructions printed thereon, and to lodge them at the office of the Hong Kong share registrar of CMC, Computershare Hong Kong Investor Services Limited at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong. In order to be valid, the **pink** form of proxy for use at the Court Meeting should be lodged not later than 10:00 a.m. (Hong Kong time) on Wednesday, 1 March 2017, and the **white** form of proxy for use at the EGM should be lodged not later than 10:30 a.m. (Hong Kong time) on Wednesday, 1 March 2017. The completion and return of a form of proxy for the Court Meeting or the EGM will

not preclude the Independent CMC Shareholders and the CMC Shareholders from attending and voting in person at the relevant meeting. In such event, the returned form of proxy will be deemed to have been revoked.

If you do not appoint a proxy and you do not attend and vote at the Court Meeting and the EGM, you will still be bound by the outcome of such the Court Meeting and the EGM, if, among other things, the resolutions are passed by the requisite majorities of the Independent CMC Shareholders or the CMC Shareholders (as the case may be). You are therefore strongly urged to attend and vote at the Court Meeting and the EGM in person or by proxy.

For the purpose of determining the entitlements of the holders of Scheme Shares to attend and vote at the Court Meeting and the CMC Shareholders to attend and vote at the EGM, the register of members of CMC will be closed from Tuesday, 28 February 2017 to Friday, 3 March 2017 (both days inclusive) and during such period, no transfer of the CMC Shares will be effected. In order to qualify to vote at the Court Meeting and the EGM, all transfers accompanied by the relevant share certificates must be lodged with Computershare Hong Kong Investor Services Limited, the Hong Kong share registrar of CMC at Shops 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong before 4:30 p.m. on Monday, 27 February 2017.

An announcement will be made by CMC and the Offeror in relation to the results of the Court Meeting and the EGM. If all the resolutions are passed at those meetings, further announcement(s) will be made of the results of the Grand Court hearing of the petition to sanction the Scheme and, if the Scheme is sanctioned, the Scheme Record Date, the Effective Date and the date of withdrawal of the listing of the CMC Shares on the Stock Exchange.

Actions to be Taken by Holders through Trust or CCASS

CMC will not recognise any person as holding any CMC Shares upon any trust. If you are a Beneficial Owner whose CMC Shares are held upon trust by, and registered in the name of, a Registered Owner (other than HKSCC Nominees Limited), you should contact the Registered Owner and provide him, her or it with instructions or make arrangements with the Registered Owner in relation to the manner in which your CMC Shares should be voted at the Court Meeting and/or the EGM. Such instructions and/or arrangements should be given or made in advance of the deadline in respect of the Court Meeting and the EGM set by them in order to provide the Registered Owner with sufficient time to accurately complete his, her or its proxy and to submit it by the deadline stated above. To the extent that any Registered Owner requires instructions from or arrangements to be made with any Beneficial Owner at a particular date or time in advance of the aforementioned latest time for the lodgment of forms of proxy in respect of the Court Meeting and the EGM, any such Beneficial Owner should comply with the requirements of the Registered Owner.

If you are a Beneficial Owner whose CMC Shares are deposited in CCASS and registered under the name of HKSCC Nominees Limited, you must, unless you are an Investor Participant, contact your broker, custodian, nominee, or other relevant person who is, or has, in turn, deposited such CMC Shares with, another CCASS Participant regarding voting instructions to be given to such persons if you wish to vote at the Court Meeting and/or at the EGM. You should contact your broker, custodian, nominee or other relevant person in advance of the latest time for the lodgment of forms of proxy in respect of the Court Meeting and the EGM, in order to provide such broker, custodian, nominee or other relevant person with sufficient time to provide HKSCC Nominees Limited with instructions or make arrangements with HKSCC Nominees Limited in relation to the manner in which the CMC Shares of the Beneficial Owner should be voted at the Court Meeting and/or the EGM.

HKSCC Nominees Limited may also vote for and against the Scheme in accordance with instructions received from CCASS Participants (as defined under the General Rules of CCASS). However, for the purpose of calculating the "majority in number", each such CCASS Participant who instructs HKSCC Nominees Limited to vote in favour of the Scheme shall be counted for the "majority in number" as a single CMC Shareholder voting in favour of the Scheme, and, if applicable, each such CCASS Participant who instructs HKSCC Nominees Limited to vote against the Scheme shall be counted for the "majority in number" as a single CMC Shareholder voting against the Scheme. HKSCC Nominees Limited itself, as opposed to instructing CCASS Participants, shall not be counted as a CMC Shareholder for the purpose of the calculation of the "majority in number".

Petition hearing in the Grand Court

Prior to the despatch of this Scheme Document, CMC obtained directions from the Grand Court for the convening of the Court Meeting to consider the Scheme and other procedural matters regarding the Scheme.

In accordance with Sections 14, 15 and 86 of the Companies Law, if the resolutions are approved at the Court Meeting and the EGM, CMC must then make a further application to the Grand Court to confirm the resolution reducing the share capital of CMC and to sanction the Scheme. CMC and the Offeror cannot complete the Scheme and the Proposal without obtaining these approvals. In this regard, CMC has filed a petition with the Grand Court seeking these approvals which will be heard on Friday, 10 March 2017 (Cayman Islands time).

In determining whether to exercise its discretion and sanction the Scheme, the Grand Court will determine, among other things, whether the votes cast at the Court Meeting fairly represented the decision of the Scheme Shareholders and whether the Scheme is fair to the Scheme Shareholders. At the hearing of the petition, the Grand Court may impose such conditions as it deems appropriate in relation to the Scheme but may not impose any material changes without the joint consent of CMC and the Offeror. CMC may consent on behalf of its shareholders to any modification of the Scheme which the Grand Court may think fit to approve or impose.

If the Grand Court sanctions the Scheme and if all of the other conditions to the Scheme are satisfied or (to the extent allowed by law) waived, CMC intends to file the court order sanctioning the Scheme with the Registrar of Companies in the Cayman Islands on Monday, 13 March 2017 or as otherwise directed by the Grand Court, at which time the Scheme will become effective.

CMC SHAREHOLDERS (INCLUDING ANY BENEFICIAL OWNERS OF SUCH CMC SHARES THAT GIVE VOTING INSTRUCTIONS TO A CUSTODIAN OR CLEARING HOUSE THAT SUBSEQUENTLY VOTES AT THE COURT MEETING) SHOULD NOTE THAT THEY WILL BE ENTITLED TO APPEAR AT THE GRAND COURT HEARING EXPECTED TO BE ON FRIDAY, 10 MARCH 2017 (CAYMAN ISLANDS TIME) AT WHICH CMC WILL SEEK, AMONG OTHER THINGS, THE SANCTION OF THE SCHEME.

26. RECOMMENDATIONS

Your attention is drawn to the following:

(a) the letter from the CMC Board set out in Part IV of this Scheme Document;

(b) the letter from the CMC Independent Board Committee set out in Part V of this Scheme Document; and

(c) the letter from the CMC Independent Financial Adviser set out in Part VI of this Scheme Document.

27. FURTHER INFORMATION

Further information is set out in the Appendices to, and elsewhere in, this Scheme Document, all of which form part of this Explanatory Memorandum.

CMC Shareholders should rely only on the information contained in this Scheme Document. None of CMC, the Offeror, Morgan Stanley or any of their respective affiliates has authorised anyone to provide you with information that is different from what is contained in this Scheme Document.

I. SUMMARY OF FINANCIAL INFORMATION OF THE CMC GROUP

The following is a summary of the audited consolidated financial results of the CMC Group for each of the three years ended 31 December 2013, 2014 and 2015 and a summary of the unaudited condensed consolidated financial results of the CMC Group for each of the six months ended 30 June 2015 and 2016.

The figures for the years ended 31 December 2014 and 2015 are extracted from the 2015 annual report of CMC. The figures for the year ended 31 December 2013 are extracted from the 2014 annual report of CMC. The figure for the six months ended 30 June 2015 and 2016 are extracted from the 2016 interim report of CMC. The auditor's reports in respect of the CMC Group's audited consolidated financial statements for each of the years ended 31 December 2013, 2014 and 2015 and unaudited condensed consolidated financial statements for the six months ended 30 June 2015 and 2016 did not contain any qualifications.

	For the six months ended 30 June		**For the year ended 31 December**		
	2016	**2015**	**2015**	**2014**	**2013**
	(unaudited)	(unaudited)	(audited)	(audited)	(audited)
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*
Revenue	242,844	81,253	426,630	—	—
Cost of sales	(231,772)	(46,222)	(293,949)	—	—
Gross profit	11,072	35,031	132,681	—	—
Other gains	5,352	10,250	12,635	5,566	3,859
General and administrative expenses	(13,625)	(11,545)	(19,508)	(11,275)	(39,905)
Selling and distribution expenses	(28,995)	(6,974)	(41,025)	—	—
Other expenses	(4,436)	(3,053)	(13,259)	—	—
Operating (loss)/profit	(30,632)	23,709	71,524	(5,709)	(36,046)
Finance income	139	202	455	752	541
Finance expenses	(57,722)	(8,830)	(57,318)	(3,392)	(2,342)
Foreign exchange gain/(loss), net	3,810	(7,781)	(26,584)	(8,026)	1,448
Investment income	5,417	1,762	14,992	1,586	—
Share of (loss)/profit of a joint venture	(193)	354	304	(1,684)	(87)
(Loss)/profit before income tax	(79,181)	9,416	3,373	(16,473)	(36,486)
Income tax benefit	33,138	2,770	(17,044)	3,260	5,422
(Loss)/profit for the period	(46,043)	12,186	(13,671)	(13,213)	(31,064)

	For the six months ended 30 June		For the year ended 31 December		
	2016	**2015**	**2015**	**2014**	**2013**
	(unaudited)	(unaudited)	(audited)	(audited)	(audited)
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*
Other comprehensive income					
Items to be reclassified to profit or loss in subsequent periods:					
Exchange differences on translation of foreign Operations	3,261	(7,329)	(15,231)	(7,660)	(4,411)
Other comprehensive income for the period, net of tax	3,261	(7,329)	(15,231)	(7,660)	(4,411)
Total comprehensive income for the period	(42,782)	4,857	(28,902)	(20,873)	(35,475)
(Loss)/earning per share for the period attributable to the equity holders of the Company					
(expressed in US$ per share)					
Basic and diluted	(0.0039)	0.0010	(0.0012)	(0.0011)	(0.003)

Notes:

1. No dividend has been paid or declared by the CMC Group during the years ended 31 December 2013, 2014 and 2015 and the six months ended 30 June 2015 and 2016.

2. Chinalco Peru holds 83.28% interest in Sociedad Minera Pesares S.A. ("Pesares"), which was incorporated in 1905. Pesares had three mining concessions which were subsequently transferred to Chinalco Peru under a transfer agreement of the Toromocho Project when Chinalco Peru acquired Pesares in order to obtain the mining concessions as a whole. Pesares has not engaged in any business activity and has no permanent personnel since the date of its incorporation.

   The minority interest was not material to the consolidated financial statements of CMC (on the date of incorporation and before 31 January 2013 when CMC was listed on the Stock Exchange) and there has been no material transaction since then.

II. UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS OF THE CMC GROUP

The following is the full text of the unaudited condensed consolidated financial statements of the CMC Group for the six months ended 30 June 2016 as extracted from the interim report of CMC for the six months ended 30 June 2016.

Unaudited Interim Condensed Consolidated Statement of Financial Position
as at 30 June 2016

	Note	30 June 2016 Unaudited US$'000	31 December 2015 Audited US$'000
ASSETS			
Non-current assets			
Property, plant and equipment	*6*	4,774,411	4,631,931
Intangible assets		546	554
Investment in a joint venture		2,025	2,218
Deferred tax assets		47,419	14,247
Value-added tax recoverable	*7*	126,470	131,419
Prepayments and other receivables	*9*	12,475	12,632
Restricted cash		4,338	7,881
		4,967,684	4,800,882
Current assets			
Inventories		150,060	107,499
Prepayments and other receivables	*9*	63,621	37,892
Value-added tax recoverable	*7*	116,055	104,535
Trade receivables	*8*	40,472	72,448
Cash and cash equivalents		53,537	122,111
Financial assets at fair value through profit or loss		3,940	—
Derivative financial instruments		3,489	—
		431,174	444,485
Total assets		5,398,858	5,245,367

	Note	30 June 2016 Unaudited US$'000	31 December 2015 Audited US$'000
EQUITY AND LIABILITIES			
Equity attributable to the Company's equity holders			
Share capital	*10*	472,711	472,711
Share premium	*10*	327,267	327,267
Reserve		(7,520)	(10,781)
Accumulated deficits		(162,596)	(116,553)
Total equity		629,862	672,644
LIABILITIES			
Non-current liabilities			
Loans and borrowings	*12*	2,361,500	2,505,570
Provision for remediation and restoration	*11*	230,895	116,302
Deferred income		3,923	3,973
		2,596,318	2,625,845
Current liabilities			
Loans and borrowings	*12*	1,936,634	1,654,688
Trade payables	*13*	194,678	227,749
Accruals and other payables		38,940	39,137
Amount due to immediate holding company		2,426	2,426
Derivative financial instruments		—	22,878
		2,172,678	1,946,878
Total liabilities		4,768,996	4,572,723
Total equity and liabilities		5,398,858	5,245,367
Net current liabilities		(1,741,504)	(1,502,393)
Total assets less current liabilities		3,226,180	3,298,489

Unaudited Interim Condensed Consolidated Statement of Profit or Loss and Other Comprehensive Income

for the six months ended 30 June 2016

		Six months ended 30 June	
		2016	**2015**
	Note	Unaudited	Unaudited
		US$'000	*US$'000*
Revenue	*14*	242,844	81,253
Cost of sales		(231,772)	(46,222)
Gross profit		11,072	35,031
Other gains		5,352	10,250
General and administrative expenses	*16*	(13,625)	(11,545)
Selling and distribution expenses		(28,995)	(6,974)
Other expenses		(4,436)	(3,053)
Operating (loss)/profit		(30,632)	23,709
Finance income	*17*	139	202
Finance expenses	*17*	(57,722)	(8,830)
Foreign exchange gain/(loss), net		3,810	(7,781)
Investment income		5,417	1,762
Share of (loss)/profit of a joint venture		(193)	354
(Loss)/profit before income tax		(79,181)	9,416
Income tax benefit	*18*	33,138	2,770
(Loss)/profit for the period		(46,043)	12,186
Other comprehensive income			
Items to be reclassified to profit or loss in subsequent periods:			
Exchange differences on translation of foreign operations		3,261	(7,329)
Other comprehensive income for the period, net of tax		3,261	(7,329)
Total comprehensive income for the period		(42,782)	4,857
(Loss)/earning per share for the period attributable to the equity holders of the Company (expressed in US$ per share)			
Basic and diluted	*19*	(0.0039)	0.0010
Dividends			
Interim dividend declared	*20*	—	—

Unaudited Interim Condensed Consolidated Statement of Changes in Equity

for the six months ended 30 June 2016

	Share capital	Share premium	Capital reserves	Currency translation differences	Accumulated deficits	Total
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*
Balance at 1 January 2016	472,711	327,267	16,521	(27,302)	(116,553)	672,644
Comprehensive income						
Loss for the period	—	—	—	—	(46,043)	(46,043)
Other comprehensive income						
Currency translation differences *(Note)*	—	—	—	3,261	—	3,261
Total comprehensive income	—	—	—	3,261	(46,043)	(42,782)
Balance at 30 June 2016	472,711	327,267	16,521	(24,041)	(162,596)	629,862
Balance at 1 January 2015	472,711	327,267	16,521	(12,071)	(102,882)	701,546
Comprehensive income						
Profit for the period	—	—	—	—	12,186	12,186
Other comprehensive income						
Currency translation differences *(Note)*	—	—	—	(7,329)	—	(7,329)
Total comprehensive income	—	—	—	(7,329)	12,186	4,857
Balance at 30 June 2015	472,711	327,267	16,521	(19,400)	(90,696)	706,403

Note: The financial statements of certain subsidiaries in Peru are denominated in its functional currency (Nuevos soles for Pomacocha Power S.A.C. and Cal del Centro S.A.C.), and are then translated into U.S. dollars for group consolidation purpose. The exchange differences arising on translation for consolidation are recognized as currency translation differences in other comprehensive income. Upon disposal of a foreign operation, the other comprehensive income related to the foreign operation will be reclassified to profit or loss subject to final calculation at that time.

Unaudited Interim Condensed Consolidated Statement of Cash Flows

for the six months ended 30 June 2016

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
	US$'000	*US$'000*
Cash flows from operating activities		
(Loss)/profit before income tax	(79,181)	9,416
Adjustments for:		
Depreciation and amortization	91,427	28,595
Finance expenses, net	53,773	15,341
Investment income	(5,417)	(1,762)
Gain from change of futures' fair value	(3,940)	(6,641)
Share of loss/(profit) of a joint venture	193	(354)
Changes in working capital:		
Inventories	(42,561)	(20,864)
Trade receivables	31,976	(2,117)
Prepayment and other receivables	1,744	(11,550)
Derivative financial instrument	(26,367)	—
Trade payables	(33,071)	—
Accruals and other payables	(695)	11,331
Deferred income	(50)	(52)
Interest received	139	202
Interest paid	(53,668)	—
Income tax paid	(10,457)	(4,917)
Net cash (used in)/generated from operating activities	(76,155)	16,628
Cash flows from investing activities		
Purchases of property, plant and equipment	(180,737)	(208,432)
Purchases of intangible assets	(169)	(296)
Value-added tax refunds received	69,360	29,635
Decrease/(increase) in restricted cash	3,543	(13,782)
Interest paid	(13,142)	(50,947)
Payment of futures deposits	(11,100)	—
Proceeds from investment income	3,274	—
Net cash used in investing activities	(128,971)	(243,822)
Cash flows from financing activities		
Proceeds from loans and borrowings	470,000	830,000
Repayment of loans and borrowings	(338,545)	(576,076)
Net cash generated from financing activities	131,455	253,924
Effects of exchange rates on cash and cash equivalents	5,097	(1,068)
Net (decrease)/increase in cash and cash equivalents	(73,671)	26,730
Cash and cash equivalents at beginning of the period	122,111	75,173
Cash and cash equivalents at end of the period	53,537	100,835

Notes to Unaudited Interim Condensed Consolidated Financial Statements

for the six months ended 30 June 2016

1. GENERAL INFORMATION

Chinalco Mining Corporation International (the "Company") was incorporated in the Cayman Islands on 24 April 2003 as an exempted company with limited liability under the Companies Law of the Cayman Islands. Its name was Peru Copper Syndicate, Ltd. on incorporation and changed to Chinalco Mining Corporation International on 30 September 2011. The Company's registered office is PO Box 309 Ugland House, Grand Cayman, KY 1-1104, Cayman Islands.

The Company's shares were listed on the Main Board of The Stock Exchange of Hong Kong Limited on 31 January 2013.

The Company is a subsidiary of Aluminum Corporation of China Overseas Holdings Limited ("Chinalco Overseas"), a company incorporated in Hong Kong with limited liability. As at the date of approval of these financial statements, the directors of the Company regard Aluminum Corporation of China ("Chinalco"), a state-owned enterprise incorporated in the People's Republic of China (the "PRC") and administered by the State-owned Assets Supervision and Administration Commission ("SASAC") of the State Council (the "State Council") of the PRC, as its ultimate holding company.

The Company and its subsidiaries (together, the "Group") are principally engaged in exploration, development and production of ore resources and other mining related activities.

In May 2003, the Company's subsidiary, Minera Chinalco Peru S.A. ("MCP"), was awarded by the Peruvian government a right to develop and extract ore resource in the district of Morococha, Yauli Province, the Republic of Peru ("Peru") through a public bidding (the "Toromocho Project"). In June 2003, the Company signed an assignment agreement and by which the Company was entitled to exercise a purchase option of the mining concessions during a period which could be extended to June 2008. In May 2008, the Company exercised its right and signed with Activos Mineros (an entity incorporated by the Peruvian government), in the name of Peruvian Government, the Mining Concessions Transference Agreement of the Toromocho Project (the "Assignment Agreement"). Under the Assignment Agreement, Activos Mineros transferred to the Company the title of certain mining concessions, their surface property, buildings and water usage right pertaining to the Toromocho Project.

From August 2012 to February 2013, the Company entered into five binding off-take agreements with four cornerstone investors (or their affiliates) and one independent third party, pursuant to which the Company agreed to sell an aggregate of 70% of the annual production of copper concentrates from the Toromocho Project for a period of five years starting from the first official production of the Toromocho Project at a price determined by reference to certain benchmark market rates adjusted based on the grade of the copper concentrates, two of which will automatically continue for another five years (the "Off-take Agreements"). The Toromocho Project has commenced commercial production in June 2015. Three of the Off-take Agreements have come into force through signing supplemental agreements.

The interim condensed consolidated financial statements are presented in US dollar ("US$"), unless otherwise stated.

The interim condensed consolidated financial statements have not been audited.

2. BASIS OF PREPARATION

The interim condensed consolidated financial statements for the six months ended 30 June 2016 have been prepared in accordance with International Accounting Standard ("IAS") 34 Interim Financial Reporting.

The interim condensed consolidated financial statements do not include all the information and disclosures required in the annual financial statements and should be read in conjunction with the Group's annual financial statements as at 31 December 2015.

Going concern

As at 30 June 2016, the Group's current liabilities exceeded its current assets by approximately US$1,742 million (31 December 2015: US$1,502 million). The directors of the Company has considered the Group's available sources of funds as follows:

- In August 2016, the Group has obtained a banking facility amounting to RMB600 million (equivalent to US$90.48 million) from Industrial Bank. As at the date of approval of this report, no facility has been drawn down.

- In March 2016, the Group has obtained trade financing facility amounting to RMB450 million (equivalent to US$67.86 million) from China Construction Bank to issue Letter of Credit for international trades. As at 30 June 2016, the remaining balance of this facility was RMB322 million (equivalent to US$48.62 million). As at the date of approval of this report, all outstanding balance has been repaid and remaining balance of this facility was RMB450 million (equivalent to US$67.86 million).

- In February 2016, the Group has obtained the term sheet of a finance lease arrangement amounting to US$450 million for the proper development of the Toromocho Project from ICBC Financial Leasing ("ICBC Leasing").

- The Company's immediate holding company, Chinalco Overseas provided some loan facilities to the Group for general corporate purposes including but not limited to funding the working capital for the Toromocho Project. In 2014, Chinalco Overseas provided loan facilities of US$350 million and US$200 million (the "2014 Loan Facilities"). In January 2015, Chinalco Overseas provided a loan facility of US$1,200 million (the "2015 Loan Facility"). The 2014 Loan Facilities and the 2015 Loan Facility were renewed in January 2016. The loan facility of US$200 million among the 2014 Loan Facilities was matured at 30 June 2016 and was not renewed. As at 30 June 2016, the remaining balances of 2014 Loan Facilities and 2015 Loan Facility were US$50 million and US$630 million, respectively.

- The Company's immediate holding company, Chinalco Overseas, has agreed not to demand repayment of the loan due from the Group amounting to approximately US$1,031 million as at 30 June 2016 (31 December 2015: US$1,079 million) until the Group is financially capable to do so. The Company's ultimate holding company, Chinalco also agreed that it would provide continuing financial support to finance the future operations of the Group for a period of not less than 12 months from the date these financial statements were approved.

Based on the above, the directors of the Company believe that the Group will have adequate resources to continue in operations for a period that is not less than 12 months from 30 June 2016. The Group therefore continues to adopt the going concern basis in preparing these financial statements.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies adopted in the preparation of the interim condensed consolidated financial statements are consistent with those followed in the preparation of the Group's annual consolidated financial statements for the year ended 31 December 2015, except for the adoption of new standards and interpretations effective as of 1 January 2016. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

The nature and the effect of these new standards and interpretations that are applicable to the Group's operations are disclosed below. Although these new standards and amendments apply for the first time in 2016, they do not have a material impact on the annual consolidated financial statements of the Group or the interim condensed consolidated financial statements of the Group. The nature and the impact of each new standard or amendment is described below:

Amendments to IFRS 11: ***Accounting for Acquisitions of Interests in Joint Operations***

The amendments to IFRS 11 require that an acquirer of an interest in a joint operation in which the activity of the joint operation constitutes a business must apply the relevant principles for business combinations in IFRS 3. The amendments also clarify that a previously held interest in a joint operation is not remeasured on the acquisition of an additional interest in the same joint operation while joint control is retained. In addition, a scope exclusion has been added to IFRS 11 to specify that the amendments do not apply when the parties sharing joint control, including the reporting entity, are under common control of the same ultimate controlling party. The amendments apply to both the acquisition of the initial interest in a joint operation and the acquisition of any additional interests in the same joint operation. The amendments do not have any impact on the financial position or performance of the Group upon adoption on 1 January 2016.

Amendments to IAS 16 and IAS 38: ***Clarification of Acceptable Methods of Depreciation and Amortisation***

The amendments clarify the principle in IAS 16 and IAS 38 that revenue reflects a pattern of economic benefits that are generated from operating a business (of which the asset is part) rather than the economic benefits that are consumed through use of the asset. As a result, a revenue-based method cannot be used to depreciate property, plant and equipment and may only be used in very limited circumstances to amortise intangible assets. These amendments do not have any impact to the Group given that the Group has not used a revenue-based method to depreciate or amortise its noncurrent assets.

Amendments to IAS 1 ***Disclosure Initiative***

The amendments to IAS 1 clarify, rather than significantly change, existing IAS 1 requirements. The amendments clarify:

(i) The materiality requirements in IAS 1;

(ii) That specific line items in the statement of profit or loss and other comprehensive income and the statement of financial position may be disaggregated;

(iii) That entities have flexibility as to the order in which they present the notes to financial statements; and

(iv) That the share of other comprehensive income of associates and joint ventures accounted for using the equity method must be presented in aggregate as a single line item, and classified between those items that will or will not be subsequently reclassified to profit or loss.

Furthermore, the amendments clarify the requirements that apply when additional subtotals are presented in the statement of financial position and the statement of profit or loss and other comprehensive income. These amendments do not have any impact on the Group.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of the interim condensed consolidated financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenue, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingents liabilities, uncertainty about these judgements, assumptions and estimates could result in outcomes that require a material adjustment to carrying amounts of assets or liabilities affected in future periods.

In preparing these interim condensed consolidated financial statements, the significant judgements and estimates made by management in applying the Group's accounting policies and the key sources of estimation uncertainty were consistent with those applied to the consolidated financial statements for the year ended 31 December 2015.

5. FINANCIAL RISK MANAGEMENT

5.1 Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including foreign currency risks, cash flow and fair value interest rate risk and commodity price risk), credit risk and liquidity risk.

The interim condensed consolidated financial statements do not include all financial risk management information and disclosures required in the annual financial statements, and should be read in conjunction with the Group's annual financial statements for the year ended 31 December 2015.

(a) There have been no changes in the risk management department since 31 December 2015 or in any risk management policies.

There was no material change in the status of market risk or credit risk as compared with that of 31 December 2015.

(b) Liquidity Risk

As compared with 31 December 2015, there was no material change in the contractual undiscounted cash outflows for financial liabilities. The liquidity risk of the Group is controlled by maintaining sufficient cash and cash equivalents, which is generated primarily from financing activities.

5.2 Financial instruments

Set out below is an overview of financial instruments held by the Group as at 30 June 2016 and 31 December 2015:

	30 June 2016			31 December 2015
	Financial assets at fair value through profit or loss	**Loans and receivables**	**Total**	**Loans and receivables**
	Unaudited	Unaudited	Unaudited	Audited
	US$'000	*US$'000*	*US$'000*	*US$'000*
Financial assets:				
Trade receivables	—	40,472	40,472	72,448
Other receivables	—	34,119	34,119	23,049
Restricted cash	—	4,338	4,338	7,881
Cash and cash equivalents	—	53,537	53,537	122,111
Financial assets at fair value through profit or loss	3,940	—	3,940	—
Derivative financial instruments	3,489	—	3,489	—
Total	7,429	132,466	139,895	225,489

	30 June 2016		31 December 2015		
	Financial liabilities at amortised costs	**Total**	**Financial liabilities at fair value through profit or loss**	**Financial liabilities at amortised costs**	**Total**
	Unaudited	Unaudited	Audited	Audited	Audited
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*
Financial liabilities:					
Loans and borrowings	4,298,134	4,298,134	—	4,160,258	4,160,258
Trade payables	194,678	194,678	—	227,749	227,749
Financial liabilities included in accruals and other payables	21,107	21,107	—	24,598	24,598
Derivative financial instruments	—	—	22,878	—	22,878
Amount due to the immediate holding company	2,426	2,426	—	2,426	2,426
Total	4,516,345	4,516,345	22,878	4,415,031	4,437,909

Management assessed that the fair value of the Group's financial assets and financial liabilities, except the non-current portion of loans and borrowings, approximated to their carrying amounts at the reporting date largely due to the short term maturities of these instruments.

The fair value of the Group's non-current portion of loans and borrowings approximated to their carrying amounts mainly because they are floating rate loans and borrowings.

Fair value hierarchy

The following tables illustrate the fair value measurement hierarchy of the Group's financial instruments:

Assets measured at fair value

As at 30 June 2016

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	**Significant observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**	**Total**
	US$'000	*US$'000*	*US$'000*	*US$'000*
Financial assets at fair value through profit or loss:				
Futures contracts	3,709	—	—	3,709
Foreign exchange forward contracts	—	231	—	231
Derivative financial instruments	—	3,489	—	3,489
	3,709	3,720	—	7,429

There were no assets measured at fair value as at 31 December 2015.

Liabilities measured at fair value

As at 30 June 2016

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	**Significant observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**	**Total**
	US$'000	*US$'000*	*US$'000*	*US$'000*
Derivative financial instruments	—	—	—	—
	—	—	—	—

As at 31 December 2015

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	**Significant observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**	**Total**
	US$'000	*US$'000*	*US$'000*	*US$'000*
Derivative financial instruments	—	22,878	—	22,878
	—	22,878	—	22,878

During the six-month period ended 30 June 2016, there were no transfers between Level 1 and Level 2 fair value measurements, and no transfers into or out of Level 3 fair value measurements.

6. PROPERTY, PLANT AND EQUIPMENT

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
	US$'000	*US$'000*
At 1 January		
Cost	4,802,478	4,414,404
Accumulated depreciation	(170,547)	(57,027)
Net carrying amount	4,631,931	4,357,377
During the period		
At 1 January, net carrying amount	4,631,931	4,357,377
Additions	117,643	146,828
Estimated remediation and restoration obligations *(Note)*	112,842	(16,436)
Transfer to intangible assets	—	(241)
Disposals	(305)	(14)
Effect of exchange rate fluctuation	3,550	(6,432)
Depreciation	(91,250)	(34,743)
At 30 June, net carrying amount	4,774,411	4,446,339
At 30 June		
Cost	5,035,473	4,538,109
Accumulated depreciation	(261,062)	(91,770)
Net carrying amount	4,774,411	4,446,339

Note: Included in the movement of property, plant and equipment of the Group for the six months ended 30 June 2016 was a upward revision to the estimated remediation and restoration obligations (Note 11) in relation to the property, plant and equipment amounting to US$112,842,000 (six months ended 30 June 2015: downward revision of US$16,436,000).

During the six months ended 30 June 2016, the Group capitalised financing costs amounting to US$14,893,000 (six months ended 30 June 2015: US$50,947,000) (Note 17) included in the additions of property, plant and equipment of the Group.

As at 30 June 2016, bank borrowings from Export-Import Bank of China ("Eximbank") amounting to US$2,109,936,000 (31 December 2015: US$2,193,774,000) (Note 12(b)) were guaranteed by Chinalco and according to the borrowing agreements, in case that the credibility or financial status of Chinalco deteriorates or has the potential to deteriorate, all property, plant and equipment pertaining to the Toromocho Project will be pledged as additional security for these borrowings.

As at 30 June 2016, the amount of nil (31 December 2015: US$28 million) by which net proceeds received exceed the costs of testing while bringing the Toromocho Project to commercial production levels has been credited to the cost of property, plant and equipment of the Group.

7. VALUE-ADDED TAX RECOVERABLE

On 14 September 2010, by means of Supreme Decree No. 060-2010-EM issued by the Peruvian Ministry of Energy and Mines ("MEM"), as countersigned by the Ministry of Economy and Finance, the Company was entitled to use the Special Regime of the Value Added Tax ("VAT") Anticipated Refunding ("RERA IGV", the Spanish acronym), in adherence to Legislative Decree 973. Accordingly, qualified VAT paid on purchases can be used to set off tax payable to local sales, or any other taxes required by the Peruvian tax authorities or refunded in the form of negotiable credit notes or non-negotiable checks.

In order to qualify for the above entitlement under RERA IGV, the Group signed an investment agreement with respect to the Toromocho Project (the "Investment Agreement") on 16 June 2009 with MEM, which was modified under an addendum dated 27 July 2010. Pursuant to the Investment Agreement, the Group agreed to invest into the Toromocho Project US$2,053 million by the end of 2012. On 15 December 2011, the MEM and MCP signed an addendum to the Investment Agreement, which was approved by the MEM and Ministry of Finance of the Peruvian government on 8 February 2012, in order to extend the period of fulfillment of the committed investment until December 2013.

On 17 January 2014, the Group signed an amendment of the Investment Agreement with MEM, pursuant to which the Group committed to invest US$2,984 million in the Toromocho Project until 30 June 2016.

VAT recoverable represents the VAT credits entitled to the Group for VAT paid on the acquisition of goods and services related to its exploration and development activities, and is summarized as follows:

	30 June 2016	**31 December 2015**
	Unaudited	Audited
	US$'000	*US$'000*
VAT recoverable:		
— to be recovered after 12 months	126,470	131,419
— to be recovered within 12 months	116,055	104,535
	242,525	235,954

8. TRADE RECEIVABLES

	30 June 2016	31 December 2015
	Unaudited	Audited
	US$'000	*US$'000*
Trade receivables	40,472	72,448
Less: impairment	—	—
	40,472	72,448

The Group mainly requires its customers to make payment at a specific percentage of the trade receivables, within the credit period which is generally three months, extending up to six months. As at 30 June 2016, none of trade receivables were past due but impaired. Trade receivables are non-interest-bearing.

In determining the recoverability of receivables, the Group performs a risk analysis considering the type and aging of the outstanding receivables and the creditworthy of the counterparty.

An aging analysis of the trade receivables as at the end of the reporting period, based on the invoice date and net of provisions, is as follows:

	30 June 2016	31 December 2015
	Unaudited	Audited
	US$'000	*US$'000*
Within 3 months	36,140	59,493
3 to 6 months	4,274	10,947
6 months to 1 year	58	2,008
	40,472	72,448

9. PREPAYMENTS AND OTHER RECEIVABLES

	30 June 2016 Unaudited US$'000	31 December 2015 Audited US$'000
Other receivables:		
Loan to a joint venture *(Note (a))*	9,428	9,585
Loan to a transportation services provider *(Note (b))*	3,047	3,047
Amount due from contractors for purchase of fuel	2,842	4,033
Employee advances	77	304
Amounts due from ultimate holding company	177	174
Futures deposits	13,655	2,555
Insurance claims	1,863	2,794
Receivables for the realized gain on futures contract	2,143	—
Others	887	557
	34,119	23,049
Less: impairment	—	—
	34,119	23,049
Prepayments:		
Prepaid insurance	5,244	2,303
Prepaid income tax	30,126	19,703
Advance to constructors	1,258	1,838
Advance to suppliers	1,483	3,179
Others	3,866	452
	41,977	27,475
Total prepayments and other receivables	76,096	50,524
Less: non-current portion *(Note (c))*	(12,475)	(12,632)
	63,621	37,892

Notes:

(a) The loan to a joint venture is unsecured and bears interest at LIBOR plus 5% per annum. The principle repayment will start only if MCP deliver at least 45,000 MT of copper concentrate for 3 consecutive months.

(b) As at 30 June 2016, the other receivables amounting to US$3,047,000 (31 December 2015: US$3,047,000) represented a loan to Ferrocarril Central Andino S.A., a third party Peruvian limited liability company which provides certain transportation services to the Group. Such loan receivable is unsecured, interest free and is due in 6 years.

(c) The non-current portion mainly includes other receivables from a joint venture and Ferrocarril Central Andino S.A.

Aging analysis of other receivables is as follows:

	30 June 2016	31 December 2015
	Unaudited	Audited
	US$'000	*US$'000*
Within 3 months	14,119	7,678
3 to 6 months	517	407
6 months to 1 year	6,980	2,302
1 to 2 years	1,866	2,171
2 to 3 years	5,491	7,444
Over 3 years	5,146	3,047
	34,119	23,049

In determining the recoverability of other receivables, the Group performs a risk analysis considering the type and aging of the outstanding receivables and the creditworthy of the counterparties.

10. SHARE CAPITAL AND SHARE PREMIUM

As at 30 June 2016, the number of total authorized ordinary shares was 25 billion (31 December 2015: 25 billion) with a par value of US$0.04 (31 December 2015: US$0.04) per share.

The details of the issued and fully paid ordinary shares of the Company are as follows:

	Number of issued shares	Ordinary shares	Share premium
	Unaudited	Unaudited	Unaudited
		US$'000	*US$'000*
At 1 January 2016	11,817,782,429	472,711	327,267
Issuance of new shares	—	—	—
At 30 June 2016	11,817,782,429	472,711	327,267
At 1 January 2015	11,817,782,429	472,711	327,267
Issuance of new shares	—	—	—
At 30 June 2015	11,817,782,429	472,711	327,267

The Company completed initial public offering on 31 January 2013 and the over-allotment option was exercised on 22 February 2013 with 1,764,913,000 and 51,698,000 shares issued respectively at a par value of US$0.04 per share. The issue price was HK$1.75 per share.

11. PROVISION FOR REMEDIATION AND RESTORATION

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
	US$'000	*US$'000*
At beginning of the period	116,302	126,472
Revision	112,842	(16,436)
Accretion expenses *(Note 17)*	1,751	1,745
At the end of the period	230,895	111,781

Provision for remediation and restoration includes environmental remediation costs, assets retirement obligation and similar obligations in relation to the Group's development of the Toromocho Project. Pursuant to the Assignment Agreement of the Toromocho Project (Note 1), the Group is responsible for the remediation of the alternations of the lands given for mineral exploitation, even if these damages were caused before the signing of the relevant concession agreements. In addition, the Group is also obliged to operate and maintain certain facilities after closure of the mines.

In August 2012, Walsh Peru S.A., an independent valuer, issued to the Group the Mine Closure Plan which was approved by the Ministry of Energy and Mines of Peru ("MEM") on 27 December 2012. During first half of 2016, Walsh Peru S.A., renewed the Mine Closure Plan which was approved by MEM as at 8 June 2016.

Taking into consideration of the above reports issued by Walsh Peru S.A. and the MEM's approval of the Mine Closure Plan, the Group has assessed and provided for remediation and restoration and similar obligations amounting to US$230,895,000 as at 30 June 2016 (31 December 2015: US$116,302,000).

12. LOANS AND BORROWINGS

	30 June 2016	**31 December 2015**
	Unaudited	Audited
	US$'000	*US$'000*
Current		
Borrowings from immediate holding company *(a)*		
— unsecured	870,000	920,000
Short-term bank loans *(b)*		
— secured	625,000	325,000
— unsecured	190,758	208,348
Long-term bank loan, due within one year *(b)*		
— secured	214,580	198,880
— unsecured	27,000	—
Other loans, due within one year *(c)*		
— secured	9,296	2,460
	1,936,634	1,654,688
Non-current		
Borrowings from immediate holding company *(a)*		
— unsecured	161,208	158,904
Long-term bank loans *(b)*		
— secured	2,127,556	2,240,094
— unsecured	—	27,000
Other loans *(c)*		
— secured	72,736	79,572
	2,361,500	2,505,570
	4,298,134	4,160,258

(a) Borrowings from immediate holding company

During the six months ended 30 June 2016 and 2015, the Group's borrowings from its immediate holding company are as follows:

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
	US$'000	*US$'000*
At beginning of the period	1,078,904	435,271
Addition	170,000	790,000
Interest charged	27,865	11,819
Repayment	(245,561)	(129,986)
At the end of the period	1,031,208	1,107,104
Among which:		
Principal	1,013,400	1,093,399
Interest payable	17,808	13,705
	1,031,208	1,107,104

(b) Bank loans

As at 30 June 2016 and 31 December 2015, bank loans are summarized as follows:

	30 June 2016 Unaudited		**31 December 2015 Audited**	
	Amount US$'000	*Effective interest rate*	*Amount US$'000*	*Effective interest rate*
The Export-import Bank of China ("Eximbank") *(i)*	2,109,936	2.76%–4.43%	2,193,774	2.65%–4.30%
China Development Bank ("CDB") *(ii)*	357,200	3.69%–4.40%	370,200	3.62%–4.30%
Other banks *(iii)*	717,758	1.64%–3.99%	435,348	1.57%–3.75%
	3,184,894		2,999,322	

(i) In December 2010, the Group obtained a banking facility amounting to US$2,000 million from Eximbank for the purpose of financing the development of the Toromocho Project. The Group is required to pay a 1% commission fee for each drawdown and the facility bears an interest rate at LIBOR plus 1.85% per annum. This facility is guaranteed by Chinalco (Note 22(b)) and will become secured by all property, plant and equipment pertaining to the Toromocho Project if Chinalco's credibility or financial status deteriorates (Note 6). The Group is also required to comply with certain financial covenants relating to the use of funds and other administrative resources.

In March 2013, the Group signed a supplemental agreement with Eximbank which provided additional loan facility amounting to US$419 million with an interest rate at LIBOR plus 3.5% per annum. The Group is required to pay a 1% commission fee for each drawdown. This facility is guaranteed by Chinalco (Note 22(b)) and will become secured by all property, plant and equipment pertaining to the

Toromocho Project if Chinalco's credibility or financial status deteriorates (Note 6). The Group is also required to comply with certain financial covenants relating to the use of funds and other administrative resources.

As at 30 June 2016 and 31 December 2015, the above banking facilities with Eximbank had been fully drawn down. In 2016, the newly amortised commission fee amounting to US$1,252,000, the unamortised commission fee amounted to US$12,794,000. As at 30 June 2016, the Group has repaid US$296,270,000 based on the payment schedule.

(ii) In September 2012, the Group obtained a banking facility amounting to US$83 million from CDB for the construction, maintenance and operation of Kingsmill Tunnel Water Treatment Plant. This facility is guaranteed by Chinalco (Note 22(b)) and bears an interest rate at LIBOR plus 3.5% per annum.

In September 2012, CDB issued a memorandum indicating its commitment to lend US$274 million to the Group for certain designated projects in relation to the development of the Toromocho Project, in which US$100 million was cancelled later due to delay of related specific project. Pursuant to this memorandum, the Group has obtained banking facilities which are guaranteed by Chinalco (Note 22(b)) and bear an interest rate at LIBOR plus 3.5% per annum.

In August 2015, the Group obtained a banking facility amounting to US$125 million from CDB for the general corporate purposes for the Toromocho Project. In August, November and December 2015, US$30 million, US$50 million and US$45 million were drawn down respectively. This facility is secured by trade receivables from several copper concentrate sales agreements.

As at 30 June 2016, all facilities from CDB have been fully drawn down and US$24.8 million has been repaid based on the payment schedule.

(iii) As at 30 June 2016, the Group obtained bank loans of US$418 million from Banco Bilbao Vizcaya Argentaria Hong Kong ("BBVA-HK"), Banco Bilbao Vizcaya Argentaria Perú ("BBVA-Perú"), Standard Chartered Bank (Taiwan) Limited, Natixis (acting through its Hong Kong Branch), Banco de Credito del Perú and Shanghai Pudong Development Bank, which bear interest at rates ranging from 1.64% to 3.99% per annum, among which, US$100 million from Natixis is guaranteed by Chinalco, US$100 million from BBVA-HK is guaranteed by China Export and Credit Insurance Corporation, a third party, with a counter-guarantee provided by Chinalco (Note 22(b)). As at 30 June 2016, US$20.455 million was repaid to BBVA-Perú.

In March 2016, the Group signed a short term loan agreement with Banco Santander S.A (Spain) amounting to US$300 million with an interest rate at LIBOR plus 1.70% per annum. This short term loan has been used as working capital and is guaranteed by Bank of Shanghai (Beijing Branch), with a counter-guarantee provided by Chinalco (Note 22(b)).

During the periods ended 30 June 2016 and 2015, the movement in the borrowings from banks are analysed as follows:

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
	US$'000	*US$'000*
At beginning of the period	2,999,322	3,269,157
Proceeds of new borrowings	300,000	40,000
Repayments of the borrowings	(118,545)	(446,090)
Exchange rate effect of loans in PEN	2,865	—
Amortization of commission fee	1,252	1,398
At the end of the period	3,184,894	2,864,465

(c) As at 30 June 2016 and 31 December 2015, the long-term bank borrowings and other loans were repayable as follows:

	30 June 2016	**31 December 2015**
	Unaudited	Audited
	US$'000	*US$'000*
Within 1 year	250,876	201,340
Between 1 and 2 years	235,452	254,721
Between 2 and 5 years	695,615	728,886
Over 5 years	1,430,433	1,521,963
	2,612,376	2,706,910
Amount due within one year shown under current liabilities	(250,876)	(201,340)
	2,361,500	2,505,570

13. TRADE PAYABLES

The trade payables are non-interest-bearing and are normally settled in 60 days to 90 days.

Aging analysis of trade payables is as follows:

	30 June 2016	**31 December 2015**
	Unaudited	Audited
	US$'000	*US$'000*
Up to 3 months	144,892	204,580
3 to 6 months	20,022	6,752
6 months to 1 year	29,764	2,869
1 to 2 year	—	13,548
	194,678	227,749

14. REVENUE

During the six-month period ended 30 June 2016 and 2015, the Group recorded the revenue as following:

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
	USD'000	*USD'000*
Sales of goods	242,844	81,253
Total revenue	242,844	81,253

15. SEGMENT REPORTING

Management determines the operating segments based on the information reported to the Group's chief operating decision maker. As the majority of the Group's activities are engaged in the mining development and the majority of the principal assets employed by the Group are located in Peru, the Group's chief operating decision maker considers the performance assessment of the Group should be based on the results of the Group as a whole. Therefore no further segment information is disclosed.

16. GENERAL AND ADMINISTRATIVE EXPENSES

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
	US$'000	*US$'000*
By nature:		
Labor cost	2,823	2,598
Amortization and depreciation	120	235
Consulting and other service expenses	972	397
Office and other supplies	65	139
Advertising and promotion	14	61
Travel and transportation	347	195
Taxes other than income tax	5,954	1,111
Operating lease expense	811	723
Insurance expense	1,750	4,288
Others	769	1,798
	13,625	11,545

17. FINANCIAL INCOME/(EXPENSES)

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
	US$'000	*US$'000*
Finance income		
— Interest income	139	202
Total finance income	139	202
Finance expenses		
— Interest expense on borrowings wholly repayable within five years	(30,264)	(18,328)
— Interest expense on borrowings wholly repayable after five years	(39,521)	(39,433)
— Bank charges	(1,079)	(271)
— Accretion of interest on provision for remediation and restoration *(Note 11)*	(1,751)	(1,745)
	(72,615)	(59,777)
Less: amounts capitalised into construction-in-progress *(Note 6)*	14,893	50,947
Total finance expenses	(57,722)	(8,830)

18. INCOME TAX BENEFIT

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
	US$'000	*US$'000*
Current income tax	(34)	(8)
Deferred income tax	33,172	2,778
	33,138	2,770

The Company was incorporated in Cayman Islands as an exempted company with limited liability under the Companies Law of Cayman Islands and, accordingly, is exempted from payment of Cayman Islands corporate income tax.

Subsidiaries incorporated in Peru are subject to corporate income tax at a rate of 32% during the six-month period ended 30 June 2016 (six months ended 30 June 2015: 32%), pursuant to the Stability Agreement signed with the MEM that stabilizes their income tax rates at 32%, taking effect on 1 January 2014. Our subsidiary in China is subject to corporate income tax at a rate of 25%.

The income tax on the Group's (loss)/profit before tax differs from the theoretical amount that would arise using the applicable tax rates to (loss)/profit of the consolidated entities as follows:

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
	US$'000	*US$'000*
(Loss)/profit before income tax	(79,181)	9,416
Tax benefit/(expense) calculated at the tax rates applicable to profit or loss in the respective countries	25,338	(3,013)
Non-deductible expenses	(1,325)	(1,422)
Benefit from recognized tax loss (unrecognized)	8,423	7,766
Others	702	(561)
Income tax benefit	33,138	2,770

19. EARNING/(LOSS) PER SHARE FOR THE PERIOD ATTRIBUTABLE TO THE EQUITY HOLDERS OF THE COMPANY

(a) Basic

Basic (loss)/earning per share is calculated by dividing the net (loss)/profit attributable to the equity holders of the Company by the weighted average number of ordinary shares in issue during the period.

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
(Loss)/profit attributable to equity holders of the Company (US$'000)	(46,043)	12,186
Weighted average number of ordinary shares in issue (thousands)	11,817,782	11,817,782
Basic (loss)/earning per share (US$ per share)	(0.0039)	0.0010

(b) Diluted

Diluted earning/(loss) per share for the six months ended 30 June 2016 and 2015 are the same as the basic earning/(loss) per share, as there are no dilutive potential shares.

20. DIVIDENDS

No dividend has been paid or declared by the Company during the six months ended 30 June 2016 and 2015.

21. COMMITMENTS AND CONTINGENCIES

(a) Commitments

(i) *Capital Commitments*

	30 June 2016	31 December 2015
	Unaudited	Audited
	US$'000	*US$'000*
Contracted, but not provided for: Property, plant and equipment	132,695	82,008

(ii) *Operating lease commitments — where the Group is the lessee*

The Group leases various offices and warehouses under operating lease agreements. Leases for offices and warehouses are negotiated for terms ranging from two to five years.

The future aggregate minimum lease payments under non-cancellable operating leases are as follows:

	30 June 2016	31 December 2015
	Unaudited	Audited
	US$'000	*US$'000*
No later than 1 year	1,421	3,643
Later than 1 year and no later than 5 years	1,011	665
	2,432	4,308

(iii) *Investment Commitments*

(1) Pursuant to the Investment Agreement in connection with the VAT recoverable entitlement (Note 7), the Group is committed to investing in the Toromocho Project amounting to US$2,053 million by the end of 2012. On 15 December 2011, the MEM and MCP signed an addendum to the Investment Agreement, which was approved by the MEM and the Ministry of Finance of the Peruvian government on 8 February 2012, to extend the period of fulfilment of the committed investment until December 2013.

On 17 January 2014, the Group signed an amendment to the Investment Agreement with the MEM, pursuant to which, the Group committed to investing US$2,984 million in the Toromocho Project by 30 June 2016.

On 23 November 2013, the Company submitted to the General Mining Bureau ("GMB") a modification request of the "Agreement of Guarantees and Measures to Promote Investment" (the "Stability Agreement", which was initially signed with the MEM on 9 March 2009) to increase the amount of committed investment and extend the period of disbursement. On 27 December 2013, the GMB approved the modification of the investment schedule of the Toromocho Project, with an increase of total investment up to US$4,383 million and an extended period of disbursement to December 2016. As at 30 June 2016, the Group has invested US$4,205 million in the development of the Toromocho Mining Project.

The above modification of investment schedule of Stability Agreement includes the investment commitment indicated in the Investment Agreement in connection with VAT recoverable entitlement.

(2) The Group maintains letters of credit amounting to US$15,764,000 as the guarantee for compliance with the Mine Closures Plan (Note 11), which is secured by restricted cash US$919,000.

(b) Contingencies

(i) In May 2010, the local government of Morococha issued an order to MCP to cease the construction work for the new town of Morococha for the purpose of relocating the local original residents in relation to the development of the Toromocha Project through an administrative resolution on the ground that the construction started without a proper permit. In August 2011, MCP obtained from the provincial government of Yauli-La Oroya a preliminary relief which explicitly permits it to continue the construction. In August 2011, the district court ruled that the local municipal government of Morococha is a competent authority to issue the aforementioned order and that the evidence shows that the Company did not have a relevant permit at the time of such order. In September 2011, MCP filed an appeal with the court of appeal against the decision by the district court claiming that, among others, the competent authority to supervise this matter should be the provincial government of Yauli-La Oroya of Peru and that the local government of Morococha's resolution on this matter is invalid. In September 2012, the superior court issued a resolution declaring the appeal as inadmissible. MCP filed an appeal to the constitutional high court, which will be the final instance. On 11 March 2013, MCP presented their oral report before the constitutional high court and the final resolution is yet to be released.

As at the date of approval of these financial statements, the aforementioned appeal is still in progress. In consideration of the opinion of an independent legal counsel, the directors of the Company are of the opinion that the claim is likely to be resolved in favour of MCP. Accordingly, no provision is considered necessary with respect to the aforementioned claim as at 30 June 2016.

Beside the above, the Group has a claim of Abengoa related to the construction of the transmission line of electric power (property of Pomacocha Power S.A.C.) amounting to US$4.4 million, which it has been classified as possible according to the management's and its legal advisors' assessment.

(ii) Apart from the above, as at 30 June 2016, the directors of the Company did not anticipate that any material liabilities will arise from the contingent liabilities other than those provided for in the financial statements.

22. RELATED PARTY DISCLOSURES

Other than the related party information and transactions disclosed elsewhere in the interim condensed consolidated financial statements, the following is a summary of significant related party transactions entered into, in the ordinary course of business, between the Group and its related parties during the period:

(a) Borrowings due to immediate holding company

During the six months ended 30 June 2016 and 2015, the Group has outstanding borrowings due to its immediate holding company, details of which are disclosed in Note 12(a). For the six months ended 30 June 2016, the interest expense incurred for such borrowing amounted to US$27,865,000 (six months ended 30 June 2015: US$11,819,000).

(b) Financial guarantees by ultimate holding company

As at 30 June 2016, the Group's borrowings amounting to US$2,442 million (31 December 2015: US$2,439 million) (Note 12(b)) were guaranteed by Chinalco.

As at 30 June 2016, the Group's current borrowings amounting to US$100 million (31 December 2015: US$100 million) were guaranteed by China Export and Credit Insurance Corporation, with counter-guarantee by Chinalco (Note 12(b)).

As at 30 June 2016, the Group's current borrowings amounting to US$300 million (31 December 2015: Nil) were guaranteed by Bank of Shanghai (Beijing Branch), with counter-guarantee by Chinalco (Note 12(b)).

As at 30 June 2016, the Group's Letter of Credit amounting to US$19.24 million (31 December 2015: Nil) were guaranteed by Chinalco.

The guarantees will continue to be in place until the Group is able to replace or refinance the existing loan facility in a commercially justifiable manner.

(c) Facilities provided by immediate holding company

In April 2014, November 2014 and January 2015, the Company's immediate holding company, Chinalco Overseas provided to the Group a loan facility of US$200 million, US$350 million and US$1,200 million respectively, for general corporate purposes including but not limited to funding the working capital for the Toromocho Project, among which the loan facility of US$200 million matured at 30 June 2016 and was not renewed. As at 30 June 2016, except for loans amounting to US$720 million drawn down before 31 December 2015 and US$170 million drawn down (among which a loan of US$20 million was repaid) during current period, the remaining facility provided by Chinalco Overseas was US$680 million.

(d) Operating lease agreement with a fellow subsidiary

The Company rents 3 offices under an operating lease contract from Chinalco Property Development Co., Ltd., the area is 395 square meters. During first half of 2016, the Company accrued a rental expense and a property management fee amounting to US$60,877 and US$10,871 respectively (2015: US$129,386 and US$23,105). As at 30 June 2016, the remaining balance of other payable amounted to US$23,916, due to the unpaid rent and property management fee of this term(31 December 2015: US$73,269).

(e) Key management personnel compensation

	Six months ended 30 June	
	2016	**2015**
	Unaudited	Unaudited
	US$'000	*US$'000*
Short-term employed benefits	5,389	6,180
Retirement scheme contributions	140	—
	5,529	6,180

(f) Significant transactions with state-owned enterprises except Chinalco and its subsidiaries ("Other State-owned Enterprises")

In accordance with IAS 24(revised), government-related entities and their subsidiaries, directly or indirectly controlled, jointly controlled or significantly influenced by the PRC government are also defined as related parties of the Group.

During the six months ended 30 June 2016, significant transactions with Other State-owned Enterprises are summarized as follows:

Cash and cash equivalents amounting to US$17,068,518 at 30 June 2016 (31 December 2015: US$16,779,783) and borrowings amounting to US$2,467 million as at 30 June 2016 (31 December 2015: US$2,564 million), and the relevant interest income earned and expenses incurred during the six months ended 30 June 2016 and 2015 are transacted with banks owned/controlled by the PRC government.

The above transactions conducted with Other State-owned Enterprises are based on terms as set out in the underlying agreements as mutually agreed.

(g) Outstanding balances with related parties

	30 June 2016 Unaudited *US$'000*	**31 December 2015** Audited *US$'000*
Included in prepayments and other receivables		
Amount due from ultimate holding company *(Note 9)*	177	174
Included in loans and borrowings		
Borrowings from immediate holding company *(Note 12(a))*	1,031,208	1,078,904
Included in amount due to immediate holding company		
Amount due to immediate holding company	2,426	2,426
Included in trade payables		
Amount due to a fellow subsidiary	162	162
Included in accruals and other payables		
Amount due to a fellow subsidiary	28	73

23. EVENT AFTER THE REPORTING PERIOD

Save as disclosed in Note 2 to the interim condensed consolidated financial statements, no other reportable events or transactions have taken place after the reporting period.

24. COMPARATIVE AMOUNTS

Certain comparative amounts have been reclassified to conform with the current period's presentation and disclosure.

25. APPROVAL OF THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

The interim condensed consolidated financial statements were approved and authorised for issue by the board of directors on 23 August 2016.

III. AUDITED CONSOLIDATED FINANCIAL STATEMENTS OF THE CMC GROUP

The following is the full text of the audited consolidated financial statements of the CMC Group for the year ended 31 December 2015 as extracted from the annual report of CMC for the year ended 31 December 2015.

Consolidated Statement of Financial Position
as at 31 December 2015

		31 December	
		2015	**2014**
	Notes	*US$'000*	*US$'000*
ASSETS			
Non-current assets			
Property, plant and equipment	*4*	4,631,931	4,357,377
Intangible assets	*5*	554	516
Investment in a joint venture	*6*	2,218	1,914
Deferred tax assets	*7*	14,247	31,225
Value-added tax recoverable	*8*	131,419	172,512
Prepayments and other receivables	*9*	12,632	12,321
Restricted cash	*10*	7,881	7,888
		4,800,882	4,583,753
Current assets			
Inventories	*11*	107,499	105,058
Prepayments and other receivables	*9*	37,892	55,385
Value-added tax recoverable	*8*	104,535	71,050
Trade receivables	*13*	72,448	75,993
Cash and cash equivalents	*12*	122,111	75,173
		444,485	382,659
Total assets		5,245,367	4,966,412

	Notes	31 December 2015 US$'000	2014 US$'000
EQUITY AND LIABILITIES			
Equity attributable to the Company's equity holders			
Share capital	*14*	472,711	472,711
Share premium	*14*	327,267	327,267
Reserves		(10,781)	4,450
Accumulated deficits		(116,553)	(102,882)
Total equity		672,644	701,546
LIABILITIES			
Non-current liabilities			
Loans and borrowings	*16*	2,505,570	2,591,448
Provision for remediation and restoration	*15*	116,302	126,472
Deferred income		3,973	4,072
		2,625,845	2,721,992
Current liabilities			
Loans and borrowings	*16*	1,654,688	1,112,980
Trade payables	*17*	227,749	392,612
Accruals and other payables	*18*	39,137	34,856
Amount due to the immediate holding company	*19*	2,426	2,426
Derivative financial instruments	*20*	22,878	—
		1,946,878	1,542,874
Total liabilities		4,572,723	4,264,866
Total equity and liabilities		5,245,367	4,966,412
Net current liabilities		(1,502,393)	(1,160,215)
Total assets less current liabilities		3,298,489	3,423,538

Consolidated Statement of Profit or Loss and Other Comprehensive Income
for the year ended 31 December 2015

	Notes	2015 US$'000	2014 US$'000
Revenue	*21*	426,630	—
Cost of sales		(293,949)	—
Gross profit		132,681	—
Other gains	*23*	12,635	5,566
General and administrative expenses	*24*	(19,508)	(11,275)
Selling and distribution expenses	*25*	(41,025)	—
Other expenses		(13,259)	—
Operating profit/(loss)		71,524	(5,709)
Finance income	*26*	455	752
Finance expenses	*26*	(57,318)	(3,392)
Foreign exchange loss, net		(26,584)	(8,026)
Investment income	*27*	14,992	1,586
Share of profit/(loss) of a joint venture		304	(1,684)
Profit/(loss) before income tax	*28*	3,373	(16,473)
Income tax (expense)/benefit	*29*	(17,044)	3,260
Loss for the year		(13,671)	(13,213)
Other comprehensive income			
Items to be reclassified to profit or loss in subsequent periods:			
Exchange differences on translation of foreign operations		(15,231)	(7,660)
Other comprehensive income for the year, net of tax		(15,231)	(7,660)
Total comprehensive income for the year		(28,902)	(20,873)
Loss per share attributable to the equity holders of the Company (expressed in US$ per share)			
Basic and diluted	*30*	(0.0012)	(0.0011)

Consolidated Statement of Changes in Equity

for the year ended 31 December 2015

	Share capital	Share premium	Capital reserves	Currency translation differences	Accumulated deficits	Total
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*
At 1 January 2015	472,711	327,267	16,521	(12,071)	(102,882)	701,546
Loss for the year	—	—	—	—	(13,671)	(13,671)
Other comprehensive income:						
Currency translation differences *(Note)*	—	—	—	(15,231)	—	(15,231)
Total comprehensive income	—	—	—	(15,231)	(13,671)	(28,902)
At 31 December 2015	472,711	327,267	16,521	(27,302)	(116,553)	672,644
At 1 January 2014	472,711	327,267	16,521	(4,411)	(89,669)	722,419
Loss for the year	—	—	—	—	(13,213)	(13,213)
Other comprehensive income:						
Currency translation differences *(Note)*	—	—	—	(7,660)	—	(7,660)
Total comprehensive income	—	—	—	(7,660)	(13,213)	(20,873)
At 31 December 2014	472,711	327,267	16,521	(12,071)	(102,882)	701,546

Note: The financial statements of certain subsidiaries in Peru are denominated in its functional currency (Nuevos soles for Pomacocha Power S.A.C. and Cal del Centro S.A.C.), and are then translated into U.S. dollars for group consolidation purpose. The exchange differences arising on translation for consolidation are recognised as currency translation differences in other comprehensive income. Upon disposal of a foreign operation, the other comprehensive income related to the foreign operations will be reclassified to profit or loss subject to final calculation at that time.

Consolidated Statement of Cash Flows

for the year ended 31 December 2015

	Notes	2015 US$'000	2014 US$'000
Cash flows from operating activities			
Profit/(loss) before income tax		3,373	(16,473)
Adjustments for:			
Depreciation and amortisation		89,712	459
Loss/(gain) on disposal of property, plant and equipment		14	(2,014)
Finance income	*26*	(455)	(752)
Finance expenses	*26*	57,318	3,392
Foreign exchange loss		26,584	8,026
Investment income	*27*	(14,992)	(1,586)
Share of (profit)/loss of a joint venture	*6*	(304)	1,684
Changes in working capital:			
Inventories		(2,441)	(42,448)
Trade receivables		3,545	(75,993)
Prepayments and other receivables		20,362	14,450
VAT recoverable		(11,355)	—
Trade payables		(69,882)	—
Accruals and other payables		4,281	(5,207)
Derivative financial instruments		22,878	—
Deferred income		(99)	(119)
Interest paid		(50,610)	—
Interest received		455	752
Income tax paid		(11,071)	(4,704)
Net cash generated from/(used in) operating activities		67,313	(120,533)

	Notes	2015 US$'000	2014 US$'000
Cash flows from investing activities			
Purchases of property, plant and equipment		(493,275)	(520,854)
Interest paid		(60,649)	(93,037)
Purchases of intangible assets		(535)	(364)
Value-added tax refunds received		71,321	49,857
Decrease in restricted cash		7	3,552
Proceeds from futures contracts		14,992	1,586
Net cash used in investing activities		(468,139)	(559,260)
Cash flows from financing activities			
Proceeds from loans and borrowings		1,322,380	1,024,620
Repayment of loans and borrowings		(872,980)	(391,000)
Net cash generated from financing activities		449,400	633,620
Net increase/(decrease) in cash and cash equivalents		48,574	(46,173)
Cash and cash equivalents at beginning of the year		75,173	122,916
Effects of exchange rates on cash and cash equivalents		(1,636)	(1,570)
Cash and cash equivalents at end of the year		122,111	75,173

Notes to the Consolidated Financial Statements

for the year ended 31 December 2015

1. GENERAL INFORMATION

Chinalco Mining Corporation International (the "Company") was incorporated in the Cayman Islands on 24 April 2003 as an exempted company with limited liability under the Companies Law of the Cayman Islands. Its name was Peru Copper Syndicate, Ltd. on incorporation and changed to Chinalco Mining Corporation International on 30 September 2011. The Company's registered office address is PO Box 309 Ugland House, Grand Cayman, KY1-1104, Cayman Islands.

The Company's shares were listed on the Main Board of The Stock Exchange of Hong Kong Limited on 31 January 2013.

The Company is a subsidiary of Aluminum Corporation of China Overseas Holdings Limited ("Chinalco Overseas"), a company incorporated in Hong Kong with limited liability. As at the date of approval of these financial statements, the directors of the Company regard Aluminum Corporation of China ("Chinalco"), a state-owned enterprise incorporated in the People's Republic of China (the "PRC") and administered by the State-owned Assets Supervision and Administration Commission ("SASAC") of the State Council (the "State Council") of the PRC, as its ultimate holding company.

The Company and its subsidiaries (together, the "Group") are principally engaged in exploration, development and production of ore resources and other mining related activities.

In May 2003, the Company's subsidiary, Minera Chinalco Peru S.A. ("MCP"), was awarded by the Peruvian government a right to develop and extract ore resource in the district of Morococha, Yauli Province, the Republic of Peru ("Peru") through a public bidding (the "Toromocho Project"). In June 2003, the Company signed an assignment agreement and by which the Company was entitled to exercise a purchase option of the mining concessions during a period which could be extended to June 2008. In May 2008, the Company exercised its right and signed with Activos Mineros (an entity incorporated by the Peruvian government), in the name of Peruvian Government, the Mining Concessions Transference Agreement of the Toromocho Project (the "Assignment Agreement"). Under the Assignment Agreement, Activos Mineros transferred to the Company the title of certain mining concessions, their surface property, buildings and water usage right pertaining to the Toromocho Project.

From August 2012 to February 2013, the Company entered into five binding off-take agreements with four cornerstone investors and one independent third party, pursuant to which the Company agreed to sell an aggregate of 70% of the annual production of copper concentrates from the Toromocho Mining Project for a period of five years starting from the first official production of the Toromocho Mining Project at a price determined by reference to certain benchmark market rates adjusted based on the grade of the copper concentrates, two of which will automatically continue for another five years (the "Off-take Agreements"). The Toromocho Mining Project has commenced commercial production in June 2015. Three of the Off-take Agreements have been taken into force through signing supplemental agreements.

Information about subsidiaries

As at 31 December 2015, the Company had direct and indirect interests in the following subsidiaries, all of which are limited liability entities incorporated in Peru and are principally engaged in mining related activities in Peru:

Name	Date of incorporation/ establishment	Registered and fully paid capital *US$'000*	Percentage of equity attributable to the Company (%) Direct	Indirect	Principal activities
Minera Chinalco Perú S.A. ("MCP")	20 May 2003	628,499	100	—	Mining activities
Minera Centenario S.A.C. ("Centenario")	3 April 2006	3	—	100	Mining activities
Cal del Centro S.A.C. ("Centro")	16 March 2011	—	—	100	Industrial activities related with mining activities
Sociedad Minera Pesares S.A. ("Pesares")	6 June 1905	—	—	83.28	Mining activities
Pomacocha Power S.A.C. ("Pomacocha")	17 January 2011	—	—	100	Operating and exploiting the 220Kv Pomacocha Transmission Line

2.1 BASIS OF PREPARATION

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRS") (which include all International Financial Reporting Standards, International Accounting Standards ("IAS") and Interpretations) as issued by the International Accounting Standards Board ("IASB").

In addition, these financial statements also comply with the applicable disclosure requirements of the Hong Kong Companies Ordinance relating to the preparation of financial statements.

The financial statements have been prepared under the historical cost convention, except for derivative financial instruments which have been measured at fair value.

These financial statements are presented in US dollar ("US$") and all values are rounded to the nearest thousands, except when otherwise indicated.

Going concern

As at 31 December 2015, the Group had net current liabilities of approximately US$1,502 million (31 December 2014: US$1,160 million) and accumulated deficits of approximately US$117 million (31 December 2014: US$103 million). The directors of the Company (the "directors") have considered, among others, the internally generated funds and financial resources available to the Group as follows:

- In February 2016, the Group has obtained the term sheet of a finance lease arrangement amounting to US$450 million for the proper development of the Toromocho Project from ICBC Financial Leasing ("ICBC Leasing").

- In January 2015, the Company's immediate holding company, Chinalco Overseas provided to the Group a loan facility of US$1,200 million, for general corporate purposes including but not limited to funding the working capital for the Toromocho Project. As at 31 December 2015, except for loans amounting to US$640 million drawn down, and the remaining facility provided by Chinalco Overseas was US$560 million. For the loan facilities of US$350 million and US$200 million provided by the Company's immediate holding company in 2014, the remaining balances as at 31 December 2015 were US$80 million and US$190 million respectively. These loan facilities of US$350 million and US$200 million were renewed in January 2016.

- The Company's immediate holding company, Chinalco Overseas, has agreed not to demand repayment of the loan due from the Group amounting to approximately US$1,079 million as at 31 December 2015 (31 December 2014: US$435 million) until the Group is financially capable to do so. The Company's ultimate holding company, Chinalco also agreed that it would provide continuing financial support to finance the future operations of the Group for a period of not less than 12 months from the date of approval of these financial statements.

Based on the above, the directors of the Company believe that the Group will have adequate resources to continue in operations for a period that is not less than 12 months from 31 December 2015. The Group therefore continues to adopt the going concern basis in preparing these financial statements.

Basis of consolidation

The consolidated financial statements include the financial statements of the Company and its subsidiaries for the year ended 31 December 2015. A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

When the Company has, directly or indirectly, less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

(a) the contractual arrangement with the other vote holders of the investee;

(b) rights arising from other contractual arrangements; and

(c) the Group's voting rights and potential voting rights.

The financial statements of the subsidiaries are prepared for the same reporting period as the Company, using consistent accounting policies. The results of subsidiaries are consolidated from the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases.

Profit or loss and each component of other comprehensive income are attributed to the owners of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance.

All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control described in the accounting policy for subsidiaries below. A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises (i) the assets (including goodwill) and liabilities of the subsidiary, (ii) the carrying amount of any non-controlling interest and (iii) the cumulative translation differences recorded in equity; and recognises (i) the fair value of the consideration received, (ii) the fair value of any investment retained and (iii) any resulting surplus or deficit in profit or loss. The Group's share of components previously recognised in other comprehensive income is reclassified to profit or loss or retained profits, as appropriate, on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

2.2 CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES

The Group applied for the first time certain standards and amendments, which are effective for annual periods beginning on or after 1 January 2015. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

Although these new standards and amendments applied for the first time in 2015, they did not have a material impact on the annual consolidated financial statements of the Group. The nature and the impact of each new standard or amendment is described below:

IFRS Annual Improvements 2010–2012 Cycle

The following improvements are effective for accounting periods beginning on or after 1 July 2014, and the Group has applied these improvements for the first time in these consolidated financial statements:

IFRS 3 Business Combinations

The amendment is applied prospectively and clarifies that all contingent consideration arrangements classified as liabilities (or assets) arising from a business combination should be subsequently measured at fair value through profit or loss whether or not they fall within the scope of IAS 39. This is consistent with the Group's current accounting policy and, thus, this amendment has no impact on the Group.

IFRS 8 Operating Segments

The amendments are applied retrospectively and clarify that an entity must disclose the judgements made by management in applying the aggregation criteria in paragraph 12 of IFRS 8, including a brief description of operating segments that have been aggregated and the economic characteristics used to assess whether the segments are similar. The amendments also clarify that a reconciliation of segment assets to total assets is only required to be disclosed if the reconciliation is reported to the chief operating decision maker.

As all of the Group's activities are engaged in the mining development and all the principal assets employed by the Group are located in Peru, the Group's chief operating decision maker considers the performance assessment of the Group should be based on the results of the Group as a whole. Therefore no further segment information is disclosed. The amendments have no impact on the Group.

IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets

The amendments are applied retrospectively and clarify the treatment of the gross carrying amount and accumulated depreciation or amortisation of revalued items of property, plant and equipment and intangible assets. The amendments have had no impact on the Group as the Group does not apply the revaluation model for the measurement of these assets.

IAS 24 Related Party Disclosures

The amendment is applied retrospectively and clarifies that a management entity (i.e., an entity that provides key management personnel services) is a related party subject to related party disclosure requirements. In addition, an entity that uses a management entity is required to disclose the expenses incurred for management services. The amendment has had no impact on the Group as the Group does not receive any management services from other entities.

IFRS Annual Improvements 2011–2013 Cycle

These improvements are effective from 1 July 2014 and the Group has applied them for the first time in these consolidated financial statements. They include:

IFRS 3 Business Combinations

The amendment is applied prospectively and clarifies for the scope exceptions within IFRS 3 that joint arrangements, not just joint ventures, are outside the scope of IFRS 3 and the scope exception applies only to the accounting in the financial statements of the joint arrangement itself. The amendment has had no impact on the Group as the Company is not a joint arrangement and the Group did not form any joint arrangement during the year.

IFRS 13 Fair Value Measurement

The amendment is applied prospectively and clarifies that the portfolio exception in IFRS 13 can be applied not only to financial assets and financial liabilities, but also to other contracts within the scope of IAS 39. The amendment has had no impact on the Group and the Group does not apply the portfolio exception in IFRS 13.

IAS 40 Investment Property

The amendment clarifies that IFRS 3, instead of the description of ancillary services in IAS 40 which differentiates between investment property and owner-occupied property, is used to determine if the transaction is a purchase of an asset or a business combination. The amendment is applied prospectively for acquisitions of investment properties. The amendment has had no impact on the Group as there is no acquisition of investment properties during the year.

2.3 STANDARDS ISSUED BUT NOT YET EFFECTIVE

The following new and revised standards that are applicable to the Group's operations have been issued but are not yet effective in 2015 and have not been early adopted.

IFRS 9	*Financial Instruments*[2]
Amendments to IFRS 10 and IAS 28 (2011)	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*[1]
Amendments to IFRS 11	*Accounting for Acquisitions of Interests in Joint Operations*[1]
IFRS 15	*Revenue from Contracts with Customers*[2]
Amendments to IAS 1	*Disclosure Initiative*[1]
Amendments to IAS 16 and IAS 38	*Clarification of Acceptable Methods of Depreciation and Amortisation*[1]

[1] Effective for annual periods beginning on or after 1 January 2016

[2] Effective for annual periods beginning on or after 1 January 2018

IFRS 9 Financial Instruments

In July 2014, the IASB issued the final version of IFRS 9 Financial Instruments which reflects all phases of the financial instruments project and replaces IAS 39 Financial Instruments: Recognition and Measurement and all previous versions of IFRS 9. The standard introduces new requirements for classification and measurement, impairment, and hedge accounting. IFRS 9 is effective for annual periods beginning on or after 1 January 2018, with early application permitted. During 2015, the Group performed a high-level assessment of the impact of the adoption of IFRS 9. This preliminary assessment is based on currently available information and may be subject to changes arising from further detailed analyses or additional reasonable and supportable information being made available to the Group in the future. The expected impacts arising from the adoption of IFRS 9 are summarised as follows:

(a) ***Classification and measurement***

The Group does not expect that the adoption of IFRS 9 will have a significant impact on the classification and measurement of its financial assets. It expects to continue measuring at fair value all financial assets currently held at fair value. Equity investments currently held as available for sale will be measured at fair value through other comprehensive income as the investments are intended to be held for the foreseeable future and the Group expects to apply the option to present fair value changes in other comprehensive income. Gains and losses recorded in other comprehensive income for the equity investments cannot be recycled to profit or loss when the investments are derecognised.

(b) ***Impairment***

IFRS 9 requires an impairment on debt instruments recorded at amortised cost or at fair value through other comprehensive income, lease receivables, loan commitments and financial guarantee contracts that are not accounted for at fair value through profit or loss under IFRS 9, to be recorded based on an expected credit loss model either on a twelve-month basis or a lifetime basis. The Group expects to apply the simplified approach and record lifetime expected losses that are estimated based on the present value of all cash shortfalls over the remaining life of all of its trade and other receivables. The Group will perform a more detailed analysis which considers all reasonable and supportable information, including forward-looking elements, for estimation of expected credit losses on its trade and other receivables upon the adoption of IFRS 9.

Amendments to IFRS 10 and IAS 28: ***Sale or Contribution of Assets between an Investor and its Associate or Joint Venture***

The amendments to IFRS 10 and IAS 28 (2011) address an inconsistency between the requirements in IFRS 10 and in IAS 28 (2011) in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The amendments require a full recognition of a gain or loss when the sale or contribution of assets between an investor and its associate or joint venture constitutes a business. For a transaction involving assets that do not constitute a business, a gain or loss resulting from the transaction is recognised in the investor's profit or loss only to the extent of the unrelated investor's interest in that associate or joint venture. The amendments are to be applied prospectively. The amendments are not expected to have any impact on the financial position or performance of the Group upon adoption on 1 January 2016.

Amendments to IFRS 11: ***Accounting for Acquisitions of Interests in Joint Operations***

The amendments to IFRS 11 require that an acquirer of an interest in a joint operation in which the activity of the joint operation constitutes a business must apply the relevant principles for business combinations in IFRS 3. The amendments also clarify that a previously held interest in a joint operation is not remeasured on the acquisition of an additional interest in the same joint operation while joint control is retained. In addition, a scope exclusion has been added to IFRS 11 to specify that the amendments do not apply when the parties sharing joint control, including the reporting entity, are under common control of the same ultimate controlling party. The amendments apply to

both the acquisition of the initial interest in a joint operation and the acquisition of any additional interests in the same joint operation. The amendments are not expected to have any impact on the financial position or performance of the Group upon adoption on 1 January 2016.

IFRS 15: ***Revenue from Contracts with Customers***

IFRS 15 was issued in May 2014 and establishes a new five-step model account for revenue arising from contracts with customers. Under IFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The principles in IFRS 15 provide a more structured approach for measuring and recognising revenue.

The standard also introduces extensive qualitative and quantitative disclosure requirements, including disaggregation of total revenue, information about performance obligations, changes in contract asset and liability account balances between periods and key judgements and estimates.

The standard will supersede all current revenue recognition requirements under IFRSs. In July 2015, the IASB issued an amendment to IFRS 15 regarding a one-year deferral of the mandatory effective date of IFRS 15 to 1 January 2018. The Group expects to adopt IFRS 15 on 1 January 2018. During the year ended 31 December 2015, the Group performed a preliminary assessment on the impact of the adoption of IFRS 15.

Amendments to IAS 1: ***Disclosure Initiative***

The amendments clarify:

(i) the materiality requirements in IAS 1;

(ii) that specific line items in the statement of profit or loss and the statement of financial position may be disaggregated;

(iii) that entities have flexibility as to the order in which they present the notes to financial statements; and

(iv) that the share of other comprehensive income of associates and joint ventures accounted for using the equity method must be presented in aggregate as a single line item, and classified between those items that will or will not be subsequently reclassified to profit or loss.

Furthermore, the amendments clarify the requirements that apply when additional subtotals are presented in the statement of financial position and the statement of profit or loss. The Group expects to adopt the amendments from 1 January 2016. The amendments are not expected to have any impact on the financial position or performance of the Group upon adoption on 1 January 2016.

Amendments to IAS 16 and IAS 38: ***Clarification of Acceptable Methods of Depreciation and Amortisation***

The amendments clarify the principle in IAS 16 and IAS 38 that revenue reflects a pattern of economic benefits that are generated from operating a business (of which the asset is part) rather than the economic benefits that are consumed through use of the asset. As a result, a revenue-based method cannot be used to depreciate property, plant and equipment and may only be used in very limited circumstances to amortise intangible assets. The amendments are effective prospectively for annual periods beginning on or after 1 January 2016, with early adoption permitted. These amendments are not expected to have any impact to the Group given that the Group has not used a revenue-based method to depreciate or amortise its non-current assets.

2.4 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

2.4.1 Subsidiaries

A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

When the Company has, directly or indirectly, less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

(a) the contractual arrangement with the other vote holders of the investee;

(b) rights arising from other contractual arrangements; and

(c) the Group's voting rights and potential voting rights.

The results of subsidiaries are included in the Company's statement of profit or loss and other comprehensive income to the extent of dividends received and receivable. The Company's investments in subsidiaries that are not classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are stated at cost less any impairment losses.

Impairment testing of the investments in subsidiaries is required upon receiving a dividend from these investments if the dividend exceeds the total comprehensive income of the subsidiary in the period the dividend is declared or if the carrying amount of the investment in the separate financial statements exceeds the carrying amount in the consolidated financial statements of the investee's net assets including goodwill.

2.4.2 Joint arrangements

The Group has applied IFRS 11 to all joint arrangements as of 1 January 2013. Under IFRS 11 investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations each investor. The Group has assessed the nature of its joint arrangements and determined them to be joint ventures. Joint ventures are accounted for using the equity method.

Under the equity method of accounting, interests in joint ventures are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses and movements in other comprehensive income. When the Group's share of losses in a joint venture equals or exceeds its interests in the joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint venture), the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the joint venture.

Unrealised gains on transactions between the Group and its joint venture are eliminated to the extent of the Group's interest in the joint venture. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. If an investment in an associate becomes an investment in a joint venture or vice versa, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method. In all other cases, upon loss of joint control over the joint venture, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the joint venture upon loss of joint control and the fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

2.4.3 Business combinations

Business combinations are accounted for using the acquisition method. The consideration transferred is measured at the acquisition date fair value which is the sum of the acquisition date fair values of assets transferred by the Group, liabilities assumed by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree that are present ownership interests and entitle their holders to a proportionate share of net assets in the event of liquidation at fair value or at the proportionate share of the acquiree's identifiable net assets. All other components of non-controlling interests are measured at fair value. Acquisition-related costs are expensed as incurred.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts of the acquiree.

If the business combination is achieved in stages, the previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in profit or loss.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability is measured at fair value with changes in fair value recognised in profit or loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

2.4.4 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability, or in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or the most advantageous market must be accessible by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1	based on quoted prices (unadjusted) in active markets for identical assets or liabilities
Level 2	based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable, either directly or indirectly
Level 3	based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

2.4.5 Related parties

A party is considered to be related to the Group if:

(a) the party is a person or a close member of that person's family and that person:

(i) has control or joint control over the Group;

(ii) has significant influence over the Group; or

(iii) is a member of the key management personnel of the Group or of a parent of the Group;

or

(b) the party is an entity where any of the following conditions applies:

(i) the entity and the Group are members of the same group;

(ii) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);

(iii) the entity and the Group are joint ventures of the same third party;

(iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;

(v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;

(vi) the entity is controlled or jointly controlled by a person identified in (a);

(vii) a person identified in (a) (i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); and

(viii) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

2.4.6 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the executive directors and certain senior management (including the chief financial officer) together referred to as the 'Senior Management' that makes strategic decisions.

2.4.7 Foreign currency translation

(a) ***Functional and presentation currency***

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated financial statements are presented in US dollars (US$), which is the Company's functional and the Group's presentation currency.

(b) ***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 profit or loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions.

(c) ***Group companies***

The results and financial position of all the Group entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

(i) assets and liabilities are translated at the closing rate at the end of the reporting period;

(ii) income and expenses are translated at average exchange rates (unless this average 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 rate on the dates of the transactions); and

(iii) all resulting currency translation differences are recognised in other comprehensive income and accumulated in the exchange fluctuation reserve. On disposal of a foreign operation, the component of other comprehensive income relating to that particular foreign operation is recognised in profit or loss.

2.4.8 Property, plant and equipment

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and accumulated impairment losses.

The cost of an item of property, plant and equipment comprises its purchase price, any directly attributable costs of bringing the asset to its working condition and location for its intended use, the estimate of the provision for remediation and restoration, and, for qualifying assets (where relevant), borrowing costs.

Subsequent expenditure is 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 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 profit or loss and other comprehensive income during the financial period in which they are incurred.

The directly attributable costs of an item of property, plant and equipment include the costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition. Thus these net proceeds are offset against the cost of the assets.

Mine and plant development assets will be, upon commencement of production, depreciated using the unit-of-production ("UOP") method based on the estimated economically recoverable reserves to which they relate or will be written-off if the property is abandoned. The UOP rate calculation for the depreciation of mine and plant development assets takes into account expenditures incurred to date, together with sanctioned future development expenditure. Economically recoverable reserves include proven and probable reserves.

Depreciation for all other property, plant and equipment is calculated using the straight-line method to allocate their cost less their residual value over their estimated useful life, as follows:

Land and buildings	up to 50 years
Machinery and equipment	up to 35 years
Motor vehicles	up to 5 years
Furniture, fixtures and others	4–10 years

Construction in progress represents mine sites and processing plants under construction, which is stated at cost less any impairment losses, and is not depreciated until it is ready for its intended use. Cost comprises the direct costs of construction and capitalised borrowing costs on related borrowed funds during the period of construction. Construction in progress is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

The assets' residual values, useful lives and the estimated economically recoverable reserves are reviewed, and adjusted if appropriate, at the end of each reporting period.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 2.4.11).

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within 'other gains' in the consolidated statement of profit or loss and other comprehensive income.

2.4.9 Stripping costs

As part of its mining operations, the Group incurs stripping costs both during the development phase and production phase of its operations. Stripping costs incurred in the development phase of a mine, before the production phase commences (development stripping), are capitalised as part of the cost of constructing the mine and subsequently amortised over its useful life using a UOP method. The capitalisation of development stripping costs ceases when the mine/component is commissioned and ready for use as intended by management.

Stripping activities undertaken during the production phase of a surface mine (production stripping) are accounted for as set out below. After the commencement of production, further development of the mine may require a phase of unusually high stripping that is similar in nature to development phase stripping. The cost of such stripping is accounted for in the same way as development stripping (as outlined above).

Production stripping is generally considered to create two benefits, being either the production of inventory or improved access to the ore to be mined in the future. Where the benefits are realised in the form of inventory produced in the period, the production stripping costs are accounted for as part of the cost of producing those inventories. Where the benefits are realised in the form of improved access to ore to be mined in the future, the costs are recognised as a non-current asset, referred to as a 'stripping activity asset', if the following criteria are met:

(a) Future economic benefits (being improved access to the ore body) are probable

(b) The component of the ore body for which access will be improved can be accurately identified

(c) The costs associated with the improved access can be reliably measured

If all of the criteria are not met, the production stripping costs are charged to profit or loss as operating costs as they are incurred.

In identifying components of the ore body, the Group works closely with the mining operations personnel for each mining operation to analyse each of the mine plans. Generally, a component will be a subset of the total ore body, and a mine may have several components. The mine plans, and therefore the identification of components, can vary between mines for a number of reasons. These include, but are not limited to: the type of commodity, the geological characteristics of the ore body, the geographical location, and/or financial considerations. Given the nature of the Group's operations, components are generally either major pushbacks or phases and they generally form part of a larger investment decision which requires board approval.

The stripping activity asset is initially measured at cost, which is the accumulation of costs directly incurred to perform the stripping activity that improves access to the identified component of ore, plus an allocation of directly attributable overhead costs. If incidental operations are occurring at the same time as the production stripping activity, but are not necessary for the production stripping activity to continue as planned, these costs are not included in the cost of the stripping activity asset.

If the costs of the inventory produced and the stripping activity asset are not separately identifiable, a relevant production measure is used to allocate the production stripping costs between the inventory produced and the stripping activity asset. This production measure is calculated for the identified component of the ore body and is used as a benchmark to identify the extent to which the additional activity of creating a future benefit has taken place. The Group uses the expected volume of waste extracted compared with the actual volume for a given volume of ore production of each component.

The stripping activity asset is subsequently depreciated using the UOP method over the life of the identified component of the ore body that became more accessible as a result of the stripping activity. Economically recoverable reserves, which comprise proven and probable reserves, are used to determine the expected useful life of the identified component of the ore body. The stripping activity asset is then carried at cost less depreciation and any impairment losses.

2.4.10 Intangible assets — computer software

Acquired computer software is capitalised on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortised over its estimated useful life and recorded in amortisation and depreciation within general and administrative expenses in the consolidated statement of profit or loss and other comprehensive income.

2.4.11 Impairment of non-financial assets

Assets that are subject to amortisation or depreciation 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. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Non-financial assets that suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

2.4.12 Financial assets

(a) ***Classification***

The Group classifies its financial assets in the category of financial assets at fair value through profit or loss and loans and receivables. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition as at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of sale in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments as defined by IAS 39.

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with positive net changes in fair value presented as other income and gains and negative net changes in fair value presented as finance costs in the statement of profit or loss. These net fair value changes do not include any dividends or interest earned on these financial assets, which are recognised in accordance with the policies set out for "Revenue recognition" below.

Financial assets designated upon initial recognition as at fair value through profit or loss are designated at the date of initial recognition and only if the criteria in IAS 39 are satisfied.

Derivatives embedded in host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated as at fair value through profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognised in the statement of profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

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 included in current assets, except for the amounts that are settled or expected to be settled more than 12 months after the end of the reporting period, which are classified as non-current assets. The Group's loans and receivables comprise 'trade receivables', 'other receivables', 'cash and cash equivalents' and 'restricted cash' in the statement of financial position.

(b) ***Recognition and measurement***

Regular way purchases and sales of financial assets are recognised on the trade date, the date on which the Group commits to purchase or sell the asset. Investments are initially recognised at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss. Loans and receivables are subsequently carried at amortised cost using the effective interest method.

(c) ***Derecognition of financial assets***

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

- the rights to receive cash flows from the asset have expired; or
- the Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risk and rewards of ownership of the asset. When it has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

(d) ***Impairment of financial assets***

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that the debtors or the group of debtors are experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation, and where observable data indicate that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

Financial assets carried at amortised cost

For financial assets carried at amortised cost, the Group first assesses whether impairment exists individually for financial assets that are individually significant, or collectively for financial assets that are not individually significant. If the Group determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is, or continues to be, recognised are not included in a collective assessment of impairment.

The amount of any impairment loss identified is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not yet been incurred). The present value of the estimated future cash flows is discounted at the financial asset's original effective interest rate (i.e., the effective interest rate computed at initial recognition).

The carrying amount of the asset is reduced through the use of an allowance account and the loss is recognised in the statement of profit or loss. Interest income continues to be accrued on the reduced carrying amount using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. Loans and receivables together with any associated allowance are written off when there is no realistic prospect of future recovery and all collateral has been realised or has been transferred to the Group.

If, in a subsequent period, the amount of the estimated impairment loss increases or decreases because of an event occurring after the impairment was recognised, the previously recognised impairment loss is increased or reduced by adjusting the allowance account. If a write-off is later recovered, the recovery is credited to other expenses in the statement of profit or loss.

2.4.13 Financial liabilities

(a) ***Classification***

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss and loans and borrowings by the Group.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings, net of directly attributable transaction costs.

The Group's financial liabilities include financial liabilities at fair value through profit or loss, accounts and other payables, an amount due to the immediate holding company, interest-bearing loans and borrowings and derivative financial instrument.

(b) ***Recognition and measurement***

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are acquired for the purpose of repurchasing in the near term. This category includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IAS 39. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments. Gains or losses on liabilities held for trading are recognised in the statement of profit or loss. The net fair value gain or loss recognised in the statement of profit or loss does not include any interest charged on these financial liabilities.

Financial liabilities designated upon initial recognition as at fair value through profit or loss are designated at the date of initial recognition and only if the criteria in IAS 39 are satisfied.

Loans and borrowings

After initial recognition, loans and borrowings are subsequently measured at amortised cost, using the effective interest rate method unless the effect of discounting would be immaterial, in which case they are stated at cost. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the effective interest rate amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in finance expenses in profit or loss.

(c) ***Derecognition of financial liabilities***

A financial liability is derecognised when the obligation under the liability is discharged or cancelled, or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and a recognition of a new liability, and the difference between the respective carrying amounts is recognised in profit or loss.

2.4.14 Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount reported in the statement of financial position when there is a currently legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

2.4.15 Derivative financial instruments

The Group uses derivative financial instruments, such as copper concentrate futures, to hedge its commodity price risk. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative.

The fair value of commodity purchase contracts that meet the definition of a derivative as defined by IAS 39 is recognised in the consolidated statement of profit or loss and other comprehensive income as cost of sales. Commodity contracts that are entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item in accordance with the Group's expected purchase, sale or usage requirements are held at cost.

Derivative instruments that are not designated as effective hedging instruments are classified as current or non-current or separated into current and non-current portions based on an assessment of the facts and circumstances (i.e., the underlying contracted cash flows).

2.4.16 Inventories

Inventories primarily consist of finished goods, supplies and spare parts. Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted average method. Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses.

2.4.17 Cash and cash equivalents

In the consolidated statement of cash flows, cash and cash equivalents includes cash on hand, deposits held at call with banks and other short-term highly liquid investments with original maturities of three months or less. For the purpose of the consolidated statement of financial position, cash and cash equivalents comprise cash on hand and at banks, including term deposits, and assets similar in nature to cash, which are not restricted as to use.

2.4.18 Share capital

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

2.4.19 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

Where funds have been borrowed generally, and used for the purpose of obtaining qualifying assets, a capitalisation rate ranging between 1.57% and 4.30% has been applied to the expenditure on the individual assets for the year ended 31 December 2015.

2.4.20 Income tax

Income tax comprises current and deferred tax. Income tax relating to items recognised outside profit or loss is recognised outside profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the liability method, on all temporary differences at the end of the reporting period between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and

- in respect of taxable temporary differences associated with investments in subsidiaries and joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, the carryforward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, the carryforward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and

- in respect of deductible temporary differences associated with investments in subsidiaries and joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each reporting period and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

2.4.21 Revenue recognition

Revenue is recognised when it is probable that the economic benefits will flow to the Group and when the revenue can be measured reliably, on the following bases:

(a) from the sale of goods, when the significant risks and rewards of ownership have been transferred to the buyer, provided that the Group maintains neither managerial involvement to the degree usually associated with ownership, nor effective control over the goods sold;

(b) rental income, on a time proportion basis over the lease terms;

(c) interest income, on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset.

2.4.22 Employee benefits

(a) ***Pension obligations***

The Group operates various defined contribution schemes. A defined contribution scheme is a pension plan under which the Group pays fixed contributions to a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

The Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

(b) ***Employee profit sharing***

In accordance with Peruvian labor law, mining companies need to pay their employee profit sharing based on 8% of their taxable income. The employee's profit sharing should be paid by the Company to its employee directly annually. Therefore, once commercial production starts, the Company will recognise a liability and an expense for the employee's profit sharing. The employee's profit sharing is a deductible item for income tax purpose.

2.4.23 Provisions

Provisions for environmental restoration and legal claims are recognised when: the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount can be reliably estimated.

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 expenditures expected to be required to settle the obligation which reflects the risks specific to the obligation, using a pre-tax rate that reflects current market assessments of the time value of money. The increase in the provision due to passage of time is recognised as interest expenses.

2.4.24 Leases

Leases that transfer substantially all the rewards and risks of ownership of assets to the Group, other than legal title, are accounted for as finance leases. At the inception of a finance lease, the cost of the leased asset is capitalised at the present value of the minimum lease payments and recorded together with the obligation, excluding the interest element, to reflect the purchase and financing. Assets held under capitalised finance leases, including prepaid land lease payments under finance leases, are included in property, plant and equipment, and depreciated over the shorter of the lease terms and the estimated useful lives of the assets. The finance costs of such leases are charged to the statement of profit or loss so as to provide a constant periodic rate of charge over the lease terms.

Leases where substantially all the rewards and risks of ownership of assets remain with the lessor are accounted for as operating leases. Where the Group is the lessor, assets leased by the Group under operating leases are included in non-current assets, and rentals receivable under the operating leases are credited to the statement of profit or loss on the straight-line basis over the lease terms. Where the Group is the lessee, rentals payable under operating leases net of any incentives received from the lessor are charged to the statement of profit or loss on the straight-line basis over the lease terms.

2.4.25 Dividends distribution

Dividends distribution to the Company's equity holders are recognised as a liability in the statement of financial position in the period in which the dividends are approved by the Company's shareholders and declared.

2.4.26 Profit/loss per share

Basic loss per share is determined by dividing the loss attributable to the Company's equity holders by the weighted average number of participating shares outstanding during the reporting period.

Diluted loss per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares and adjusting profit or loss attributable to the Company's equity holders accordingly for related amounts. The effect of potentially dilutive ordinary shares is included only if they are dilutive.

3. SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

Judgements

(a) ***Commencement date of commercial production***

The Group assesses the stage of each mining project under construction to determine when a mine moves into the commercial production stage being when the mine is substantially complete and ready for its intended use.

The criteria used to assess the commencement date are determined based on the unique nature of each mine construction project. The Group considers various relevant criteria to assess when the commercial production phases are considered to commence and all related amounts are reclassified from "Construction in progress" to the appropriate category of "Property, plant and equipment". Some of the criteria used include, but are not limited to, the following:

- Level of capital expenditure incurred compared to the original construction cost estimates
- Completion of a reasonable period of testing of the mine plant and equipment
- Ability to produce metal in saleable form (within specifications)
- Ability to sustain ongoing production of metal for a reasonable period of time

When a mine development/construction project moves into the commercial production stage, the capitalisation of certain mine development/construction costs ceases and costs are either regarded as forming part of the costs of inventories or expensed, except for costs that qualify for capitalisation relating to mining asset additions or improvements, underground mine development or mineable reserve development. It is also at this point that depreciation/amortisation commences.

(b) ***Going concern***

As set out in Note 2.1, the ability of the Group to continue operations is dependent upon obtaining necessary financing borrowings and/or financial support from its holding companies in order to maintain sufficient cash flows to meet its liabilities as they fall due. In the event the Group is unable to obtain adequate funding, there is uncertainty as to whether the Group will be able to continue as a going concern. These financial statements do not include any adjustments related to the carrying values and classifications of assets and liabilities that would be necessary should the Group be unable to continue as a going concern.

Estimates

(a) ***Recovery of the cost of mine and development assets of the Toromocho Project and ore reserves estimates***

The Group capitalises qualified expenditures, comprising exploration, and acquisition of materials and supplies, technical assessments and applicable taxes, directly attributable to the Toromocho Project.

In accordance with the Group's relevant accounting policies as set out in Note 2.4, the Group evaluates, on a periodic basis, the ore reserves estimates of the Toromocho Project, which is the amount of unexploited copper in the mining concessions to which the Group is entitled and which may be produced and sold to generate revenues. Such evaluations are based on engineering tests performed on samples of drilling well and other mine pits combined with certain assumptions regarding copper market prices and production costs.

Based on the estimation of the internal experts of the Group, the estimated unexploited proved and probable ore reserves in the mining concessions to which the Group is entitled approximated to 1,593Mt. Based on the Group's projections of the future economic benefits expected from the ore reserves of the Toromocho Project, the Group concluded that no impairment was required as at 31 December 2015.

Because the economic assumptions used to estimate the value of reserves may change from period to period, and because additional geological data is generated during the course of operations, estimates of reserves may change from period to period. Changes in reported reserves may affect the Group's financial statements in a number of ways, including the following:

- Assets' carrying values may be affected due to changes in estimated future cash flows.
- Depreciation, depletion and amortisation charged in profit or loss may change where such charges are determined by the units of production basis, or where the useful economic lives of assets change.
- Decommissioning, site restoration and environmental provisions may change where changes in estimated reserves affect expectations about the timing or cost of these activities.
- The carrying value of deferred tax may change due to changes in estimates of the likely recovery of the tax benefits.

The Group estimates its ore reserves and mineral resources based on information compiled by appropriately qualified persons relating to the geological and technical data on the size, depth, shape and grade of the ore body and suitable production techniques and recovery rates. Such an analysis requires complex geological judgements to interpret the data. The estimation of recoverable reserves is based upon factors such as estimates of foreign exchange rates, commodity prices, future capital requirements and production costs, along with geological assumptions and judgements made in estimating the size and grade of the ore body.

As the economic assumptions used may change and as additional geological information is produced during the operation of a mine, estimates of ore reserves.

(b) ***Provision for remediation and restoration***

Provision for remediation and restoration included environmental remediation costs, asset retirement obligation and similar obligation in relation to the Group's operations. Provision is made when the related environmental disturbance and present obligations occur, based on the net present value of estimated future costs. The ultimate cost of environmental disturbances, asset retirement and similar obligation are uncertain and management uses its judgment and experience to provide for these costs over the life of operations. Cost estimates can vary in response to many factors including changes to the relevant legal requirements, the Group's related policies, the emergence of new restoration techniques and the effects of inflation. Cost estimates are updated throughout the life of the operation.

The expected timing of expenditure included in cost estimates can also change, for example in response to changes in ore reserves, or production rates, operating license or economic conditions. Expenditure may occur before and after closure and can continue for an extended period of time depending on the specific site requirements. Cash flows must be discounted if this has a material effect. The selection of appropriate sources on which to base the risk-free discount rate used for this purpose also requires judgment. As a result of all of the above factors there could be significant adjustments to the provision for close down, restoration and clean-up costs which would affect future financial results.

The Group currently operates mainly in Peru. The outcome of environmental and other similar obligations under proposed or future environmental legislation in Peru cannot reasonably be estimated at present, and could be material. Under existing legislation, however, the directors of the Company are in their opinion that there are no probable liabilities that are in addition to amounts which have already been reflected in the financial statements that will have a materially adverse effect on the financial position of the Group.

The Group engaged an independent valuer, namely Walsh Peru S.A. to perform a mine closure plan including the estimated future expenditure in relation to remediation and restoration costs as well as other similar obligations on the Toromocho Project and a report was issued in August 2012 and was approved by the Ministry of Energy and Mines of Peru (''MEM'') on 27 December 2012 (the ''Mine Closure Plan''). Taking into consideration the report issued by Walsh Peru S.A. and approval of the Mine Closure Plan from the MEM, the Group has assessed and provided for remediation and restoration and similar obligations amounting to US$116,302,000 as at 31 December 2015 (31 December 2014: US$126,472,000). Further details are set out in Note 15.

(c) ***Income taxes and value-added tax recoverable***

The estimates of deferred income tax assets require estimates of future taxable profit and the corresponding applicable income tax rates of future years. Changes in future income tax rates and timing will affect income tax expense or benefit, as well as deferred income tax assets and liabilities. The realisation of deferred income tax assets also depends on the realisation of sufficient profitability (taxable profit) of the Group. Deviation of future profitability from the estimate could result in material adjustments to the carrying amount of deferred income tax assets.

Determination of tax obligations and expenses requires interpretations of the applicable tax laws and regulations. The Group seeks advice from professional legal tax counsel before making any decision on tax matters. Management considers that their estimates are prudent and appropriate; however, differences of interpretation may arise from the interpretation made by the Peruvian Tax Authorities that may affect future charges for taxes.

Similarly, the recoverability of value-added tax recoverable is determined by management based on past experience, taking into account existing relevant Peruvian tax rules.

4. PROPERTY, PLANT AND EQUIPMENT

	Mine and plant development assets *(Note (a))* *US$'000*	Asset for environmental rehabilitation *US$'000*	Stripping cost *US$'000*	Land and buildings *(Note (b))* *US$'000*	Machinery and equipment *US$'000*	Motor vehicles *US$'000*	Furniture, fixtures and others *US$'000*	Construction-in-progress *US$'000*	Total *US$'000*
At 1 January 2015									
Cost	901,777	—	—	56,260	248,421	21,729	4,804	3,181,413	4,414,404
Accumulated depreciation	—	—	—	(4,463)	(41,948)	(7,602)	(3,014)	—	(57,027)
Net book amount	901,777	—	—	51,797	206,473	14,127	1,790	3,181,413	4,357,377
At 31 December 2015									
Opening net book amount	901,777	—	—	51,797	206,473	14,127	1,790	3,181,413	4,357,377
Additions	22,472	—	36,229	—	6,248	—	19	352,673	417,641
Change in estimated remediation and restoration obligations *(Note 15)*	—	(13,661)	—	—	—	—	—	—	(13,661)
Transfer (out)/in	(159,698)	82,581	—	1,112,950	1,511,403	106	6,450	(2,554,084)	(292)
Depreciation	(10,658)	(846)	(1,389)	(17,336)	(78,907)	(3,424)	(996)	—	(113,556)
Effect of exchange rate fluctuation	(95)	—	—	—	(1,460)	—	—	(14,009)	(15,564)
Disposals	—	—	—	—	—	(14)	—	—	(14)
Closing net book amount	753,798	68,074	34,840	1,147,411	1,643,757	10,795	7,263	965,993	4,631,931
At 31 December 2015									
Cost	764,456	68,920	36,229	1,169,210	1,764,612	21,785	11,273	965,993	4,802,478
Accumulated depreciation	(10,658)	(846)	(1,389)	(21,799)	(120,855)	(10,990)	(4,010)	—	(170,547)
Net book amount	753,798	68,074	34,840	1,147,411	1,643,757	10,795	7,263	965,993	4,631,931
At 1 January 2014									
Cost	818,976	—	—	57,580	96,752	20,846	3,578	2,845,158	3,842,890
Accumulated depreciation	—	—	—	(2,711)	(19,268)	(4,343)	(2,525)	—	(28,847)
Net book amount	818,976	—	—	54,869	77,484	16,503	1,053	2,845,158	3,814,043
At 31 December 2014	818,976	—	—	54,869	77,484	16,503	1,053	2,845,158	3,814,043
Additions*	82,850	—	—	—	23,983	—	14	473,720	580,567
Transfer in/(out)	—	—	—	(1,320)	129,778	1,094	1,225	(130,777)	—
Depreciation	—	—	—	(1,752)	(22,744)	(3,444)	(489)	—	(28,429)
Effect of exchange rate fluctuation	(49)	—	—	—	—	—	—	(6,688)	(6,737)
Disposals	—	—	—	—	(2,028)	(26)	(13)	—	(2,067)
Closing net book amount	901,777	—	—	51,797	206,473	14,127	1,790	3,181,413	4,357,377
At 31 December 2014									
Cost	901,777	—	—	56,260	248,421	21,729	4,804	3,181,413	4,414,404
Accumulated depreciation	—	—	—	(4,463)	(41,948)	(7,602)	(3,014)	—	(57,027)
Net book amount	901,777	—	—	51,797	206,473	14,127	1,790	3,181,413	4,357,377

* Included in the addition of property, plant and equipment of the Group for the year ended 31 December 2014 were estimated remediation and restoration obligations in relation to the property, plant and equipment amounting to US$33,007,000 (Note 15).

Notes:

(a) The Group owns a 50% equity interest in Sociedad Minera de Responsabilidad Limitada Juanita de Huancayou (the "Juanita"), a limited liability company incorporated under the laws of Peru and established for the purpose of holding one of the mining concession rights of the Toromocho Project (the "Metallic Mining Concession Right"). Except for holding the Metallic Mining Concession Right, Juanita had no other significant business activities during the years ended 31 December 2015 and 2014. The directors of the Company are of the opinion that since the sole purpose of Juanita is to hold the Metallic Mining Concession Right of the Toromocho Project, the Group's 50% share of the concession right amounting to US$3,500,000 is accounted for as part of the 'mine and plant development assets'. There are no significant contingent liabilities relating to the Group's interest in Juanita, and of Juanita itself.

(b) The Group's freehold land and buildings included in property, plant and equipment with a net carrying amount of US$1,147,412,000 (2014: US$51,797,000) are situated in Peru.

As at 31 December 2015, the Group has capitalised finance costs included in the additions of property, plant and equipment amounting to US$62,177,000 (31 December 2014: US$99,736,000) (Note 26).

As at 31 December 2015, the bank borrowings from Eximbank amounting to US$2,193,774,000 (31 December 2014: US$2,402,157,000) (Note16(b)) were guaranteed by Chinalco and according to the borrowing agreements, in case that the credibility or financial status of Chinalco deteriorates or has the potential to deteriorate, all the property, plant and equipment pertaining to the Toromocho Project will be pledged as additional security for these borrowings.

In connection with the agreement to construct and operate the Kingsmill Tunnel Water Treatment Plant (facilities used to supply water to the Toromocho Project), the Group is required to maintain certain deposits with a bank. At 31 December 2015, bank deposits amounting to US$540,000 (31 December 2014: US$540,000) were held as a performance guarantee (Note10(a)). The Group acquired certain mining concessions and the equity interest in Centenario from Austria Duvaz, which is a Peruvian mining group in 2006. US$1,668,000 represented the remaining outstanding consideration for the acquisition of Centenario and was paid into an escrow account in March 2011 and will be paid to Austria Duvaz after it presents the final report of contingencies of labor and environmental matters. At 31 December 2015, bank deposits amounted to US$1,668,000 (31 December 2014: US$1,668,000) (Note10(c)).

As at 31 December 2015, the amount of approximately US$28 million (31 December 2014: US$16 million) by which net proceeds received exceed the costs of testing while bringing the Toromocho Project to commercial production levels has been credited to the cost of property, plant and equipment of the Group.

During the year ended 31 December 2015, depreciation expense was recognised as follows:

	2015	2014
	US$'000	*US$'000*
Capitalised in construction-in-progress	24,067	27,991
General and administrative expenses	257	438
Cost of sales	87,494	—
Selling and distribution expenses	1,738	—
Total	113,556	28,429

5. INTANGIBLE ASSETS

	2015	2014
	US$'000	*US$'000*
Computer software		
Opening net book value	516	1,255
Additions	275	376
Transfer in	292	—
Disposals	—	(12)
Amortisation	(529)	(1,103)
Closing net book value	554	516
Cost	5,708	5,141
Accumulated amortisation	(5,154)	(4,625)
Net book value	554	516

During the year ended 31 December 2015, amortisation is recognised as follows:

	2015	2014
	US$'000	*US$'000*
Capitalised in construction in progress	306	1,082
Cost of sales	154	—
General and administrative expenses	69	21
Total	529	1,103

6. INVESTMENT IN A JOINT VENTURE

	2015	2014
	US$'000	*US$'000*
At beginning of the year	1,914	3,598
Share of profit/(loss)	304	(1,684)
At end of the year	2,218	1,914

In September 2010, the Group and four other independent investors jointly established Transportadora Callao S.A. ("Transportadora Callao"), a company incorporated under the laws of Peru. In accordance with the relevant investment agreement, the Group contributed US$1,290,000 for a 7% equity interest in Transportadora Callao. Transportadora Callao was established exclusively for the design, construction, finance, operation and conservation of a specialised dock for mineral concentrates and the corresponding conveyer belt located in the northern wave break of the Callao Port in Peru according to the terms and conditions established in the Concession Agreement signed with the Peruvian government. As at 31 December 2015, Transportadora Callao has completed the construction work and is at operation stage.

The following table illustrates the aggregate financial information of Transportadora Callao that is not individually material:

	2015	2014
	US$'000	*US$'000*
Share of the joint venture's profit/(loss) for the year	304	(1,684)
Share of the joint venture's other comprehensive income	—	—
Share of the joint venture's total comprehensive income	304	(1,684)
Aggregate carrying amount of the Group's investment in the joint venture	2,218	1,914

As at 31 December 2015, the Peruvian government requires Transportadora Callao to maintain a guarantee deposit of US$27,000,000 (31 December 2014: US$27,000,000) as a performance guarantee. In this connection, the Group placed cash in a designated bank account amounting to US$1,890,000, which represents the Group's proportional share of the total guarantee deposit as at 31 December 2015 (31 December 2014: US$1,890,000) (Note 10(a)).

There are no significant contingent liabilities in relation to the Group's interest in the joint venture and no significant contingent liabilities of the joint venture itself.

Except as disclosed in the preceding paragraphs, there are no other significant commitments in relation to the Group's interest in the joint venture, and no significant commitments of the joint venture itself.

7. DEFERRED TAX ASSETS

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to income tax levied by the same tax authority. All of the deferred income tax assets and liabilities are to be recovered or settled after 12 months.

The gross movements in the deferred tax assets are as follows:

	2015	2014
	US$'000	*US$'000*
At beginning of the year	31,225	27,742
Credited to profit or loss *(Note 29)*	(16,978)	3,483
At end of the year	14,247	31,225

Deferred income tax assets/liabilities

	At 1 January 2014	Credited to profit or loss	At 31 December 2014	Credited to profit or loss	At 31 December 2015
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*
Deferred tax assets					
Tax losses available	—	261,813	261,813	3,116	264,929
Expenses capitalised for tax purposes	25,705	1,714	27,419	—	27,419
Asset remediation and restoration provision	2,328	1,200	3,528	1,117	4,645
Provisional price adjustment	—	4,861	4,861	2,460	7,321
Others	(291)	1,345	1,054	1,187	2,241
Total deferred tax assets	27,742	270,933	298,675	7,880	306,555
Deferred tax liabilities					
Accelerated tax depreciation of mine development costs	—	(267,450)	(267,450)	(24,858)	(292,308)
Total deferred tax liabilities	—	(267,450)	(267,450)	(24,858)	(292,308)
Deferred tax assets, net	27,742	3,483	31,225	(16,978)	14,247

There was no unrecognised net operating tax loss as at 31 December 2015 (31 December 2014: Nil).

8. VALUE-ADDED TAX RECOVERABLE

On 14 September 2010, by means of Supreme Decree No 060-2010-EM issued by the MEM, as countersigned by the Ministry of Economy and Finance, the Company is entitled to use the Special Regime of the Value-added Tax (''VAT'') Anticipated Refunding (RERA IGV, the Spanish acronym), in adherence to Legislative Decree 973. Accordingly, qualified VAT paid on purchases can be used to set off tax payable to local sales, income taxes or any other taxes required by the Peruvian tax authorities or refunded in the form of negotiable credit notes or non-negotiable checks.

In order to qualify for the above entitlement under RERA IGV, the Group signed an investment agreement with respect to the Toromocho Project (the ''Investment Agreement'') on 16 June 2009 with the MEM, which was modified under an addendum dated 27 July 2010. Pursuant to the Investment Agreement, the Group agreed to invest into the Toromocho Project US$2,053 million by the end of 2012. On 15 December 2011, the MEM and MCP signed an addendum of the Investment Agreement, which was approved by the MEM and the Ministry of Finance of the Peruvian government on 8 February 2012, in order to extend the period of fulfillment of the committed investment until December 2013.

On 17 January 2014, the Group signed an amendment of the Investment Agreement with the MEM, pursuant to which, the Group committed to invest US$2,984 million into the Toromocho Project until 31 December 2015.

VAT recoverable represents the VAT credit entitled to the Group for VAT paid on the acquisition of goods and services related to its exploration and development activities, and is summarised as follows:

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
VAT recoverable:		
— to be recovered after 12 months	131,419	172,512
— to be recovered within 12 months	104,535	71,050
	235,954	243,562

9. PREPAYMENTS AND OTHER RECEIVABLES

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Other receivables		
Loan to a joint venture *(Note (a))*	9,585	9,274
Loan to a transportation services provider *(Note (b))*	3,047	3,047
Amount due from contractors for purchase of fuel	4,033	9,181
Employee advances	304	598
Amounts due from the ultimate holding company *(Note 35(d))*	174	192
Futures deposit	2,555	—
Insurance claims	2,794	—
Others	557	600
	23,049	22,892
Less: impairment	—	—
	23,049	22,892
Prepayments		
Prepaid insurance	2,303	1,431
Prepaid income tax	19,703	9,647
Advance to constructors	1,838	16,747
Advance to suppliers	3,179	13,914
Others	452	3,075
	27,475	44,814
Total prepayments and other receivables	50,524	67,706
Less: non-current portion *(Note (c))*	(12,632)	(12,321)
	37,892	55,385

Notes:

(a) The loan to a joint venture is unsecured and bears interest at LIBOR plus 5% per annum and is due in 8 years.

(b) As at 31 December 2015, the other receivables amounting to US$3,047,000 (31 December 2014: US$3,047,000) represented a loan to Ferrocarril Central Andino S.A., a third party Peruvian limited liability company which provides certain transportation services to the Group. Such loan receivable is unsecured, interest-free and is due in 7 years.

(c) The non-current portion mainly includes other receivables from a joint venture and Ferrocarril Central Andino S.A.

Aging analysis of other receivables are as follows:

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Within 3 months	7,678	5,960
3 to 6 months	407	3,103
6 months to 1 year	2,302	1,508
1 to 2 years	2,171	9,274
2 to 3 years	7,444	3,047
Over 3 years	3,047	—
	23,049	22,892

In determining the recoverability of other receivables, the Group performs a risk analysis considering the type and aging of the outstanding receivables and the creditworthy of the counterparties.

Prepayments and other receivables are denominated in the following currencies:

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
US$	23,781	41,022
New PEN	26,743	26,684
	50,524	67,706

10. RESTRICTED CASH

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Guaranteed deposits for import of equipment into Peru	2,487	2,754
Bank deposits held for performance guarantees *(Note (a))*	2,430	2,430
Bank deposits held for issuance of letters of credit *(Note (b))*	919	919
Bank deposits held in an escrow account *(Note (c))*	1,668	1,668
Others	377	117
	7,881	7,888

Notes:

(a) The bank deposits held for performance guarantees represented deposits held in banks for performance guarantees under the relevant contracts and agreements (Notes 4 and 6).

(b) The bank deposits held for issuance of letters of credit represented a guarantee for issuance of letters or credit (Note 34(a)(iii) 2)).

(c) The Group acquired certain mining concessions and the equity interest in Centenario from Austria Duvaz which is a Peruvian mining group in 2006. US$1,668,000 represented the remaining outstanding consideration for the acquisition of Centenario and was paid into an escrow account in March 2011 and will be paid to Austria Duvaz after it presents the final report of contingencies of labor and environmental matters.

All of the restricted cash was denominated in US$ as at 31 December 2015 and 2014.

11. INVENTORIES

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Raw materials	77,245	86,882
Work in progress	27,804	13,316
Finished goods	2,450	4,860
	107,499	105,058

12. CASH AND CASH EQUIVALENTS

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Cash at banks and on hand	122,111	75,173
Cash and cash equivalents	122,111	75,173

Cash and cash equivalents are denominated in the following currencies:

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
US$	79,233	61,538
New PEN	42,033	13,502
HK$	483	21
RMB	362	112
	122,111	75,173

Cash at banks earns interest as floating rates based on daily bank deposit rates. Short term time deposits are made for varying periods of between one day and three months depending on the immediate cash requirements of the Group, and earn interest at the respective short term time deposit rates. The bank balances and term deposits are deposited with creditworthy banks with no recent history of default.

13. TRADE RECEIVABLES

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Trade receivables	72,448	75,993
Less: impairment	—	—
	72,448	75,993

The Group mainly requires its customers to make payment at a specific percentage of the trade receivables within the credit period which is generally three months, extending up to six months. As at 31 December 2015, none of trade receivables were past due and impaired. Trade receivables are non-interest-bearing.

In August 2015, the Group obtained a banking facility amounting to US$125 million from CDB for the general corporate purposes for the Toromocho Project which is secured by trade receivables from several copper concentrate sales agreements.

In determining the recoverability of receivables, the Group performs a risk analysis considering the type and aging of the outstanding receivables and the creditworthy of the counterparties.

An aging analysis of the trade receivables as at the end of the reporting period, based on the invoice date and net of provisions, is as follows:

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Within 3 months	59,493	60,256
3 to 6 months	10,947	9,576
6 months to 1 year	2,008	6,161
	72,448	75,993

14. SHARE CAPITAL AND SHARE PREMIUM

As at 31 December 2015, the number of total authorised ordinary shares was 25 billion (31 December 2014: 25 billion) with a par value of US$0.04 (31 December 2014: US$0.04) per share.

The details of the issued and fully paid ordinary shares of the Company are as follows:

	Number of issued shares	**Ordinary shares**	**Share premium**
		US$'000	*US$'000*
At 1 January 2014	11,817,782,429	472,711	327,267
Issuance of ordinary shares	—	—	—
At 31 December 2014	11,817,782,429	472,711	327,267
Issuance of ordinary shares	—	—	—
At 31 December 2015	11,817,782,429	472,711	327,267

The Company completed initial public offering on 31 January 2013 and the over-allotment option was exercised on 22 February 2013 with 1,764,913,000 and 51,698,000 shares issued respectively at a par value of US$0.04 per share. The issue price was HK$1.75 per share.

15. PROVISION FOR REMEDIATION AND RESTORATION

	2015	2014
	US$'000	*US$'000*
At beginning of the year	126,472	90,200
Additional provision	(13,661)	33,007
Accretion expenses *(Note 26)*	3,491	3,265
At end of the year	116,302	126,472

Provision for remediation and restoration includes environmental remediation costs, asset retirement obligation and similar obligation in relation to the Group's development of the Toromocho Project. Pursuant to the Assignment Agreement of the Toromocho Project (Note 1), the Group is responsible for the remediation of the alternations of the lands given for mineral exploitation, even if these damages were caused before the signing of the relevant concession agreements. In addition, the Group is also obliged to operate and maintain certain facilities after closure of the mines.

In August 2012, Walsh Peru S.A., an independent valuer, issued to the Group the Mine Closure Plan which was approved by the MEM on 27 December 2012. Taking into consideration the report issued by Walsh Peru S.A. and the MEM's approval of the Mine Closure Plan, the Group has assessed and provided for remediation and restoration and similar obligations amounting to US$116,302,000 as at 31 December 2015 (31 December 2014: US$126,472,000).

16. LOANS AND BORROWINGS

	At 31 December	
	2015	2014
	US$'000	*US$'000*
Current		
Borrowings from the immediate holding company *(a)*		
— unsecured	920,000	280,000
Short-term bank loans *(b)*		
— secured	325,000	400,000
— unsecured	208,348	210,000
Long-term bank loans, due within one year *(b)*		
— secured	198,880	222,980
Other loans, due within one year *(c)*		
— secured	2,460	—
	1,654,688	1,112,980
Non-current		
Borrowings from the immediate holding company *(a)*		
— unsecured	158,904	155,271
Long-term bank loans *(b)*		
— secured	2,240,094	2,436,177
— unsecured	27,000	—
Other loans *(c)*		
— secured	79,572	—
	2,505,570	2,591,448
	4,160,258	3,704,428

(a) Borrowings from the immediate holding company

During the years ended 31 December 2015 and 2014, the Group's borrowings from the immediate holding company are as follows:

	2015	2014
	US$'000	*US$'000*
At beginning of the year	435,271	151,604
Addition	860,000	280,000
Interest charged	22,568	5,710
Repayment	(238,935)	(2,043)
At the end of the year	1,078,904	435,271
Among which:		
Principal	1,063,399	423,399
Interest payable	15,505	11,872
	1,078,904	435,271

As at 31 December 2013, the Company's immediate holding company provided loan facilities amounting to US$143,399,477 for general corporate purposes including but not limited to funding the working capital for the Toromocho Project in its commissioning stage. The borrowings were repayable in 5 years or at any time at the Company's discretion. The borrowings bear interest at LIBOR plus 2% per annum.

In April and November 2014, the immediate holding company provided loan facilities of US$200 million and US$350 million, respectively, for general corporate purposes including but not limited to funding the working capital for the Toromocho Project. Loans amounting to US$200 million and US$80 million were drawn down in 2014, respectively. As at 31 December 2014, the borrowings due to the immediate holding company were repayable at any time at the Company's discretion, which bear interest rate per annum equal to the lower of: i) the all-in cost to the lender of funding the drawdown; and ii) LIBOR plus 4%–4.2% per annum.

In January 2015, the Company's immediate holding company provided a loan facility of US$1,200 million for general corporate purposes including but not limited to funding the working capital for the Toromocho Project. Loans amounting to US$640 million were drawn down in 2015. The borrowings due to the immediate holding company were repayable at any time at the Company's discretion, which bear interest rate per annum equal to the all-in cost to the lender of funding the draw down.

In April and November 2015, from the facility amounting to US$200 million, US$120 million and US$70 million were repaid, respectively. In June 2015, US$220 million was drawn down from the facility amounting to US$350 million, and US$30 million was repaid in November 2015.

As of 31 December 2015, US$1,063 million remained outstanding, among which, US$143 million was repayable in 3 years or at any time at the Company's discretion, and US$920 million was repayable at any time at the Company's discretion. As at 31 December 2015, the remaining facility provided by Chinalco Overseas was US$830 million. In January 2016, the Company renewed the loan facilities amounting to US$200 million and US$350 million from Chinalco Overseas.

(b) Bank loans

As at 31 December 2015 and 2014, bank loans are summarised as follows:

	At 31 December 2015		At 31 December 2014	
Banks	**Amount**	**Effective interest rate**	**Amount**	**Effective interest rate**
	US$'000		*US$'000*	
Eximbank *(Note(i))*	2,193,774	2.65%–4.30%	2,402,157	2.21%–3.86%
CDB *(Note(ii))*	370,200	3.62%–4.30%	257,000	3.86%
Other Banks *(Note(iii))*	435,348	1.57%–3.75%	610,000	1.17%–2.26%
	2,999,322		3,269,157	

Notes:

(i) In December 2010, the Group obtained a banking facility amounting to US$2,000 million from Eximbank for the purpose of financing the development of the Toromocho Project. The Group is required to pay a 1% commission fee for each drawdown and the facility bears an interest rate at LIBOR plus 1.85% per annum. This facility is guaranteed by Chinalco (Note 35(a)) and will become secured by all property, plant and equipment pertaining to the Toromocho Project if Chinalco's credibility or financial status deteriorates (Note 4). The Group is also required to comply with certain financial covenants relating to the use of funds and other administrative resources.

In March 2013, the Group signed a supplemental agreement with Eximbank which provided an additional loan facility amounting to US$419 million with an interest rate at LIBOR plus 3.5% per annum. The Group is required to pay a 1% commission fee for each draw down. This facility is guaranteed by Chinalco (Note 35(a)) and will become secured by all property, plant and equipment pertaining to the Toromocho Project if Chinalco's credibility or financial status deteriorates (Note 4). The Group is also required to comply with certain financial covenants relating to the use of funds and other administrative resources.

As at 31 December 2015 and 2014, the above banking facilities with Eximbank had been fully drawn down. In 2015, the newly amortised commission fee amounted to US$2,797,000, the unamortised commission fee amounted to US$14,046,000. Also, in year 2015, the Group repaid US$211,180,000 based on the payment schedule.

(ii) In September 2012, the Group obtained a banking facility amounting to US$83 million from the CDB for the construction, maintenance and operation of Kingsmill Tunnel Water Treatment Plant. This facility is guaranteed by Chinalco (Note 35(a)) and bears interest at LIBOR plus 3.5% per annum.

In September 2012, CDB issued a memorandum indicating its commitment to lend US$274 million to the Group for certain designated projects in relation to the development of the Toromocho Project, in which US$100 million was cancelled later due to delay of the related specific project. Pursuant to this memorandum, the Group obtained banking facilities which are guaranteed by Chinalco (Note 35(a)) and bear interest at LIBOR plus 3.5% per annum.

In August 2015, the Group obtained a banking facility amounting to US$125 million from CDB for the general corporate purposes for the Toromocho Project. In August, November and December 2015, US$30 million, US$50 million and US$45 million were drawn down respectively. This facility is secured by trade receivables from several copper concentrate sales agreements.

As at 31 December 2015, all facilities from CDB have been fully drawn down and US$11.8 million has been repaid in 2015 based on the payment schedule.

(iii) As at 31 December 2015, the Group obtained short-term bank loans of US$435 million from Banco Bilbao Vizcaya Argentaria Hong Kong ("BBVA-HK"), Banco Bilbao Vizcaya Argentaria Perú ("BBVA-Perú"), Standard Chartered Bank (Taiwan) Limited, Natixis (acting through its Hong Kong Branch), Banco de Credito del Perú and Shanghai Pudong Development Bank, which bear interest at rates ranging from 1.57% to 3.75% per annum, among which, US$100 million is guaranteed by China Export and Credit Insurance Corporation, a third party, with a counter-guarantee provided by Chinalco (Note 35(a)). Among the total short-term bank loans, US$88 million are denominated in PEN S/. and the exchange rate is 3.407, the remaining are all denominated in US$.

(c) In October and November 2015, the Group obtained loans of US$59 million and US$23 million respectively from Caterpillar Financial Services Corporation ("CFSC") for purchasing certain vehicle products by Caterpillar, which are denominated in US$ and bear interest at LIBOR plus 2.88%–3.1255% per annum.

(d) As at 31 December 2015, the long-term bank borrowings and other loans were repayable as follows:

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Within 1 year	201,340	222,980
Between 1 and 2 years	254,721	193,580
Between 2 and 5 years	728,886	699,118
Over 5 years	1,521,963	1,698,750
	2,706,910	2,814,428
Amount due within one year shown under current liabilities	(201,340)	(222,980)
	2,505,570	2,591,448

17. TRADE PAYABLES

Aging analysis of trade payables is as follows:

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Within 3 months	204,580	284,329
3 to 6 months	6,752	67,972
6 months to 1 year	2,869	40,311
1 to 2 years	13,548	—
	227,749	392,612

The carrying amounts of the Group's trade payables are denominated in the following currencies:

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
US$	184,973	250,096
New PEN	42,515	136,116
AUD	—	1,037
EUR	259	5,363
GBP	2	—
	227,749	392,612

The trade payables are non-interest-bearing and are normally settled in 60 days to 90 days.

18. ACCRUALS AND OTHER PAYABLES

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Accrued expenses and others	3,733	7,659
Other payables	24,525	15,069
Amounts due to related parties	73	132
Payroll and welfare payables	6,524	8,450
Taxes other than corporate income tax	4,282	3,546
Total	39,137	34,856

19. AMOUNT DUE TO THE IMMEDIATE HOLDING COMPANY

The amounts due to the immediate holding company are unsecured, interest-free and are repayable on demand and are denominated in US$.

20. DERIVATIVE FINANCIAL INSTRUMENTS

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Embedded derivatives	22,878	—
	22,878	—

The contract terms for MCP's sale of copper concentrates to customers allow for a price adjustments based on the market price at the relevant quotation period stipulated in the contract. Sales contracts for copper concentrates that have provisional pricing features are considered to contain an embedded derivative, which is required to be separated from the host contract for accounting purposes upon delivery. These embedded derivatives are not designated for hedge purposes and are measured at fair value through profit or loss.

21. REVENUE

The Group commenced commercial production in June 2015. During the year ended 31 December 2015, the Group recorded the revenue as follows:

	2015	2014
	US$'000	*US$'000*
Sales of goods	426,630	—
Total revenue	426,630	—

22. SEGMENT REPORTING

Management determines the operating segments based on the information reported to the Group's chief operating decision maker. As all of the Group's activities are engaged in the mining development and all the principal assets employed by the Group are located in Peru, the Group's chief operating decision maker considers that the performance assessment of the Group should be based on the results of the Group as a whole. Therefore, no further segment information is disclosed.

23. OTHER GAINS

	2015	2014
	US$'000	*US$'000*
Income on mine concessions *(Note)*	99	120
Gain on disposal of property, plant and equipment	—	2,014
Income from indemnity	3,067	700
Gains on sales of supplies to contractors	5,743	343
Others	3,726	2,389
	12,635	5,566

Note: Income on mine concessions represented rental income from third party miners for the use and mining of certain mines owned by the Group. As at 31 December 2015, the advance received from these miners amounting to US$3,973,000 (31 December 2014: US$4,072,000) was recorded in "deferred income".

24. GENERAL AND ADMINISTRATIVE EXPENSES

	2015	2014
	US$'000	*US$'000*
By nature:		
Labor cost	5,085	5,398
Depreciation and amortisation	326	459
Auditors' remuneration	327	277
Consulting and other service expenses	985	1,036
Repair and maintenance expenses	198	—
Operating lease expense	1,662	1,307
Travel and transportation	525	813
Taxes other than income tax	6,488	537
Advertising and promotion	86	85
Insurance expenses	5,580	—
Others	(1,754)	1,363
	19,508	11,275

25. SELLING AND DISTRIBUTION EXPENSES

	2015	2014
	US$'000	*US$'000*
By nature:		
Labor cost	885	—
Depreciation and amortisation	1,738	—
Warehouse and other storage fees	14,191	—
Consulting and other service expenses	52	—
Repair and maintenance expenses	28	—
Operating lease expense	53	—
Travel and transportation	20,034	—
Packaging expenses	2,071	—
Lab fee	1,727	—
Insurance expenses	55	—
Others	191	—
	41,025	—

26. FINANCE INCOME/(EXPENSES)

	2015 *US$'000*	2014 *US$'000*
Finance income		
— Interest income	455	752
Total finance income	455	752
Finance expenses		
— Interest expense on borrowings wholly repayable within five years	(44,458)	(13,766)
— Interest expense on borrowings wholly repayable after five years	(69,026)	(85,970)
— Bank charges	(2,520)	(127)
— Accretion of interest on provision for remediation and restoration *(Note 15)*	(3,491)	(3,265)
	(119,495)	(103,128)
Less: amounts capitalised into construction-in-progress *(Note 4)*	62,177	99,736
Total finance expenses	(57,318)	(3,392)

27. INVESTMENT INCOME

	2015 *US$'000*	2014 *US$'000*
Income from futures contracts	14,992	1,586
Total investment income	14,992	1,586

The Group uses futures contracts to reduce its exposure to fluctuations in the price of copper concentrates. The Group uses the futures contracts for hedging other than speculation.

The Group uses mainly futures contracts traded on the London Metal Exchange ("LME") to hedge against fluctuations in prices of copper concentrates. For the year ended 31 December 2015, the income from the futures contracts amounting to US$14.99 million (2014: US$1.6 million) was recognised in investment income in profit or loss.

28. PROFIT/(LOSS) BEFORE INCOME TAX

The Group's profit/loss before income tax is arrived at after charging/(crediting):

	Notes	2015 US$'000	2014 US$'000
Cost of inventory sold		169,072	—
Depreciation		89,489	438
Amortisation		223	21
Employee benefit expenses			
— Wages, salaries and allowance		52,237	53,232
— Directors' emoluments	*32*	1,294	1,571
— Pension costs — defined contribution plans		6,170	6,449
— Other staff benefits		7,041	10,606
Less: staff cost capitalised into construction-in-progress		(23,544)	(66,460)
Labor cost		43,198	5,398
Auditors' remuneration	*24*	327	277
Bank interest income	*26*	(455)	(752)
Investment income from futures contracts	*27*	(14,992)	(1,586)
Loss/(gain) on disposal of property, plant and equipment		14	(2,014)

29. INCOME TAX (EXPENSE)/BENEFIT

	2015 US$'000	2014 US$'000
Current income tax	(66)	(223)
Deferred income tax *(Note 7)*	(16,978)	3,483
	(17,044)	3,260

The Company was incorporated in the Cayman Islands as an exempted company with limited liability under the Company Law of Cayman Islands and, accordingly, is exempted from payment of Cayman Islands income tax.

Subsidiaries established in Peru are subject to corporate income tax at a rate of 32% during the year ended 31 December 2015 (2014: 32%). Pursuant to the Stability Agreement signed with the MEM, their income tax was stabilised at a rate of 32%, taking effect on 1 January 2014.

The income tax on the Group's profit/(loss) before tax differs from the theoretical amount that would arise using the applicable tax rates to profit/(loss) of the consolidated entities as follows:

	2015	2014
	US$'000	*US$'000*
Profit/(loss) before income tax	3,373	(16,473)
Tax (expense)/benefit calculated at the tax rates applicable to profit or loss in Peru	(1,079)	5,271
Effect of tax rate difference between the Company and the subsidiaries in Peru	778	(870)
Effect of change in tax rate on deferred tax previously recognised (from 30% to 32%)	—	1,850
True up adjustments in respect of prior year's annual income tax filings	7,567	—
Foreign exchange difference from recognised tax loss	(24,930)	—
Non-deductible expenses	(839)	(3,108)
Others	1,459	117
Income tax (expense)/benefit	(17,044)	3,260

30. LOSS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE COMPANY

(a) Basic

Basic loss per share is calculated by dividing the net loss attributable to the Company's equity holders by the weighted average number of ordinary shares in issue during the year.

	2015	2014
Loss attributable to equity holders of the Company (US$'000)	(13,671)	(13,213)
Weighted average number of ordinary shares in issue (in thousands)	11,817,782	11,817,782
Basic loss per share (in US$)	(0.0012)	(0.0011)

(b) Diluted loss per share for the years ended 31 December 2015 and 2014 are the same as the basic loss per share as there were no potentially dilutive shares.

31. DIVIDENDS

No dividend has been paid or declared by the Company during the years ended 31 December 2015 and 2014.

32. DIRECTORS' REMUNERATION

Directors' remuneration for the years is as follows:

	Fees	Salaries, allowances and benefits in kind	Discretionary bonuses	Pension scheme contributions	Total
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*
For the year ended 31 December 2015					
Non-executive Director:					
Zhang Chengzhong *(Note i)*	—	—	—	—	—
Luan Shuwei *(Note ii)*	—	—	—	—	—
Li Bohan *(Note iii)*	—	—	—	—	—
Liu Hongjun	—	—	—	—	—
Wang Dongbo	—	—	—	—	—
Executive Director:					
Huang Shanfu *(Note iv)*	—	420	400	—	820
Jin Yanbing *(Note v)*	—	45	—	—	45
Liang Yunxing *(Note v)*	—	82	67	—	149
Independent Non-executive Director:					
Scott McKee Hand	90	—	—	—	90
Francisco Augusto Baertl Montori	70	—	—	—	70
Ronald Ashley Hall	70	—	—	—	70
Lai Yat Kwong Fred	50	—	—	—	50
	280	547	467	—	1,294
For the year ended 31 December 2014					
Non-executive Director:					
Li Bohan *(Note iii)*	—	—	—	—	—
Liu Hongjun *(Note vi)*	—	—	—	—	—
Wang Dongbo *(Note vi)*	—	—	—	—	—
Xiong Weiping *(Note vi)*	—	—	—	—	—
Liu Caiming *(Note vi)*	—	—	—	—	—
Executive Director:					
Zhang Chengzhong	—	—	—	—	—
Peng Huaisheng *(Note vii)*	—	80	22	—	102
Huang Shanfu	—	512	513	—	1,025
Liang Yunxing	—	110	54	—	164
Independent Non-executive Director:					
Scott McKee Hand	90	—	—	—	90
Francisco Augusto Baertl Montori	70	—	—	—	70
Ronald Ashley Hall	70	—	—	—	70
Lai Yat Kwong Fred	50	—	—	—	50
	280	702	589	—	1,571

Notes:

(i) Dr. Zhang Chengzhong resigned as the Chairman of the Board and a Non-executive Director with effect from 6 January 2016. Mr. Liu Jianping was appointed as the Chairman of the Board and Non-executive Director with effect from 6 January 2016.

(ii) Mr. Luan Shuwei was appointed as a Non-executive Director with effect from 26 August 2015. Mr. Luan Shuwei was appointed as an Executive Director of the Company with effect from 12 October 2015 and resigned as a Non-executive Director with effect from the same date. Mr. Luan Shuwei was re-designated as a non-executive Director and resigned as the Executive Director and Chief Executive Officer with effect from 3 March 2016.

(iii) Dr. Li Bohan was appointed as a Non-executive Director on 28 August 2014 and resigned as a Non-executive Director on 26 August 2015.

(iv) Mr. Huang Shanfu resigned as an Executive Director and the Vice-President with effect from 3 March 2016.

(v) Ms. Liang Yunxing resigned from the Chief Financial Officer and Executive Director on 27 March 2015, and Mr. Jin Yanbing was appointed as Chief Financial Officer and Executive Director on the same day.

(vi) Dr. Xiong Weiping and Dr. Liu Caiming resigned from non-executive directors on 28 August 2014, and Dr. Liu Hongjun and Dr. Wang Dongbo were reappointed as the non-executive directors on the same day.

(vii) Mr. Peng Huaisheng resigned as an Executive Director with effect from 12 August 2014.

(viii) Mr. Liu Yuewei was appointed as an Executive Director and the Chief Executive Officer with effect from 3 March 2016.

Dr. Li Bohan, Dr. Zhang Chengzhong, Dr. Liu Hongjun, Dr. Wang Dongbo and Mr. Luan Shuwei received emoluments from Chinalco for the year ended 31 December 2015. Dr. Li Bohan, Dr. Liu Hongjun, Dr. Wang Dongbo, Dr. Xiong Weiping, Dr. Zhang Chengzhong and Dr. Liu Caiming received emoluments from Chinalco for the year ended 31 December 2014. Part of these emoluments are in relation to their services to the Company. No apportionment in 2015 and 2014 has been made as the directors consider that it is impractical to apportion these emoluments between their services to the Company and their services to Chinalco.

During the year ended 31 December 2015, US$54,382 emoluments were paid by the Company to a director as compensation for loss of office of the Company in respect of the termination of the qualifying services of the director (2014: Nil). No director waived or agreed to waive any emoluments during the year ended 31 December 2015 (2014: Nil).

33. FIVE HIGHEST PAID EMPLOYEES

The numbers of directors and non-director employees included in the five highest paid individuals for the years ended 31 December 2015 and 2014 are set forth below:

	2015	**2014**
Director	1	1
Non-director	4	4
	5	5

Details of the emoluments of the director are included in Note 32. The aggregate of the emoluments in respect of the remaining highest paid individuals are as follows:

	2015	2014
	US$'000	*US$'000*
Salaries and other emoluments	1,594	1,671
Discretionary bonuses	1,063	1,064
Pension scheme contributions	—	—
	2,657	2,735

The number of the non-director highest paid individuals whose emoluments in HK$ fell within the following bands is as follows:

	2015	2014
HK$3,000,000 to HK$3,500,000	1	—
HK$3,500,001 to HK$4,000,000	—	—
HK$4,000,001 to HK$4,500,000	—	1
HK$4,500,001 to HK$5,000,000	—	—
HK$5,000,001 to HK$5,500,000	1	2
HK$5,500,001 to HK$6,000,000	2	—
HK$6,000,001 to HK$6,500,000	—	—
HK$6,500,001 to HK$7,000,000	—	1

During the year ended 31 December 2015, no emoluments were paid by the Group to the five highest paid employees as an inducement to join or upon joining the Group or as compensation for loss of office (2014: Nil).

34. COMMITMENTS AND CONTINGENCIES

(a) Commitments

(i) *Operating lease commitments — where the Group is the lessee*

The Group leases various offices and warehouses under operating lease agreements. Leases for offices and warehouses are negotiated for terms ranging from two to five years.

At 31 December, the Group had total future minimum lease payments under non-cancellable operating leases falling due as follows:

	2015	2014
	US$'000	*US$'000*
Within one year	3,643	2,304
In the second to fifth years, inclusive	665	1,933
	4,308	4,237

(ii) ***Capital commitments***

In addition to the operating lease commitments detailed in (i) above, the Group had the following capital commitments as the end of the reporting period:

	2015	2014
	US$'000	*US$'000*
Contracted, but not provided for: Property, plant and equipment	82,008	79,031

(iii) ***Investment commitments***

(1) Pursuant to the Investment Agreement in connection with the VAT recoverable entitlement (Note 8), the Group is committed to investing in the Toromocho Project amounting to US$2,053 million by the end of 2012. On 15 December 2011, the MEM and MCP signed an addendum to the Investment Agreement, which was approved by the MEM and the Ministry of Finance of the Peruvian government on 8 February 2012, to extend the period of fulfilment of the committed investment until December 2013.

On 17 January 2014, the Group signed an amendment to the Investment Agreement with the MEM, pursuant to which, the Group committed to investing US$2,984 million in the Toromocho Project by 31 December 2015.

On 23 November 2013, the Company submitted to the General Mining Bureau (''GMB'') a modification request of the ''Agreement of Guarantees and Measures to Promote Investment'' (the ''Stability Agreement'', which was initially signed with the MEM on 9 March 2009) to increase the amount of committed investment and extend the period of disbursement. On 27 December 2013, the GMB approved the modification of the investment schedule of the Toromocho Project, with an increase of total investment up to US$4,383 million and an extended period of disbursement to December 2016. As at 31December 2015, the Group has invested US$4,157 million in the development of the Toromocho Mining Project.

The above modification of investment schedule of Stability Agreement includes the investment commitment indicated in the Investment Agreement in connection with VAT recoverable entitlement.

(2) The Group maintains letters of credit amounting to US$10,348,000 as the guarantee for compliance with the Mine Closure Plan (Note 15), which is secured by restricted cash of US$919,000 (Note 10(b)).

(b) Contingencies

(i) In May 2010, the local government of Morococha issued an order to MCP to cease the construction work for the new town of Morococha for the purpose of relocating the local original residents in relation to the development of the Toromocha Project through an administrative resolution on the grounds that the construction started without a proper permit. In August 2011, MCP obtained from the provincial government of Yauli-La Oroya a preliminary relief which explicitly permits it to continue the construction. In August 2011, the district court ruled that the local municipal government of Morococha is a competent authority to issue the aforementioned order and that the evidence shows that the Company did not have a relevant permit at the time of such order. In September 2011, MCP filed an appeal with the court of appeal against the decision by the district court claiming that, among others, the competent authority to supervise this matter should be the provincial government of Yauli-La Oroya of Peru and that the local government of Morococha's resolution on this matter is invalid. In September 2012, the superior court issued a resolution declaring the appeal as inadmissible. MCP filed an appeal to the constitutional high court, which will be the final instance. On 11 March 2013, MCP presented their oral report before the constitutional high court and the final resolution is yet to be released.

As at the date of approval of these financial statements, the aforementioned appeal is still in progress. In consideration of the opinion of an independent legal counsel, the directors of the Company are of the opinion that the claim is likely to be resolved in favour of MCP. Accordingly, no provision is considered necessary with respect to the aforementioned claim as at 31 December 2015.

Beside the above, the Group has a claim of Abengoa related to the construction of the transmission line of electric power (property of Pomacocha Power S.A.C.) amounting to US$4.4 million, which it has been classified as possible according to the management's and its legal advisors' assessment.

(ii) Apart from the above, as at 31 December 2015, the directors of the Company did not anticipate that any material liabilities will arise from the contingent liabilities other than those provided for in the financial statements.

35. RELATED PARTY TRANSACTIONS

(a) Save as disclosed elsewhere in these financial statements, the Group had the following transitions with related parties during the year:

(i) ***Purchases of property, plant and equipment***

During the year 2015, the Group purchased from a fellow subsidiary certain equipment amounting to nil (2014: US$816,000), at prices and on terms mutually agreed by the parties involved.

(ii) ***Borrowings due to the immediate holding company***

During the years 2015 and 2014, the Group had outstanding borrowings due to its immediate holding company, and the details of related additions and repayments are disclosed in Note 16(a). For the year ended 31 December 2015, the interest expense incurred for such borrowings amounted to US$22,568,000 (2014: US$5,710,000).

(iii) ***Financial guarantees provided by the ultimate holding company***

As at 31 December 2015, the Group's borrowings amounting to US$2,439 million (31 December 2014: US$2,659 million) (Note 16(b)) were guaranteed by Chinalco.

As at 31 December 2015, the Group's current borrowings amounting to US$100 million (31 December 2014: US$400 million) were guaranteed by China Export and Credit Insurance Corporation, with a counter-guarantee provided by Chinalco (Note 16(b)).

The guarantees will continue to be in place until the Group is able to replace or refinance the existing loan facilities in a commercially justifiable manner.

(iv) ***Facilities provided by the immediate holding company***

In April 2014, November 2014 and January 2015, the Company's immediate holding company, Chinalco Overseas provided to the Group a loan facility of US$200 million, US$350 million and US$1,200 million respectively, for general corporate purposes including but not limited to funding the working capital for the Toromocho Project. As at 31 December 2015, loans amounting to US$280 million were drawn down before 31 December 2014 and US$860 million were drawn down during current year, and the remaining facility provided by Chinalco Overseas was US$830 million as at 31 December 2015.

(v) ***Operating lease agreement with a fellow subsidiary***

The Company rents 3 offices under an operating lease contract from Chinalco Property Development Co., Ltd., the area is 395 square meters. During the year 2015, the Company accrued a rental expense and a property management fee amounting to US$129,386 and US$23,105 respectively (2014: US$131,382 and US$11,730). As at 31 December 2015, the remaining balance of other payable amounted to US$73,269, due to the second half year unpaid rent and property management fee (31 December 2014: US$131,947).

(b) Key management compensation

	2015	**2014**
	US$'000	*US$'000*
Short-term employed benefits	5,679	6,403
Retirement scheme contributions	272	30
	5,951	6,433

(c) Significant transactions with state-owned enterprises except Chinalco and its subsidiaries ("Other State-owned Enterprises")

In accordance with IAS 24(revised), government-related entities and their subsidiaries, directly or indirectly controlled, jointly controlled or significantly influenced by the PRC government are also defined as related parties of the Group.

During the year ended 31 December 2015, significant transactions with other state-owned enterprises are summarised as follows:

Cash and cash equivalents amounting to US$16,779,783 at 31 December 2015 (31 December 2014: US$135,009) and borrowings amounting to US$2,564 million as at 31 December 2015 (31 December 2014: US$2,659 million) (Note 16(b)), and the relevant interest income earned and expenses incurred during the year ended 31 December 2015 and 2014 are transacted with banks owned/controlled by the PRC government.

The above transactions conducted with other state-owned enterprises are based on terms as set out in the underlying agreements as mutually agreed.

The related party transactions in respect of item (a) above also constitute connected transactions as defined in Chapter 14A of the Listing Rules.

(d) Outstanding balances with related parties

	As at 31 December	
	2015	**2014**
	US$'000	*US$'000*
Included in prepayments and other receivables		
Amount due from the ultimate holding company *(Note) (Note 9)*	174	192
Included in loans and borrowings		
Borrowings from the immediate holding company *(Note 16(a))*	1,078,904	435,271
Included in amount due to the immediate holding company		
Amount due to the immediate holding company *(Note 19)*	2,426	2,426
Included in trade payables		
Amount due to a fellow subsidiary	162	1,441
Included in accruals and other payables		
Amount due to a fellow subsidiary	73	132

Note: The amount due from the ultimate holding company is unsecured, interest-free and has no fixed terms of repayment.

36. FINANCIAL INSTRUMENTS BY CATEGORY

The carrying amounts of each of the categories of financial instruments as at 31 December 2015 and 2014 are as follows:

Financial assets

	31 December 2015	**31 December 2014**
	Loans and receivables	**Loans and receivables**
	US$'000	*US$'000*
Trade receivables	72,448	75,993
Other receivables	23,049	22,892
Restricted cash	7,881	7,888
Cash and cash equivalents	122,111	75,173
Total	225,489	181,946

Financial liabilities

	31 December 2015			31 December 2014		
	Financial liabilities at fair value through profit or loss	**Financial liabilities at amortised costs**	**Total**	**Financial liabilities at fair value through profit or loss**	**Financial liabilities at amortised costs**	**Total**
	US$'000	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*
Loans and borrowings	—	4,160,258	4,160,258	—	3,704,428	3,704,428
Trade payables	—	227,749	227,749	—	392,612	392,612
Financial liabilities included in accruals and other payables	—	24,598	24,598	—	15,201	15,201
Derivative financial instruments	22,878	—	22,878	—	—	—
Amount due to the immediate holding company	—	2,426	2,426	—	2,426	2,426
Total	22,878	4,415,031	4,437,909	—	4,114,667	4,114,667

37. FAIR VALUE AND FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS

The carrying amounts and fair values of the Group's financial instruments, other than those with carrying amounts that reasonably approximate to fair values, are as follows:

	Carrying amounts		Fair values	
	2015	**2014**	**2015**	**2014**
	US$'000	*US$'000*	*US$'000*	*US$'000*
Financial liabilities				
Loans and borrowings	4,160,258	3,704,428	4,160,258	3,704,428
Derivative financial instruments	22,878	—	22,878	—
Total	4,183,136	3,704,428	4,183,136	3,704,428

Management has assessed that the fair values of cash and cash equivalents, trade receivables, other receivables, restricted cash, trade payables, financial liabilities included in other payables and accruals and an amount due to the immediate holding company approximate to their carrying amounts largely due to the short term maturities of these instruments.

The Group's finance department headed by the finance manager is responsible for determining the policies and procedures for the fair value measurement of financial instruments. The finance manager reports directly to the chief financial officer and the audit committee. At each reporting date, the finance department analyses the movements in the values of financial instruments and determines the major inputs applied in the valuation. The valuation is reviewed and approved by the chief financial officer. The valuation process and results are discussed with the audit committee twice a year for interim and annual financial reporting.

The fair values of the financial assets and liabilities are included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

The following methods and assumptions were used to estimate the fair values:

The fair values of the Group's non-current portion of loans and borrowings approximated to their carrying amounts mainly because they are floating rate loans and borrowings.

The Group signed sales contracts for copper concentrates that have provisional pricing features which are considered to contain an embedded derivative. The embedded derivatives are measured at each period-end based on the pricing formula outlined in the contract and the updated market forward price of copper concentrates for the quotation period.

Fair value hierarchy

The following tables illustrate the fair value measurement hierarchy of the Group's financial instruments:

Liabilities measured at fair value:

As at 31 December 2015

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	**Significant observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**	**Total**
	US$'000	*US$'000*	*US$'000*	*US$'000*
Derivative financial instruments	—	22,878	—	22,878

There were no liabilities measured at fair value at 31 December 2014.

During the year, there were no transfers of fair value measurements between Level 1 and Level 2 and no transfers into or out of Level 3 for both financial assets and financial liabilities (2014: nil).

Liabilities for which fair values are disclosed:

As at 31 December 2015

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	**Significant observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**	**Total**
	US$'000	*US$'000*	*US$'000*	*US$'000*
Loans and borrowings	—	4,160,258	—	4,160,258

As at 31 December 2014

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	**Significant observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**	**Total**
	US$'000	*US$'000*	*US$'000*	*US$'000*
Loans and borrowings	—	3,704,428	—	3,704,428

38. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's activities expose it to a variety of financial risks: market risk (including currency risk and cash flow interest rate risk), credit risk and liquidity risk.

(a) Market risk

(i) *Foreign exchange risk*

The Group mainly operates in Peru with most of the transactions denominated and settled in its functional currency (US$) which are mainly related to the purchase of equipment, services and loans received from related parties and banks. Accordingly, it is exposed to foreign exchange risk that may arise from fluctuations in the exchange rate of the New Peruvian Soles ("New PEN"). The Group maintains a net liability position expressed in New PEN that, in its appreciation trend, may have a negative impact upon liquidation of these monetary assets and liabilities. Based on public estimates available, management does not anticipate a severe devaluation of US$ against New PEN in the short term that may cause a major impact on the financial position and results of the Group.

During the years ended 31 December 2015 and 2014, the Group did not use any financial instrument to hedge foreign exchange risk.

At 31 December 2015, if the US$ had strengthened/weakened by 5% (2014: 5%) against the New PEN with all other variables held constant, loss for the year would have been US$7,845,000 (2014: US$5,511,000) lower/higher.

(ii) *Cash flow interest rate risk*

Other than cash held in bank deposits included in cash and cash equivalents, the Group has no significant interest-bearing assets. The Group's interest rate risk mainly arises from long-term borrowings. Borrowings obtained at variable rates expose the Group to cash flow interest rate risk which is partially offset by the bank deposit shield at variable rates. A detailed analysis of the Group's borrowings, together with their respective effective interest rates and maturity dates, are included in Note 16.

At 31 December 2015, if interest rate had increased/decreased by 10 basis points (2014: 10 basis points) with all other variables held constant, interest expense would have been higher/lower by US$3,081,000 (2014: US$3,270,000).

(b) Credit risk

Credit risk is managed on a Group basis. The carrying amounts of bank deposits (including restricted cash), trade receivables and other receivables included in the consolidated statement of financial position represent the Group's maximum exposure to credit risk in relation to its financial assets.

The Group trades only with recognised and creditworthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis and the Group's exposure to bad debts is not significant.

At 31 December 2015, cash and cash equivalents and restricted cash were deposited in the major banks and financial institutions in Peru and the PRC which the directors of the Company believe are of good credit quality.

(c) Liquidity risk

The Group's liquidity risk management involves maintaining sufficient cash and cash equivalents and availability of funding through an adequate amount of committed credit facilities.

The maturity profile of the Group's financial liabilities as at the end of the reporting period, based on the contractual undiscounted payments, is as follows:

31 December 2015	**Less than 1 year** *US$'000*	**1 to 2 years** *US$'000*	**2 to 5 years** *US$'000*	**Over 5 years** *US$'000*	**Total** *US$'000*
Trade payables	227,749	—	—	—	227,749
Financial liabilities included in accruals and other payables	24,598	—	—	—	24,598
Derivative financial instruments	22,878	—	—	—	22,878
Amount due to the immediate holding company	2,426	—	—	—	2,426
Short-term loans and borrowings	1,749,200	—	—	—	1,749,200
Long-term loans and borrowings	—	323,123	1,068,307	1,672,387	3,063,817
	2,026,851	323,123	1,068,307	1,672,387	5,090,668

31 December 2014	**Less than 1 year** *US$'000*	**1 to 2 years** *US$'000*	**2 to 5 years** *US$'000*	**Over 5 years** *US$'000*	**Total** *US$'000*
Trade payables	392,612	—	—	—	392,612
Financial liabilities included in accruals and other payables	15,201	—	—	—	15,201
Amount due to the immediate holding company	2,426	—	—	—	2,426
Short-term loans and borrowings	1,188,270	—	—	—	1,188,270
Long-term loans and borrowings	—	262,118	854,178	1,876,575	2,992,871
	1,598,509	262,118	854,178	1,876,575	4,591,380

Capital management

The Group's primary objectives for managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

During the year ended 31 December 2015, as the Group has commenced commercial production, its funding is primarily from the proceeds of the Company's initial public offering, operating cash flows and shareholder's loans (Note 16(a)), as well as bank and other loans (Note 16(b)(c)).

The Group monitors capital using a gearing ratio, which is calculated as net debt divided by total capital. Net debt is calculated as total loans and borrowings (including current and non-current loans and borrowings as shown in the consolidated statement of financial position) less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the consolidated statement of financial position plus net debt. The gearing ratios of the Group as at the end of the reporting periods were as follows:

	At 31 December	
	2015	**2014**
	US$'000	*US$'000*
Total loans and borrowings	4,160,258	3,704,428
Less: Cash and cash equivalents	(122,111)	(75,173)
Net debt	4,038,147	3,629,255
Total equity	672,644	701,546
Total capital	4,710,791	4,330,801
Gearing ratio	86%	84%

The increase in the gearing ratio during the year ended 31 December 2015 resulted primarily from the increase of the Group's borrowings and loans in current year, which was mainly due to the development of commercial production of Toromocho Mining project and funding for development of Toromocho Mining Project.

39. EVENTS AFTER THE REPORTING PERIOD

Save as disclosed in Note 2 to the financial statements, no other reportable events or transactions take place after the balance sheet date.

40. COMPARATIVE AMOUNTS

Certain comparative amounts in the footnotes have been reclassified to conform with the current year's presentation and accounting treatment.

41. STATEMENT OF FINANCIAL POSITION OF THE COMPANY

Information about the statement of financial position of the Company at the end of the reporting period is as follows:

	31 December	
	2015	2014
	US$'000	*US$'000*
ASSETS		
Non-current assets		
Property, plant and equipment	24	12
Investments in subsidiaries	925,583	927,888
	925,607	927,900
Current assets		
Prepayments and other receivables	118	40
Cash and cash equivalents	6,266	231
	6,384	271
Total assets	931,991	928,171
EQUITY AND LIABILITIES		
Share capital	472,711	472,711
Share premium *(Note)*	327,267	327,267
Reserves *(Note)*	16,521	16,521
Accumulated deficits *(Note)*	(47,976)	(49,554)
Total equity	768,523	766,945
LIABILITIES		
Non-current liabilities		
Loans and borrowings	158,904	155,271
	158,904	155,271
Current liabilities		
Accruals and other payables	2,138	3,529
Amount due to the immediate holding company	2,426	2,426
	4,564	5,955
Total liabilities	163,468	161,226
Total equity and liabilities	931,991	928,171
Net current assets/(liabilities)	1,820	(5,684)
Total assets less current liabilities	927,427	922,216

Note:

A summary of the Company's reserves is as follows:

	Share premium *US$'000*	Capital reserves *US$'000*	Accumulated deficits *US$'000*	Total *US$'000*
At 1 January 2015	327,267	16,521	(49,554)	294,234
Profit for the year	—	—	1,578	1,578
Total comprehensive income	—	—	1,578	1,578
At 31 December 2015	327,267	16,521	(47,976)	295,812
At 1 January 2014	327,267	16,521	(43,356)	300,432
Loss for the year	—	—	(6,198)	(6,198)
Total comprehensive income	—	—	(6,198)	(6,198)
At 31 December 2014	327,267	16,521	(49,554)	294,234

42. APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements were approved and authorised for issue by the board of directors on 30 March 2016.

IV. INDEBTEDNESS STATEMENT

At the close of business on 31 December 2016, being the latest practicable date for the purpose of this statement of indebtedness prior to the printing of this Scheme Document, CMC Group had loans and borrowings with carrying value of approximately US$4,390 million including borrowings from the immediate holding company approximately US$1,184 million, bank loans approximately US$3,113 million and other loans approximately US$93 million.

In addition, at the close of business on 31 December 2016, the CMC had deferred income, and accruals and other payables, amount due to the immediate holding company. Except for amount due to the immediate holding company, almost all deferred income and accruals and other payables are liabilities arisen from routine business transactions.

Save as aforesaid, and apart from intra-group liabilities, the CMC Group did not have outstanding at the close of business on 31 December 2016, any loan capital issued and outstanding or agreed to be issued, bank overdrafts, loans or other similar indebtedness, liabilities under acceptances or acceptance credits, debentures, mortgages, charges, hire purchases commitments, guarantees or other material contingent liabilities.

V. MATERIAL CHANGE

Save as disclosed below, the directors of CMC confirm that, as at the Latest Practicable Date, there had been no material change in the financial or trading position or outlook of the CMC Group since 31 December 2015, the date to which the latest published consolidated audited financial statements of the CMC were made up.

Interim results for the six months ended 30 June 2016

According to the latest published interim report of CMC for the six months ended 30 June 2016 (the "2016 Interim Report"), the CMC Group has recorded a loss before income tax of approximately US$79.2 million for the six months ended 30 June 2016, compared with a profit before income tax of approximately US$9.4 million for the six months ended 30 June 2015. Further details of the financial information of the CMC Group for the six months ended 30 June 2016 are set out in the 2016 Interim Report.

The following is the text of the competent persons report from the Competent Evaluator in respect of the Toromocho Project for the purpose of incorporation into this Scheme Document.

January 2017

CHINALCO MINING CORPORATION INTERNATIONAL

Competent Persons Report for Toromocho Copper Project

Submitted to:
Chinalco Mining Corporation International

REPORT

Report Number. 1660234-001-R-Rev2b

Distribution:

1 electronic copy – Chinalco
1 electronic copy – Golder Associates Pty Ltd

Golder Associates

Executive Summary

Golder Associates ("Golder") was commissioned by Chinalco Mining Corporation International (Chinalco) to prepare a Competent Persons Report to assist Chinalco in its Independent technical review of the principal assets of Minera Chinalco Perú (MCP). The project is located in Peruvian Andes approximately 140 km east of Lima. In August 2007 Chinalco acquired all the shares of Peru Copper Inc., owner of Minera Peru Copper, which is now Minera Chinalco Peru S.A, and on 5 May of the following year (2008) signed the transfer of concessions and mining assets contract of the Toromocho Copper Project.

The information, observations, and conclusions in this Competent Persons Report (CPR) that relate to Mineral Resource and Ore Reserve estimation and classification are provided in accordance with, and conform to the conventions of, the Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition). Dr Sia Khosrowshai reviewed the Mineral Resources for the Toromocho Copper Project. Mr Glenn Turnbull reviewed the Ore Reserves and applied modifying factors. Both Dr Khosrowshahi and Mr Turnbull are current Members of the Australasian Institute of Mining and Metallurgy (The AusIMM) and are competent persons in their respective fields under the JORC 2012 code. Mr Damian Connelly is a Principal Consulting Engineer with over 28 years' experience as a Consultant Metallurgist. Mr Connelly is a current Member of the Australasian Institute of Mining and Metallurgy (The AusIMM) and a competent person in his respective field.

The Mineral Resource and Ore Reserve estimates used in this report are information as at 31st December 2015. Chinalco has not advised Golder of any material change, or event likely to cause material change, to the Mineral Resource and Ore Reserve estimates.

The project commenced ore feed to the Crusher in December 2013 with copper concentrate being produced throughout 2014 and 2015. Tonnage build up within the process plant has been rapid with some 84% of design throughput having been achieved in 2015. The annual production metrics for the process plant for 2014 to 2015 are shown below (Table A).

Table A: Toromocho Project production statistics 2014-2016

	2014	2015	2016 (Estimate)
High Grade Mill Ore (Mt)	19.7	36.1	38.3
Low Grade Mill Ore (Mt)	1.1	0	2.7
Total Mill Ore (Mt)	20.8	36.1	41.0
Head Grade Cu (%)	0.562	0.538	0.604
Head Grade Ag (g/t)	7.31	6.416	5.416
Copper Recovery (%)	60	83.08	79.86
Recovered Metal (Cu Tonnes)	70,263	161,518	197,754
Concentrate Dry Tonnes	297,698	676,449	833,977
Arsenic Grade in conc. (%)	No Data	1.047	0.865

Although tonnage build up has been relatively satisfactory, the metallurgical recovery in 2016 has been lower than expected primarily because of issues with talc in the ore feed (Table B). The high Arsenic in concentrate has resulted in high penalty costs for treatment and refining costs. The molybdenum circuit has not been commissioned to date but is understood to be well advanced.

During 2016 the process plant has to date not achieved the expected recoveries and has been below expected throughput levels; it is however expected that the two are inter-related.

It would appear that the estimated recovery for 2016 might also be optimistic as average recoveries during 2016 for the first five months only equated to 72.96%. The lower throughputs noted by the process plant

staff in terms of SAG mill performance appears to be directly related to the proportion of potassic material in the feed.

The potassic ore requires greater comminution effort in the initial phase (drilling and blasting) in order to ensure that the throughput at the SAG mill stage is not compromised. When blasting in the potassic material it is important to consider the overall total cost of operation to ensure that for example lower throughput does not result from a cost reduction in say drilling and blasting.

Table B: 2016 Actual performance January to May

Production 2016		Jan	Feb	March	April	May	YTD
Tons milled	DMT (kt)	2 770	2 230	2 401	2 973	3 064	13 439
Head Grade – Cu	%	0.61	0.51	0.58	0.60	0.64	0.59
Cu Recovery in Cu concentrate	%	73.63	77.03	73.08	72.22	70.61	72.96
Head Grade – Ag	g/t	6.14	6.90	5.98	7.22	7.13	6.70
Ag Recovery in Cu concentrate	%	59.71	69.40	64.97	58.96	55.59	61.03
Head Grade – Mo	%	0.01	0.01	0.01	0.01	0.01	0.01
Head Grade – Zn	%	0.09	0.10	0.11	0.09	0.14	0.11
Head Grade – As	%	0.03	0.04	0.03	0.04	0.03	0.03
Copper Concentrate Produced	DMT	55 693	40 232	52 658	68 881	72 382	289 847
Grade – Cu	%	22.26	21.82	19.43	18.55	19.15	20.03
Grade – Zn	%	3.23	4.47	3.65	2.79	3.83	3.53
Grade – As	%	0.82	1.20	0.83	0.92	0.65	0.86
Copper content	DMT	12 398	8 779	10 231	12 778	13 864	58 049

Of primary concern is the continuing issue with lower than expected recovery of copper. The copper will account for some 80% of the recoverable value from the project over the life of the mine and thus maximising the metallurgical recovery from the copper is vitally important. Ramp-up and commissioning has also coincided with a decline in copper prices that has resulted in significant financial pressure on the project. Total capital cost to date for the project has amounted to some $4B including finance charges.

In reviewing the Toromocho Project, Golder believes that the overall project remains technically sound, but has reservations about the ability of the project to deliver a satisfactory return on investment without the Expansion Option case. Taking the Toromocho Project as it stands today with a mill design throughput of some 42.8 Mtpa in all but the most optimistic pricing scenarios fails to meet a satisfactory level of financial return. Whilst the expanded case option, targeting some 62.0 Mtpa appears to be more financially attractive, it would seem unwise to commit to any further expansion currently until a full understanding of the talc recovery issues and future mitigation of arsenic levels in concentrate are better understood.

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TABLES

FIGURES

1.0 LIMITATIONS

This Report has been prepared for Chinalco for the Toromocho Project by Golder Associates Pty Ltd (Golder) based on assumptions as identified throughout the text and upon information and data supplied by others.

The Report is to be read in the context of the methodology, procedures and techniques used, Golder's assumptions, and the circumstances and constraints under which the Report was written. The Report is to be read as a whole, and sections or parts thereof should therefore not be read or relied upon out of context.

Golder has, in preparing the Report, followed methodology and procedures, and exercised due care consistent with the intended level of accuracy, using its professional judgment and reasonable care. However, no warranty should be implied as to the accuracy of estimates or other values and all estimates and other values are only valid as at the date of the Report and will vary thereafter.

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This disclaimer must accompany every copy of this Report, which is an integral document and must be read in its entirety.

2.0 INTRODUCTION

Golder Associates ("Golder") was commissioned by Chinalco Mining Corporation International (Chinalco) to prepare a Competent Persons Report to assist Chinalco in its Independent Technical Review of the principal assets of Minera Chinalco Perú (MCP). This report has focussed solely on the technical aspects of the Toromocho Mine and Processing Plant located in in the Peruvian Andes approximately 140 km East of Lima (Source: Google Maps

Figure 1).

In August 2007 Chinalco acquired all the shares of Peru Copper Inc., owner of Minera Peru Copper, which is now Minera Chinalco Peru S.A, and on 5 May of the following year (2008) signed the transfer of concessions and mining assets contract of the Toromocho Project.

Source: Google Maps

Figure 1: Toromocho Copper project in Peru

The information, observations, and conclusions in this Competent Persons Report (CPR) that relate to Mineral Resource and Ore Reserve estimation and classification are provided in accordance with, and conform to the conventions of, the Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition). Dr Sia Khosrowshai reviewed the Mineral Resources for the Toromocho Copper Project. Mr Glenn Turnbull reviewed the Ore Reserves and applied modifying factors. Both Dr Khosrowshahi and Mr Turnbull are current Members of the Australasian Institute of Mining and Metallurgy (The AusIMM) and are competent persons in their respective fields under the JORC 2012 code.

The Mineral Resource and Ore Reserve estimates used in this report are information as at 31st December 2015. Chinalco has not advised Golder of any material change, or event likely to cause material change, to the Mineral Resource and Ore Reserve estimates.

2.1 Site visit

Golder employee Mr Glenn Turnbull (Principal Mining Engineer) made a site visit to the Toromocho project area from 26 to 27 July 2016.

Golder was given a detailed tour of the site by Mr Victor Astete including the mining operations, geological core shed, process plant facilities, and tailings dam.

During the site visit, Golder gathered and assessed the nature of information required to evaluate the appropriateness of the data, methodology, parameters, assumptions, approach used to for production and treatment purposes, and approach and methods used to estimate the Mineral Resources and Mineral Reserves.

The site visit observations are provided throughout this document. Most of the site visit observations in this document refer to current activities as opposed to the historical ones.

2.2 Conventions

Conclusions are presented throughout the text in ***bold italic font***.

Currency

All costs and prices are in US dollars (USD) unless otherwise specified.

Grid references

All grids are in local grid.

Block dimensions

Three-dimensional entities in this report are described in the format *x* by *y* by *z*, where *x* refers to the Easting, *y* refers to the Northing and *z* refers to the RL or vertical distance in metres based on elevations above mean sea level.

2.3 History

The earliest recorded information on the Toromocho deposit dates from 1928, when a low-grade ore zone was identified along the edge of the San Francisco peak monzonite stock and several other low-grade blocks were discovered. Further exploration was carried out by Cerro de Pasco until 1973-74, when the property was nationalised by the Peruvian government and transferred to Centromin.

During the 1970's, Centromin continued exploration, carried out a drilling program, and started small-scale exploitation of the Toromocho deposit in 1974. In the 1990's Centromin began the process of privatisation of all its assets. Exploitation by Centromin ceased in October 1997.

In 1999, J. David Lowell, one of the Founders of Peru Copper, began studying potential mineable deposits of copper ore reserves in Latin America. Through this process, in 2002, Mr Lowell determined that Centromin's Toromocho deposit had potential as a large open pitable operation. In April 2003, Peru Copper Syndicate was formed for the purpose of making a bid for the Toromocho mineral concessions.

Table 1 provides summary of the exploration history at Toromocho copper.

Table 1: Exploration history at Toromocho Copper

Year	Description
1928	A low-grade copper zone was identified along the edge of the San Francisco peak granodiorite stock.
1945-1955	Cerro de Pasco Corporation carried out an exploration program to evaluate the copper mineralisation.
1963	The area was further explored when Cerro de Pasco geologists confirmed that Toromocho had economic potential.
1966-1976	Extensive exploration continued with four campaigns conducted by the Cerro de Pasco Corporation and Centromin. These campaigns completed 143 drill holes for 42 394 m.
1974	Centromin started small-scale open pit exploitation of the Toromocho deposit. Total production was about 1.4 Mt at 1.0% Cu and 25 g Ag/t between 1974 until October 1997 when Centromin ceased exploitation.
1980	Centromin hired Kaiser Engineers International, Inc., and Consultores Minero Metalúrgicos S.A. to prepare a detailed feasibility study to confirm reserve estimates and determine key operational and economic criteria.
2003	The property was privatised and awarded to Chinalco Peru Copper (MC). Five of the Centromin holes were "twinned" by MPCopper, and the existence of a large copper deposit was confirmed.
2003-2007	MC had completed a total of about 271 holes totalling 109 879 m of infill, surface exploration, and underground diamond drilling. Metallurgical studies, mine planning, rock mechanic studies, geological modelling and resource estimation, hydrology, environmental, and community relations were begun during 2006 and 2007. Exploration drilling of the south-east and north-east extensions of the main ore body also began in 2007.
2011	MCPC drilled additional 10 diamond holes for total of 4298 m.

Year	Description
2015	MCPC conducted additional 45 diamond drilling in the area to increase the confidence and for verification of the historical data

MC has the right of indefinite exploitation (mining) concessions for the Toromocho deposit. Exploitation concessions allow the concession holder to mine the area indefinitely contingent upon the annual payment of corresponding license fees.

Concessions and surface rights for the general Toromocho area are illustrated on Figure 2. The Toromocho mineral concessions are held as an option agreement between MPCopper and Centromin.

Two larger companies holding property and mineral concessions adjacent to the Toromocho deposit and currently operating small underground mines are Pan American Silver and Austria Duvaz. Smaller companies holding concessions adjacent to Toromocho are Centenario, Pomatarea, Volcan, and Sacracancha.

MPCopper signed an agreement with Austria Duvaz, which granted the company an exclusive option to acquire their Morococha mining concessions, surface areas and assets of Austria Duvaz. In accordance with the share purchase agreement signed with Austria Duvaz, MPCopper gained 100% control of Minera Centenario and its stake in 30 concessions located in the Morococha mining district.

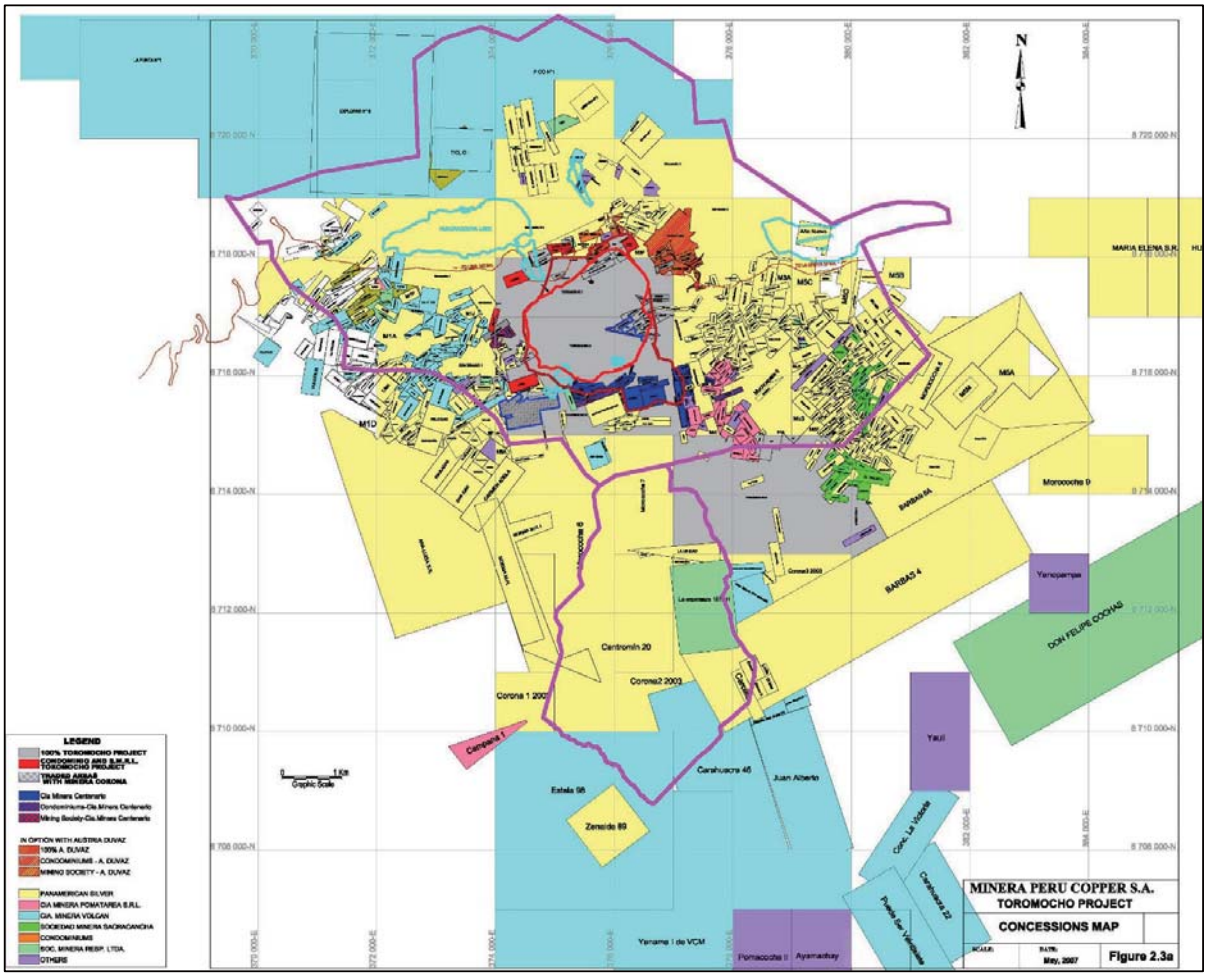


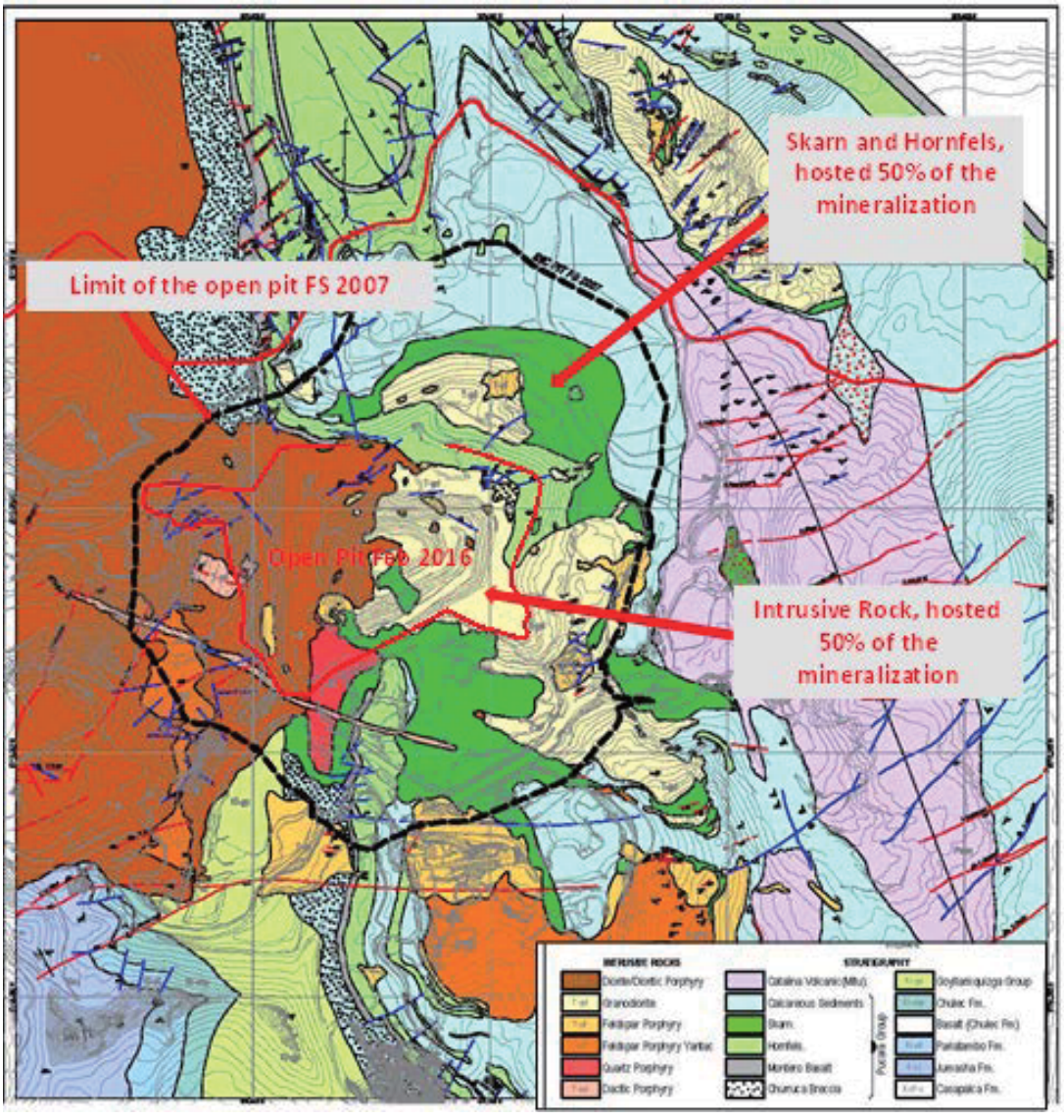
Figure 2: Tenure map

3.0 GEOLOGY AND RESOURCES

3.1 Geological setting

The 5 by 6 km Morococha district occupies a Tertiary intrusive centre with associated skarn, hornfels, and breccia mineralisation. It is developed in Jurassic Pucara calcareous sediments on the flat dipping (45-50°) western flank of a regional anticline located between a large, older, pre-mineral andesitic ("diorite") intrusive to the west, and Permian-Triassic (Catalina) volcanics to the east along the axis of the regional anticline.

The Toromocho ore body lies within the central copper zone of the well-zoned Cu/Pb-Zn/Pb-Ag polymetallic Morococha district. The ore body forms the center of a skarn and breccia associated with 7 million year old mineralisation, alteration, and granodiorite and porphyry intrusions.



(Source: TOROMOCHO GEOLOGY 2016_V01.pptx)

Figure 3: Geology of Toromocho and surrounding area

3.2 Mine geology

The Toromocho ore body outcrops on the surface. The copper ore body extends downwards to a flat "bottom" 500 to 600 m below the surface. The highest grade part of the ore body lies within a 1.0 km × 2.0 km body of brecciated skarn, surrounding a cupola-like 7 million year old feldspar porphyry and granodiorite intrusive, and underlies on the west side, the older regional andesitic/dioritic intrusive exposed on the surface.

The primary ore body is over-printed by late-stage, pyritic primary mineralisation, clay and serpentine alteration, and supergene chalcocite and covellite enrichment. Spotty and structurally controlled, moderate- to weak, chalcocite enrichment extends from the surface and from the top of dominant sulphides, downward to the bottom of enrichment, 200 to 400 m below the original topographic surface. A sulphate zone containing anhydrite disseminations and veinlets occur several hundred meters below the bottom of enrichment. A significant portion of the original leached capping above the enriched zone was probably stripped by Pleistocene glaciation. The upper half of the enriched zone in many places contains more than 50% leachable copper by sequential analyses. The lower half of the enrichment blanket above the bottom of enrichment and the top of the primary zone is generally only weakly enriched and contains from 15 to 50% leachable copper by sequential analysis.

3.2.1 Lithology

The main lithologic units that outcrop in the Morococha district are of both sedimentary and igneous nature, and their ages range from the Permian Period to the Tertiary Period.

The oldest rocks in the district belong to the Catalina Volcanics formation of the Mitu Group (Permian) and consist of lava flows of andesite to rhyolite composition, which occur with dacites, volcanic breccias, agglomerates, and tuffs located in the upper Mitu section.

Limestones of the Pucará Group (Jurassic) were deposited conformably on the Mitu (Catalina) disconformity (Proffett, 2005). In general, the Pucará sediments are comprised of light gray-to-white limestones, dolomitic limestone with interstratifications of shales, cherts, and sandstones; two lava flows are intercalated with the limestone, the Montero Basalt and the Sacracancha Trachyte. The Montero Basalt acts as a marker horizon and is near the top of the Pucará Group.

The massive anhydrite and gypsum at the bottom of the Pucará Limestone is comprised of layers of anhydrite, gypsum, shale, and limestone, lying over the volcanic rocks of the Catalina Formation in an apparent angular unconformity, and along the contacts of the feldspar porphyry, and granodiorite intrusions.

3.2.1.1 Tertiary intrusives

The wall rocks of the Toromocho deposit include several intrusive phases:

- **Anticona "Diorita"**: Exposed in the west and northwest of the Morococha district. It forms a flat bottomed "cap-rock" in the western part of the district where it overlies well-mineralised skarn.
- **Granodiorite:** The Morococha Granodiorite is an important host rock for mineralisation. It expands at depth and underlies, with a relatively flat upper contact, most of the Toromocho ore body.
- **Feldspar Porphyry**: The other important intrusive host rock for the mineralisation, and is possibly the most closely associated in time with the hydrothermal solutions that altered and mineralised the Toromocho ore body. It intrudes the diorite and granodiorite, and is intruded by the quartz porphyry.
- **Quartz Porphyry**: A younger intrusive found south-west of the main deposit.
- **Dacite Porphyry:** A single 20-30 m wide dyke of felsic porphyry containing numerous quartz eyes and quartz-feldspar aplitic groundmass trends NW-SE and crosses the entire south-western portion of the Morococha district. This dyke is a late feature and apparently post-dates all of the other Tertiary intrusions, and possibly most of the copper mineralisation.

3.2.1.2 Hornfels

Approximately one-half of the host rocks of the Toromocho ore body are the skarn and hornfel rocks.

- **Diopside Hornfels**: The calcareous sediments, which lack important argillic components, are commonly converted into diopside-quartz hornfels. Diopside hornfels and diopside-calcite rocks also appear to have developed from more pure carbonate layers, particularly in those having a significant content of original dolomite.

  Diopside-hornfels units consist of variable proportions of minerals, such as quartz, tremolite, plagioclase, epidote, and diopside, and commonly occur in units of calcareous shales. The mineralisation in these types of rocks is usually weak and limited to sparse pyrite-chalcopyrite veinlets and weak sulphide disseminations.

  The total percentage of sulphides in hornfels ranges from 1 to 2%; with sub equal Py/Cpy ratios. Copper values fluctuate between 0.3% and 0.6% in the secondarily enriched zone and from 0.1 to 0.3% in the primary zone.

- **Wollastonite Hornfels:** White jasperoidal hornfels are present in the northern part of the district and are composed mainly of wollastonite and quartz, most likely derived from calcareous sandstones.

- **Biotite Hornfels:** In the central zone, the biotite hornfels have a microgranoblastic texture composed of variable aggregates of plagioclase, potassium feldspar, quartz and biotite. Overprinting alteration to sericite and/or chlorite may be present. The sulphides are disseminated, replacing biotite altered to chlorite. Small type “B” quartz veins with Py-molybdenite may also be present. The average total content of sulphides is about 1 percent in volume and the Py/Cpy ratio varies from 3:1 to sub-equal. Copper content ranges from 0.05 to 0.15% and up to 0.06% Mo.

3.2.1.3 Skarns

The main types of skarn within the Toromocho ore body are tremolite/actinolite skarn, massive magnetite skarn, “serpentine” altered skarn, and endoskarns at the contacts with intrusives.

- **Tremolite Actinolite Skarn:** The main minerals in the early skarn rocks are garnet tremolite and actinolite. Veinlets of quartz, chalcopyrite – pyrite, or chalcopyrite without or low in pyrite with actinolite halos, are common and apparently contemporaneous with potassic biotite potassium feldspar alteration in the intrusives.

  Hydrous calcium and magnesium silicates, sulphides, and carbonates replace the anhydrous calcium and magnesium silicates predominant in hornfels by later skarn alteration.

  Mineralised structures in the skarns include small, discontinuous, and shallow veins, and rich sulphide mantos following the stratification. In general, these orebodies are small, irregular, clustered, and a very irregular local replacement of the skarn host rocks.

  The massive sulphide mineralisation in the veins and mantos structures are usually Py-Cpy-magnetite; in some cases, accompanied by marmatitegalena-pyrrhotite. Secondary chalcocite, when present, enhances the grade of all of these ores.

- **Magnetite Skarns:** Magnetite rich skarns occur especially in serpentised skarn derived from original dolomitic strata. A variety of high magnesium minerals are present in the serpentised skarn in variable proportions including: talc, antigorite, phlogopite, lizardite, and chlorite. Locally, forsterite olivine also has been identified.

- **Endoskarn:** Some of the skarn formed in and near the contacts of intrusives is an endoskarn. It preferentially develops in granodiorite and is characterized by garnets, pyroxenes, and tremolite and actinolite replacing with complete destruction of the igneous texture of the intrusives. Total sulphides range from 1 to 5%, with copper grades often above 1% Cu.

3.2.2 Structure and mineralisation

In the Morococha District the major structure is Morococha anticline, an asymmetric fold with the axis of the anticline running at a strike of N20°W south of the district, and N40°W to the north of the district, plunging between 10 and 15° to the north. There are two secondary anticlines along the east and west flanks of the Morococha anticline, respectively (Figure 4).

At least two important reverse faults are noted parallel to the general strike of the sedimentary rocks. These faults are the west-dipping "Potosi" fault on the east flank of the north-west portion of the anticline; and the east-dipping "Gertrudis" fault on the west flank (Figures 3.4a, 3.4b and 3.5c). The dip of the two reverse faults varies between 45 and 70° and is opposed.

A number of other faulting shears of interest including the Huachamachay and the San Gerardo Faults in the central eastern part of the ore district and the San Antonio 2 and 8 Vein faults.

There are several relatively small mineralised polymict and monomict hydrothermal breccias in the Pucará sediments. These breccias are generally located along reverse fault zones or along their projections, as well as along the disconformity between the limestone and the Catalina Volcanics, and along the contacts of the Morococha intrusives or Montero basalt.

These breccias appear to be relatively late and pyritic.

Mineralisation is split approximately equally between two main lithology groups of Tertiary intrusives and Meta-sediments.

The most abundant primary ore minerals in the deposit are chalcopyrite, tetrahedrite, enargite, sphalerite and galena and occur in three main forms.

- **Veins:** The strongest mineralised veins were emplaced along tension fractures. The shear faults, with abundant gangue were only weakly mineralised, making small ore shoots. Tension fractures and veins are well developed in the intrusive rocks. These are relatively continuous in length and depth, with generally uniform mineralisation. The veins in skarns and hornfels are less continuous and generally do not extend to depth. These are irregular in thickness and grade, and tend to form horse-tail structures along contacts with granodiorite and feldspar porphyry. The veins have been formed chiefly by fracture filling, but in skarn host rocks formed by both filling and irregular replacements of the skarn wall rocks.

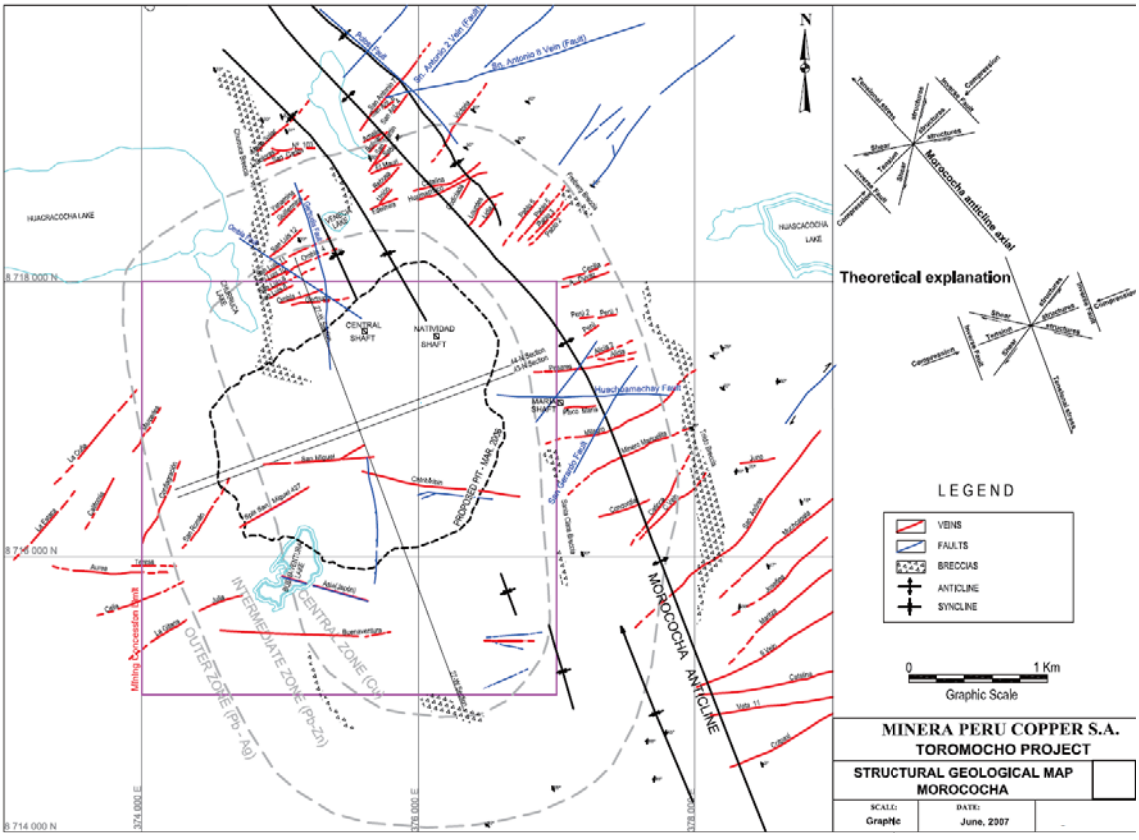
- **Mantos (massive sulphide) and Clustered Orebodies:** In general, the mantos are irregular and both follow and cross-cut the stratification. The clustered orebodies are small, very irregular, and located chiefly along the hanging wall of major veins. These orebodies are the horizontal extensions of the veins along the stratification, with local irregular replacements of the adjacent wall rocks.

- **Contact Orebodies:** These orebodies are irregular and have been formed by replacement of the skarn. The mineralisation is mainly finely disseminated but also massive, and in coarse pods. The adjacent granodiorite and feldspar porphyry can also contain finely-disseminated mineralisation.

3.2.3 Alteration

Several overall classes of mineralisation alternations are noted as follows:

- **Early low pyrite potassic alteration:** The bulk of the original primary copper mineralisation is in the form of disseminations and stockworks of chalcopyrite, low or lacking in pyrite, and often deposited with abundant magnetite. "A" type quartz veins are scarce in the Toromocho intrusives. "B" type quartz veins with selvages and sutures containing molybdenite are more common. Open cavities in the matrix of the intrusives and within the "B" veins are very common and represent the sites of original anhydrite, leached by later supergene solutions.



(Source: Figure 3.5c of Feasibility document 2007)

Figure 4: Structural geology map at Toromocho Copper

- **Early tremolite/actinolite skarn alterations:** The limestone and dolomites of the Pucará Formation were converted to anhydrous quartz and anhydrite-bearing wollastonite and diopside hornfels, and the shales to biotite/potassium feldspar hornfels by the intrusion of the Upper Tertiary San Francisco stock.

  Little to no copper was probably deposited during the time of hornfels development. Chalcopyrite mineralisation in the hornfels is mainly in the form of relatively-sparse chalcopyrite veinlets with dark green actinolite halos. There is indication of a close timing of potassic and actinolite alteration. Close spaced stockworks and pervasive replacement of diopsidic hornfels by tremolite/actinolite produced skarns containing relatively high-grade chalcopyrite mineralisation.

- **Late pyritc overprinting:** Chalcopyrite-bearing biotitic EDM-type veinlets in intrusives are systematically cut by pyritic “D” type veinlets with sericitic halos. The quartz porphyry intrusive is pervasively sericitized and contains pyritic mineralisation. Chalcopyrite/actinolite veinlets in skarns and hornfels are also consistently cut by later pyritic veinlets with soft “clay-like” halos of chloritic and serpentine-type alterations.

- **Serpentine altered skarn:** About one half of the tremolite/actinolite skarn contains variable amounts of soft clay-like “serpentine altered skarn”. The serpentine alteration contains variable combinations of high magnesium minerals such as talc, clinochlore, phlogopite, antigorite, and lizardite, and probably is a retrograde-type of alteration associated with the pyritic overprinting mentioned above, and in some skarns, magnetite formation. The occurrence of talc in the “serpentine–altered” skarn is important metallurgically. It readily floats with molybdenite and is more difficult to depress than the other

"serpentine" minerals. Clinochlore and phlogopite appear to be the most consistently associated with talc of the serpentine minerals.

- **Anhydrite:** A large percentage of the total sulphur originally deposited in the Toromocho primary sulphide ore body was deposited in the form of anhydrite. A deep "sulphate zone" has been identified. Anhydrite alteration and mineralisation spanned the evolution of the primary ore body from early potassic alteration and skarn formation to late serpentine alteration of skarn and pyritic overprinting, and to late vein and manto formation. The "top of sulphates" is formed by the hydration and solution of anhydrite and gypsum by circulating groundwater.

  Ground conditions below the "top of sulphates" differ significantly from those above the "top of sulphates". In the sulphate zone, RQD values are consistently higher (generally above 90) in both the intrusives and skarns. All rocks within the sulphate zone are impermeable and porosity is zero, due to impregnation by anhydrite disseminations and sealed anhydrite veinlets and fractures.

  Therefore, the top of sulphates also will control mine water by acting as an impermeable barrier in underground workings and/or on pit benches.

3.2.4 Enrichment and metal zoning

Several types of enrichment and metal zoning are noted as follows:

- **Copper enrichment:** Supergene leaching and enrichment processes have developed a chalcocite enrichment zone at Toromocho which extends irregularly to 400 m below the surface. Compared to other secondarily enriched porphyry copper deposits, such as El Salvador, Escondida, and Chuquicamata in Chile, chalcocite enrichment at Toromocho is relatively weak, spotty, and discontinuous, except locally and where concentrated along structures.

- **Silver Enrichment:** The silver content of the ore may be secondarily enriched from about 5 g/t in the primary zone to about 6 to 7 g/t in the enriched zone. At least some of the silver in the enriched zone could be present as acanthite (argentite), which is difficult to distinguish from chalcocite during logging. However, the higher silver values in the upper parts of the enriched zone could also be due to hypogene vertical zoning of primary silver minerals, such as tetrahedrite and tennantite.

- **Arsenic:** The highest arsenic values are concentrated in structural zones within the strongly enriched intrusives. Arsenic values in the primary zone are only about 130 ppm. Intermediate values of 200 to 500 ppm are present in the weakly-enriched zone in between. It is likely, however, that these arsenic patterns reflect mainly hypogene zoning of late enargite/tennantite mineralisation upwards as previously described.

- **MgO and Fluorine:** MgO is considered as a problematic element in the concentrate which not only attracts heavy penalty fines but also depending on the form in which it occurs may adversely impact the copper recovery. Material with which the MgO has association is talc with up to 32% MgO, phlogopite with up to 28% MgO and 4.5% fluorine and chlorites that may contain up to 8.3% MgO.

3.2.5 Summary

Geology of the Toromocho Deposit is complex and with a high degree of variability. Copper is in primary sulphide and skarn material. Skarn represents 50% of the material that contain copper mineralisation. High percentage of fluorine and MgO has been noted with skarn ores as alterations in form of talc, phlogopite and chlorites that are considered as problematic at the time of floatation in both reducing copper recovery and causing high concentration of MgO and fluorine in the concentrate that attracts undesirable heavy penalties.

3.3 Drilling data

The information contained in this section is sourced from IMC (2007) and Golder (2016).

3.3.1 Drilling

Overview

Drilling has occurred at the Toromocho deposit since 1966 with the most recent drilling completed in 2015. Drilling has been by three primary organisations – Cerro de Pasco Corporation (CdP) and Centromin (1966 to 1976), Peru Copper Incorporated (PCI) (2003 to 2012), and Chinalco (2015) (Table 2).

All drilling to date is by diamond drilling techniques and of the total 496 drill holes, eight have no information. The 2016 Resource Model used approximately 154 km of drill hole data that have assays for total copper (TCu). Drill holes are distributed on a 60 m × 60 m semi regular grid (Figure 5).

The CdP and PCI holes are located on an exploration drill grid that is rotated about 23° counter clockwise from UTM with collar locations recorded on this local grid system until about 2007. Since then all collar coordinates have been surveyed in the PSAD56/UTM Zone 18S coordinate system and pre-2007 drillhole locations converted to the same grid. The original exploration grid rotation is evident on the drill hole location map (Figure 5).

Table 2: Toromocho drilling campaigns

Company	Year	No. Drill holes		Metres
CdP/Centromin	1966	4	125	1 415.77
	1967	24		8 542.00
	1970	24		4 850.53
	1971	14		2 394.69
	1974	20		6 632.87
	1975	38		14 577.22
	1976	1		391.97
Peru Copper Inc.	2003	5	318	1 879.80
	2004	81		39 485.30
	2005	107		49 352.95
	2006	29		6 659.90
	2007	69		22 715.90
	2008	13		5 289.25
	2011	12		5 004.25
	2012	2		615.80
Chinalco	2015	45	45	10 808.45
No information		8	8	1 295.00
Total			**496**	**181 911.65**

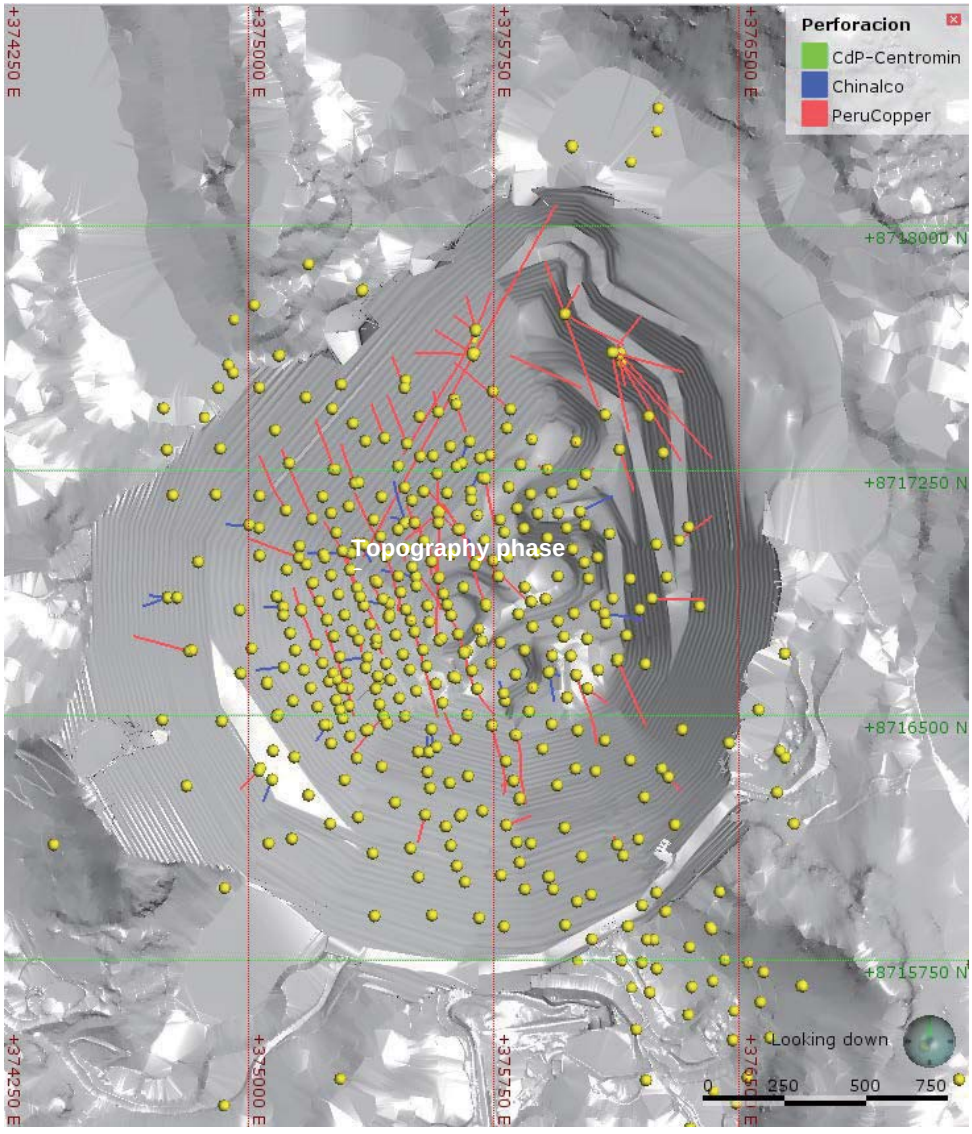


Figure 5: Toromocho drill hole locations

CdP and Centromin drilling

The CdP holes are generally on a 100-120 m spaced drill grid with more infill drilling in the central area of the deposit. Historic information available (IMC, 2007) indicates that all of the CdP holes are diamond drill holes of various diameters from BX to NX (42-55 mm diameter). In 2007, PCI undertook a comprehensive review of the CdP drilling data and results are discussed in Section 3.4.

All drillholes are vertical and Golder has no knowledge whether CdP undertook downhole surveying. There is no record of the method for surveying collar locations.

Given the amount of verification drilling in future drilling campaigns, Golder does not consider these items to have a significant effect on the estimation of Mineral Resources.

PCI drilling

The PCI holes drilled during 2003 through 2007 were generally HQ core (63.5 mm diameter), recovered with face discharge bits and split inner barrels. Every effort was made to maximise core recovery. A few PCI holes are PQ diameter for metallurgical sample purposes.

Golder has no knowledge of the methods PCI used for downhole surveying. Survey of collar locations is likely similar to Chinalco procedures, but Golder has not sighted documentation about the specific equipment or survey procedures.

Golder does not consider these items to have a significant effect on the estimation of Mineral Resources for Toromocho.

Chinalco drilling

In 2015 Chinalco completed an infill drilling campaign consisting of 45 Diamond Drill holes. All drill holes are HQ diameter and were drilled with a LF-90D rig.

Survey of drill hole collar coordinates was with a high-resolution GPS system brand TOPCOM series GR5 All collars are surveyed in the PSAD56 system.

The drill hole deviation survey was measured using a gyroscope operated by Geotecnia Perú. Measurements are every 6 m downhole.

3.3.2 Core recovery and core logging

CdP and Centromin

PCI personnel obtained paper logs for 130 of the CdP holes from the Centromin archives. Those logs included about 27 000 copper and 19 00 molybdenum assay results out of nearly 28 000 intervals.

Sample weight information was also available for the 27 000 intervals. Core recovery was variable in the CdP holes with average core recoveries reported as 80%.

Split core is still available for many of the CdP holes and PCI personnel were able to relog 97 holes with the procedures currently used by PCI and Chinalco.

PCI

PCI diamond drill holes are logged for geotechnical and geological information prior to core splitting. A summary log is first developed for the drill hole with basic contact information of rock types. Later, a detailed geological log was completed for the drill holes with rock type, alteration, and observed sulphide mineralogy.

Chinalco

Logging processes and codes are the same as those used by PCI.

Drill hole recovery was calculated by summing the length of individual core pieces (DDH) and expressing that as a percentage of the total interval. For any given lithological unit, recoveries average over 90%, with the exception of drilling in unconsolidated gravels. There are no significant variations on recovery between geological units.

3.3.3 Sampling

CdP and Centromin

The precise procedures for splitting and sampling of the CdP holes are not known. PCI re-assayed many old 10 m pulp composites as a check on the old methods and results are discussed in Section 3.4.

Sample lengths for the CdP holes generally average round 1.30 m in length although they vary significantly. Many shorter intervals are apparent in the CdP holes. PCI believed these were likely a function of drilling problems rather than an effort to match geological contacts (IMC, 2007). Core was split with half the core going to assay and the other half retained in the core tray.

PCI and Chinalco

PCI and Chinalco have similar procedures for sampling core ((from IMC, 2007)

Figure 6).

The initially sampling is been completed under the control of company personnel. The core is split by diamond sawing at the core shed in Tuctu located about 3 km from Toromocho. The core handling procedures at site are generally as follows:

- HQ and PQ Core is boxed in wooden boxes at the drill rig
- The core is transported to the core logging facility at Tuctu
- The core is washed and photographed
- Geotechnical logging is completed on whole core
- Geological logging is completed on the whole core
- The core is dry sawn lengthwise
- Half core is retained at the core shed at Tuctu.
- Half core is sent to CIMM Peru S.A. in Lima for sample preparation and assay
- The Split core is transported to the sample prep lab by company personnel.

Sample interval lengths for the PCI and Chinalco holes are generally 1.50 to 1.55 m in length corresponding to a 5 foot drill run. No effort is made to break the sample at geological contacts.

3.3.4 Sample preparation

CdP and Centromin

The current understanding of the CdP procedures is as follows:

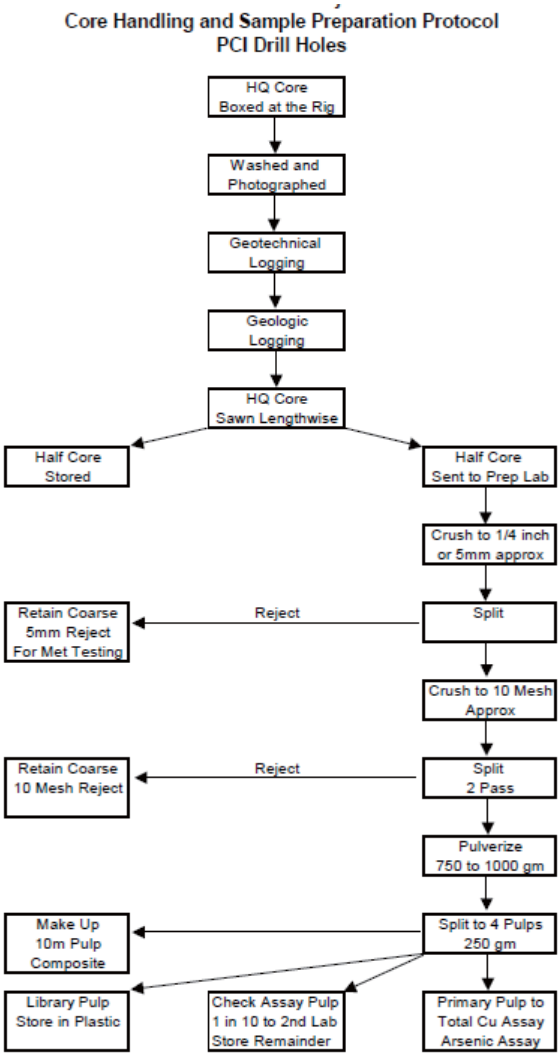
- CdP holes were split with half the core going to assay and the other half retained in the core tray.
- The split core was reduced to pulps before assaying for total copper. Occasional assays for zinc, molybdenum, and “oxide copper” were also recorded.
- Pulps of representative weight were combined to form a single pulp representing a 10 m bench interval. There is no documentation about the procedures used to make up the pulp weight composites.

PCI and Chinalco

- The sample preparation and handling of the PCI and Chinalco holes have been under the control of company personnel or their contractor lab CIMM Peru S.A. (CIMM) in Lima.
- The core handling through sawing is completed by company personnel at Tuctu. The half core is then transported to the CIMM sample preparation and assay lab in Lima by company personnel.
- The sample preparation is completed by CIMM under contract to the company ((from IMC, 2007)
- Figure 6).
- During a visit to CIMM facilities, IMC (2007) reported:

  “Proper cleaning and maintenance of sample preparation equipment is practiced by the CIMM lab. IMC personnel have not visited a sample preparation facility that is as clean and well organised as the CIMM facilities.”

- Samples are dried at 100°C for 6 to 8 hours upon arrival at CIMM. They are then crushed in a jaw crusher to nominally 90% passing ¼ inch (5 to 6 mm). Barren quartz is run between samples to clean the jaws of the crusher. The unit is also cleaned with compressed air between samples with an air injection lid on the crusher. A dust collection system is installed to minimised airborne contamination dust. All sizing units at CIMM are installed with a dust collection system.
- The sample is then split with a riffle splitter and the coarse reject saved for future use.
- The other half of the split is roll crushed to 90% passing 10 mesh. A second riffle split is completed in two passes in order to retain about 1000 g for pulverising. Pulverising is completed in one of two units – an LM2 or an LM5 pulveriser. Internal laboratory quality controls screen 2% of pulps to assure that the pulps average 96 to 98% passing 150 mesh.
- The pulps are blended and split into four pulps of about 250 g each. One of the pulps is assayed for copper and arsenic. Composites of the pulps are used to make up a composite pulp that represents a 10 m bench interval. These are developed by precise weighing of each of the component pulps in the same ratio as the component of the drill sample within the 10 m interval. The composites are assayed sequentially for copper and other elements as outlined in Section 3.3.5).
- Coarse rejects at minus 10 mesh and back up pulp samples are stored on site.



(from IMC, 2007)

Figure 6: Toromocho core handling and sample preparation protocol

3.3.5 Assaying

CdP and Centromin

The total copper assay procedure for CdP holes was reportedly the short iodide method, which is understood to be a titration process.

PCI was able to find many of the original CdP pulp 10 m weight composites and sent them for re-assay at the CIMM laboratory in Lima. Results suggest that the CdP holes overestimate copper grade in the less than 0.20% copper range (Section 3.4). The titration chemistry that seeks the copper ion will instead report the Fe++ ion when copper values are low and Fe values are high. This situation certainly occurs in the leach cap environment at Toromocho (IMC, 2007).

PCI and Chinalco

As mentioned above, PCI and Chinalco use the independent commercial laboratory Cimm Peru S.A. located in Lima as the primary lab for assays. Check assays are completed at ALS Chemex.

The CIMM Peru S.A. and ALS Chemex labs have been awarded ISO-9002 certification. The CIMM lab also has accreditation NTP-ISO/IEC 17025 from Indecopi.

Every interval was assayed at CIMM for total copper and additional metals as shown in Table 3.

The total copper assay procedure at CIMM is an aqua regia digestion followed by atomic absorption spectroscopy (AAS) analysis. Acid soluble assays are based on a nominal room temperature sulphuric acid dissolution, followed by AAS. The acid soluble rejects are rinsed, dried, and dissolved in cyanide solution followed by AAS to estimate the amount of chalcocite and other cyanide soluble species.

Samples for AAS at CIMM are prepared in batches or trays holding 50 samples. Within each tray there are: one commercial standard, one blank, and three duplicates. The internal lab QAQC analysis of the standards, blanks, and duplicates are available on request for review.

IPC, up to 2007, also sent one out of every 10 pulps out for external assay at ALS Chemex assay laboratory. IMC (2007) analysed the results of these check assays and found them to be proper confirmation (Section 3.4).

Table 3: Analytical methods for Toromocho

Element	Digestion	Detection Limit	Method
Tcu	Multi-acid digestion	< 0.001%	AAS
Scu	5% H_2SO_4 (0.002-10%)	< 0.002%	AAS
Scu	10% NaCN (0.002-10%)	< 0.002%	AAS
Rcu	Residual Cu (0.001-10%)	< 0.001%	AAS
Ag	Multi-acid digestion	< 0.3 g/t	AAS
Mo	Multi-acid digestion	< 0.0005%	AAS
As	Multi-acid digestion	< 0.001%	AAS
Zn	Multi-acid digestion	< 0.001%	AAS
Fe	Multi-acid digestion – HF, $HClO_4$, HNO_3 y HCl	< 0.01%	AAS
S(t)	Total Sulphides (Based on ASTM E 1915-09 a 2009)	< 0.01%	CIS
Multi-element	Multi-acid digestion – HF, $HClO_4$, HNO_3 y HCl	-	ICP-OES

3.3.6 Conclusions

The drilling, sampling, sample preparation schemes, and analytical techniques are considered appropriate and to industry standard.

3.4 Quality assurance and quality control (QAQC)

Quality Assurance (QA) is the system and set of procedures used to ensure that the sampling and assay results are of high quality. Quality Control (QC) is the data used to prove the results of sample preparation and chemical analysis are adequate.

To monitor the quality of the sample preparation process and geochemical analysis, complete QAQC procedures require the use of:

- Standard Samples, both Certified Reference Material (CRM) and Internal Reference Material (IRM)
- Blank pulp samples
- Cross laboratory check samples
- Duplicate samples from various stages of sample preparation submitted.

Toromocho has undergone a number of drill phases (see Section 3.3) with varying degrees of QAQC measures in place. PCI and Chinalco have both included validation programmes of the historical drilling, sampling, and analytical quality. The results of these are discussed below.

Golder has relied on information presented in IMC (2007) and Golder (2016) for assessment of QAQC data. Information presented in the following sections are sourced from these reports.

3.4.1 QAQC for historical CdP/Centromin drilling (1966 to 1976)

There is no evidence of any QAQC programmes in place for the CdP drilling, sampling, and analyses. Verification of CdP drilling has been primarily by a comprehensive programme by PCI. Information and results presented here are from IMC, 2007.

The testing and validation of CdP drilling by PCI included:

- Comparing calculated CdP drilling 10 m Composites to CdP drilling weighted assays to establish the validity of the CdP pulp weight compositing process.
- Comparing CdP Pulp Weight Assays to re-assays by CIMM of CdP Pulp Weight Composites to establish the validity of CdP Weight Assays.
- A nearest neighbour (NN) Comparison of CdP vs PCI Drilling.

3.4.1.1 Standard samples

No evidence of the use of standard samples. Assay accuracy was checked through the use of duplicate pulp analyses by PCI (Section 3.4.1.4).

3.4.1.2 Blank pulps

No evidence of the use of blank pulps have been recorded for the historical data.

3.4.1.3 Duplicates

No evidence of the use of duplicate samples have been recorded for the historical data.

3.4.1.4 Repeats

No evidence of the use of repeat assays have been recorded for the historical data.

3.4.1.5 10 m bench samples

CdP started the process of preparing pulp weight composites to represent 10 m intervals by combining carefully weighed pulps from individual assay intervals. IMC, 2007 checked the validity of the pulp weight process by calculating 10 m composites based on the individual assays for each sample interval (Figure 7).

IMC 2007 concluded:

- Copper shows a minor bias in that the pulp weight composites have lost some metal (2%) on average.
- Molybdenum shows no bias between methods, but does display more variance in the pulp weight composites than in the calculated assays.
- Results for both metals indicate that there is no bias in the pulp weight process.

CdP Calculated Composites from Assays vs CdP Pulp Weight Composites (Old Holes)							
Metal	Number Composites	Calculated Mean Grd	Pulp Wt Mean Grd	T-Test of Means	Paired T	Binomial Test	KS Distribution Test
Copper %	3797	0.423	0.415	Pass	Fail	Fail	Pass
Moly%	2719	0.012	0.012	Pass	Fail	Fail	Fail

(from IMC, 2007)

Figure 7: Statistical analysis of CdP 10 m pulp weighted assays against calculated composites

3.4.1.6 Laboratory assay checks

PCI personnel were able to find the pulps for about 52% of the pulp weight composites for the CdP drill holes. These pulps were sent to the CIMM laboratory in Lima for re-assay using the same methods applied to the PCI and Chinalco drilling (Section 3.3.5).

IMC, 2007 concluded from an analysis of results (Figure 8):

- Historical CdP silver and arsenic values cannot be repeated with reliability and should not be used for resource estimation. The re-assays by CIMM could however be used when available for silver and arsenic.
- The observed variability in the molybdenum analysis lead IMC to the conclusion that historic molybdenum assays were not reliable and that the CIMM re-assays of the old pulps should be the only use of historic data for molybdenum.
- Zinc and copper results show that the historic information could be used.
- CdP assay information could be used if no other data was available for copper, zinc, and lead. No CdP data could be used for molybdenum, silver, arsenic, or gold.

CdP Pulp Weight Assay vs Cimm Reassay of Old Pulp Weight Composites							
Metal	Number Composites	Original Mean Grd	Cimm Mean Grd	T-Test of Means	Paired T	Binomial Test	KS Distribution Test
Copper %	2012	0.377	0.382	Pass	Pass	Pass	Pass
Moly%	1822	0.013	0.012	Pass	Pass	Fail	Fail
Silver gm/t	2012	8.379	6.597	Fail	Fail	Fail	Fail
Arsenic %	1743	0.046	0.026	Fail	Fail	Fail	Fail
Zinc %	2012	0.145	0.143	Pass	Pass	Fail	Fail

(from IMC, 2007)

Figure 8: Statistical analysis of re-assays of CdP 10 m pulp weighted assays

3.4.1.7 Twin hole analysis

IMC, 2007 completed a comparison between closely spaced composites of CdP and PCI holes. The 10 m composites were paired so that CdP composites that were within 10 m of PCI hole composites were compared. The overall purpose was to determine if the CdP samples had any bias relative to nearby PCI holes once assay differences had been evaluated.

After completing a series of statistical tests, IMC, 2007 concluded CdP data could be used with PCI data, but observed some variability between individual paired data.

Nearest Neighbor, PCI Composties vs Old Hole Composites, Best Assay Selection								
Metal	Separation Dist Mtr	Number Composites	PCI Mean Grd	Old Hole Mean Grd	T-Test of Means	Paired T	Binomial Test	KS Distribution Test
Copper %	10	301	0.553	0.545	Pass	Pass	Pass	Pass
Moly%	10	84	0.010	0.009	Pass	Fail	Pass	Pass
Silver gm/t	10	84	5.298	6.054	Pass	Pass	Pass	Fail
Arsenic %	10	84	0.029	0.036	Pass	Pass	Fail	Fail
Zinc %	10	301	0.148	0.043	Pass	Pass	Fail	Fail
Lead %	10	94	0.015	0.023	Pass	Pass	Fail	Fail
Gold gm/t	10	84	0.016	0.015	Pass	Pass	Pass	Fail
Paired Samples below the Leached Surface					95% Confidence Criteria			

(from IMC, 2007)

Figure 9: Statistical analysis of paired CdP and PCI drilling data

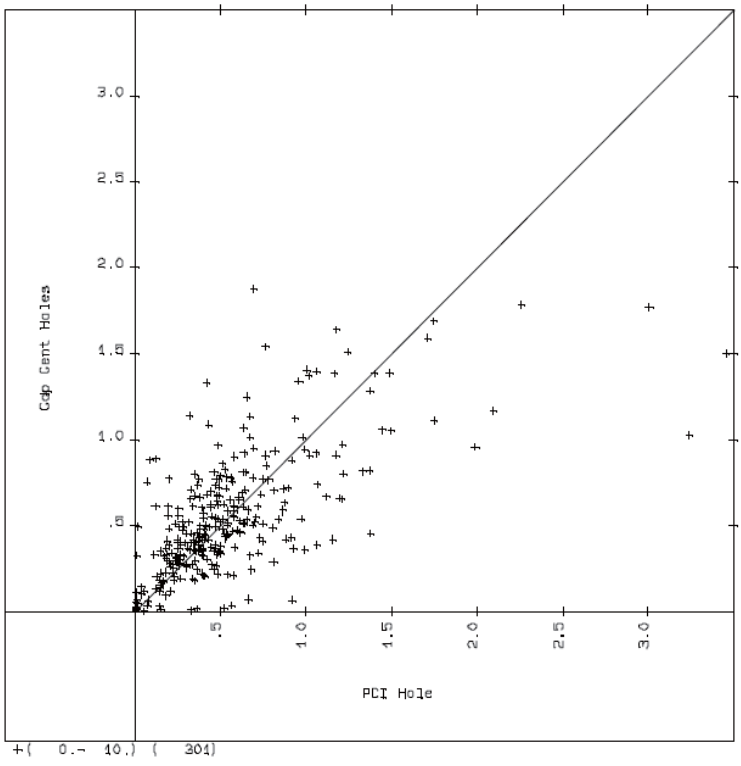


Figure 3-7
Nearest Neighbor Comparison
Total Copper, 10m Spacing
PCI vs Old Hole Composites

PCI Avg Cu = 0.553%
Old Avg Cu = 0.545%

XY Plot

(from IMC, 2007)

Figure 10: Paired TCu data from CdP and PCI drilling

3.4.2 QAQC for PCI drilling (2003 to 2012)

Information and results presented here are from IMC, 2007. The analysis covers drilling undertaken from 2003 to 2007. According to Golder, 2016 PCI did not have the same QAQC protocols for chemical analysis.

Golder undertook repeat assays of approximately 10% of the PCI samples assayed after 2007 (Section 3.4.2.6).

The QAQC by PCI included:

- Comparing CIMM Assays with Chemex and SGS check assays on pulps to establish the validity of CIMM assays
- Comparing calculated 10 m composites with 10 m Pulp Weight Composite assays to establish the validity of the Pulp Weight Composite process.

3.4.2.1 Standard samples

No evidence of the use of standard samples. Assay accuracy was checked through the use of repeat pulp analyses by Chinalco (Section 3.4.2.4).

3.4.2.2 Blank pulps

No evidence of the use of blank pulps have been recorded for PCI data.

3.4.2.3 Duplicates

No evidence of the use of duplicate samples have been recorded for PCI data.

3.4.2.4 Repeats

As stated above, Golder, 2016 states that PCI did not have QAQC protocols for chemical analysis. In order to verify that the data did not have problems of accuracy or precision and is suitable for estimation purposes, a set of pulps representative of those campaigns were selected and sent to CIMM laboratory for chemical analysis with the inclusion of control samples.

From a total of 10 340 pulps available, which represent approximately 80% of the total, 1 296 pulps were selected (approximately 10%) and sent for chemical analysis with standards, pulp blanks and duplicates.

Golder, 2016 reported:

- No issues with QAQC samples (standards and pulp blanks) submitted with batches to CIMM.
- Repeat analyses are within acceptable limits for CuT, Ag, Mo, Zn, and As.

3.4.2.5 10 m bench samples

PCI calculated composites vs PCI pulp weight composites

PCI prepared pulp weight composites to represent 10 m intervals by combining carefully weighed pulps from individual assay intervals. In order to check the validity of the pulp weight process, 10 m composites were calculated by IMC based on the individual assays for each sample interval (IMC, 2007). The results of the statistical hypothesis tests are summarised below:

IMC, 2007 concluded:

- The majority of metals show good correlation between the calculated composites and the pulp weighted composites (Figure 11).
- Molybdenum does not indicate a bias between pulp weight and calculated composites, but it does show increased variability compared with some of the other metals.
- It is appropriate to use the pulp weight composites for molybdenum if there are insufficient interval assays to use the calculated composites. If, however, there are sufficient interval assays to establish a calculated composite, it should get priority.
- Calculated composites should be used whenever possible due to the larger mass of assay support from the calculated composites. Pulp weight composites will be used when there are insufficient interval assays for a calculated composite.

PCI Calculated Composites from Assays vs PCI Pulp Weight Composites							
Metal	Number Composites	Calculated Mean Grd	Pulp Wt Mean Grd	T-Test of Means	Paired T	Binomial Test	KS Distribution Test
Copper %	9318	0.425	0.426	Pass	Pass	Pass	Pass
Moly%	863	0.003	0.003	Pass	Pass	Fail	Fail
Silver gm/t	887	5.465	5.420	Pass	Pass	Fail	Pass
Arsenic %	400	0.024	0.024	Pass	Pass	Pass	Pass
Lead %	615	0.036	0.033	Pass	Pass	Fail	Fail
Zinc%	864	0.237	0.235	Pass	Pass	Fail	Pass

(from IMC, 2007)

Figure 11: Statistical analysis by IMC, 2007 of calculated 10 m composites with pulp weighted composites

3.4.2.6 Laboratory assay checks

PCI routinely sent 1 out of every 10 pulps to outside laboratories for check assay. Most of the check assays were completed at ALS Chemex. However, during April through July 2005, outside checks were completed at the SGS Laboratories.

IMC, 2007 conducted a number of statistical hypothesis tests comparing the check assays versus the original CIMM assays (Figure 12) and concluded:

- Statistical tests and scatter plots for copper, molybdenum, and silver confirm the assay results from CIMM check well with ALS Chemex results.
- Arsenic results indicate that two values reported as 1% from Chemex were originally reported as values of about 0.1 and 0.3% from CIMM. These two outliers are suspicious results from Chemex. The positive T test and Paired-T results for the arsenic do not indicate an arsenic assay issue at CIMM.
- IMC has formed the opinion that the check assays are a reasonable validation of the CIMM assays on the PCI drilling to 2007.

Check Assay Results, Statistical Hypothesis Tests Results at 95% Confidence Level								
Metal	Number of Checks	CIMM Mean Grd	ALS-Chemex Mean Grd	SGS Mean Grd	T-Test of Means	Paired T	Binomial Test	KS Distribution Test
Copper %	5327	0.439	0.431		Pass	Fail	Fail	Pass
	1362	0.344		0.352	Pass	Fail	Fail	Pass
Moly%	649	0.007	0.006		Pass	Fail	Pass	Fail
	147	0.040		0.040	Pass	Pass	Pass	Pass
Silver	1135	8.513	8.446		Pass	Pass	Fail	Fail
	147	4.254		3.757	Pass	Fail	Fail	Fail
Arsenic	297	0.026	0.031		Pass	Pass	Fail	Fail
	147	0.008		0.009	Pass	Fail	Pass	Fail
Lead	966	0.052	0.05		Pass	Fail	Fail	Fail
Zinc	1114	0.245	0.248		Pass	Pass	Fail	Pass

(from IMC, 2007)

Figure 12: Statistical analysis comparing assays from CIMM and Chemex

3.4.2.7 Twin hole analysis

No evidence of the use of twin hole analysis have been recorded for PCI data other than nearest neighbour checks of CdP samples (Section 3.4.1.7).

3.4.3 QAQC for Chinalco drilling (2015)

Information and results presented here are from Golder, 2016. The analysis covers drilling undertaken during 2015.

Chinalco has a comprehensive QAQC protocol. Total QAQC samples submitted with 2015 drill sample batches is shown in Table 4. Acceptance criteria for the QA is:

- Field Duplicates, maximum of 10% of pairs with relative difference greater than 30%.
- Coarse Duplicates, maximum of 10% of pairs with relative difference greater than 20%.
- Pulp Duplicates, maximum of 10% of pairs with relative difference greater than 10%.
- Pulp Blanks, 3 times the detection limit
- Coarse Blanks, 5 times the detection limit
- Standards, results within ±3 standard deviation of the expected value.

Table 4: Quality control sample of 2015 campaign

Control Type	Code	No. Samples
Field Duplicate	FD	201
Coarse Duplicate	CD	201
Pulp Duplicate	PD	201
Coarse Blank	CB	202
Pulp Blank	PB	200
TCu Low Grade Standard	BDCH-01	198
TCu Middle Grade Standard	MDCH-02	141
TCu High Grade Standard	ADCH-03	62

3.4.3.1 Standard samples

Standards were constructed during 2015 by OREOS with material from the Toromocho deposit. Standards were included to determine accuracy of assaying by CIMM for the 2015 drilling programme.

TCu results for standards did not detected samples outside the acceptance criteria (Table 5). An example of the control chart for BDCH-01 is provided in Figure 13.

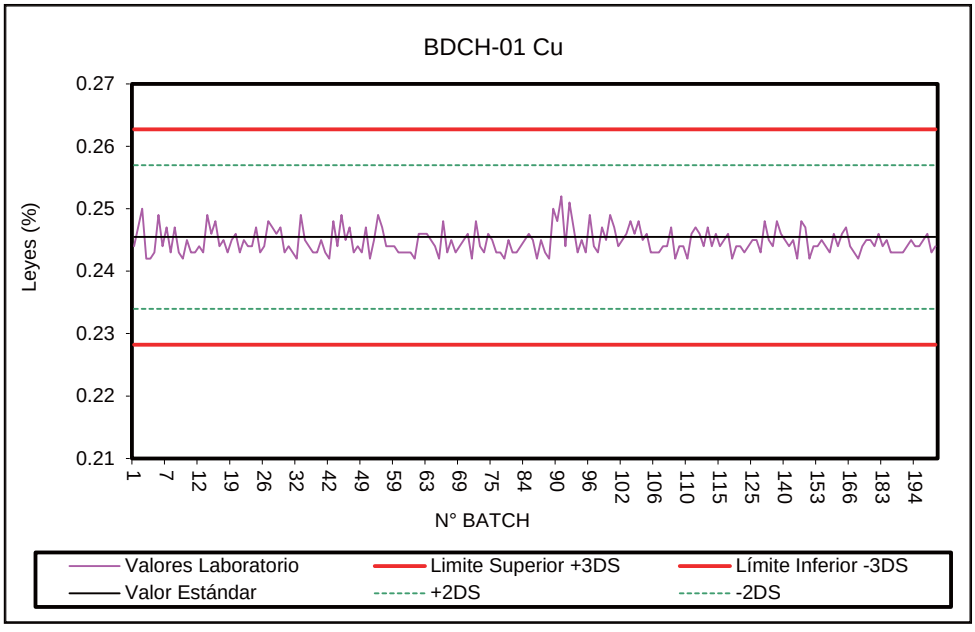
Golder noted that in general results were within acceptance ranges of internal procedures and are considered acceptable.

Table 5: Standard results 2015 drilling campaign

Standard	Element	Expected Value		# of Samples	Assay Value		Analysis			Acceptance Value	
		Ave	Std. Dev.		Ave	Std. Dev.	Bias % [a]	CV %	# Outlier	Min (-3DE)	Max (+3DE)
BDCH-01	CuT (%)	0.25	0.01	198	0.24	0.002	0.0	0.01	0	0.23	0.26
MDCH-02		0.43	0.01	141	0.43	0.003	0.4	0.01	0	0.41	0.44
ADCH-03		0.93	0.03	62	0.94	0.007	0.6	0.01	0	0.84	1.02
BDCH-01	Ag (g/t)	2.37	0.16	198	2.30	0.164	-3.1	0.07	2	1.88	2.86
MDCH-02		2.92	0.31	141	2.80	0.156	-4.2	0.06	0	1.98	3.86

Standard	Element	Expected Value		# of Samples	Assay Value		Analysis			Acceptance Value	
		Ave	Std. Dev.		Ave	Std. Dev.	Bias % [a]	CV %	# Outlier	Min (-3DE)	Max (+3DE)
ADCH-03		23.73	1.16	62	23.89	0.428	0.7	0.02	0	20.24	27.22
BDCH-01	Mo (ppm)	59.31	2.24	198	57.98	1.260	-2.2	0.02	0	52.59	66.02
MDCH-02		86.8	3.92	141	88.92	6.860	2.4	0.05	1	75.05	98.55
ADCH-03		135.17	8.43	62	141.24	3.640	4.5	0.03	0	109.87	160.47
BDCH-01	As (ppm)	49.8	9.57	198	39.60	3.610	-20.5	0.09	0	21.09	78.50
MDCH-02		187.58	11.23	141	176.52	14.240	-5.9	0.08	1	153.90	221.26
ADCH-03		1045.81	52.57	62	1041.61	135.270	-0.4	0.13	1	888.12	1203.51
BDCH-01	Zn (ppm)	61.35	2.95	198	61.97	3.990	1.0	0.06	0	52.51	70.19
MDCH-02		339.35	12.02	141	336.52	45.060	-0.8	0.13	1	303.29	375.40
ADCH-03		6392.43	96.48	62	6178.55	53.000	-3.3	0.01	5	6103.00	6681.87

(from Golder 2016).



(from Golder 2016)

Figure 13: Example control chart of TCu results for Standard BDCH-01

3.4.3.2 Blank pulps

Chinalco submits coarse blank and pulp blanks to monitor for contamination through the sample comminution circuit.

Results of analysis of all blank samples (Table 6) show all samples returned without evidence of contamination.

Table 6: Coarse blank and pulp blank results 2015 drilling campaign

	CuT %	
	Coarse Blank	Pulp Blank
Detection Limit (LD)	0.001	0.001
Limit: 5 LD	0.005	0.003
Number samples	202	200
Minimum	0.0005	0.001
Maximum	0.002	0.002
Average	0.001	0.001
Median	0.001	0.001
% Outside limit	0%	0%

(from Golder 2016).

3.4.3.3 Duplicates

As described above, Chinalco duplicate samples from different stages of the sample comminution process. For the 2015 programme just over 200 duplicate samples were submitted (Table 7). Sampling precision is acceptable for all duplicate processes, except the field duplicate results show some outliers.

Table 7: Duplicates results for TCu from 2015 drilling campaign

Type	Campaign	No. Assays	Average HRD%	Average HARD %
Field Duplicate	2015	201	-1.49	11.09
Coarse Duplicate		201	0.18	1.46
Pulp Duplicate		201	0.24	0.93

(from Golder 2016).

3.4.3.4 Repeats

No evidence of any repeat assay checks on 2015 drilling data.

3.4.3.5 10 m bench samples

No evidence of any QAQC on 10 m weighted pulp composites.

3.4.3.6 Laboratory assay checks

No evidence of any laboratory assay checks on 2015 drilling data.

3.4.3.7 Twin hole analysis

No evidence of the use of twin hole analysis have been recorded against 2015 drilling.

3.4.4 Conclusions

In the absence of historical QAQC data, analysis by IMC (IMC, 2007) appears to verify the quality of the historical drilling data.

There are no standards data to support any of the CdP and PIC results. As such there is some risk attached to the quality of this data.

The QAQC program for the Chinalco drilling appears to be extensive with both qualitative and quantitative approaches.

Golder considers that overall the QAQC results are acceptable and support the use of the data for inclusion in the Mineral Resource estimation.

Recommendation: Field duplicate analyses for the 2015 drill programme show some outlier data resulting in an average HARD% of a little over 11%. A review of the sampling protocols is recommended to improve precision of sampling.

3.5 Density

There are a number of sources of density measurements available:

- Density data recorded by CdP and Centromin amounting to 27072 density measurements (Old Holes) prior to MC acquisition.
- 38 MC samples sent to CIMM for density determinations without wax to 2007.
- 88 MC samples sent to CIMM for density determinations with wax.
- 24 MC core samples sent to Call and Nicholas (CNI) for rock strength testing had density values measured.
- Density measurements since 2007 carried out core samples every 15 m.

The density data for the CdP were individual core samples weighed in air and weighed in water without any coatings prior to immersion in water. The 38 sample sent to CIMM were also weighed in air and weighed in water without coating prior to immersion. The 88 sample sent to CIMM did include a paraffin coating prior to immersion with appropriate back calculation and removal of the paraffin density from the rock density determination.

All other density data since 2007 were carried on core samples taken every 15 m by selecting 10 cm of cores that are considered as representative of the geology of the interval. Density measures consider the wax immersion methodology. 5% of the density samples are sent to a second laboratory as part of the QAQC program. Results of the QAQC indicate no major issues.

Density database includes a total of 26 758 measurements distributed as shown in Figure 14.

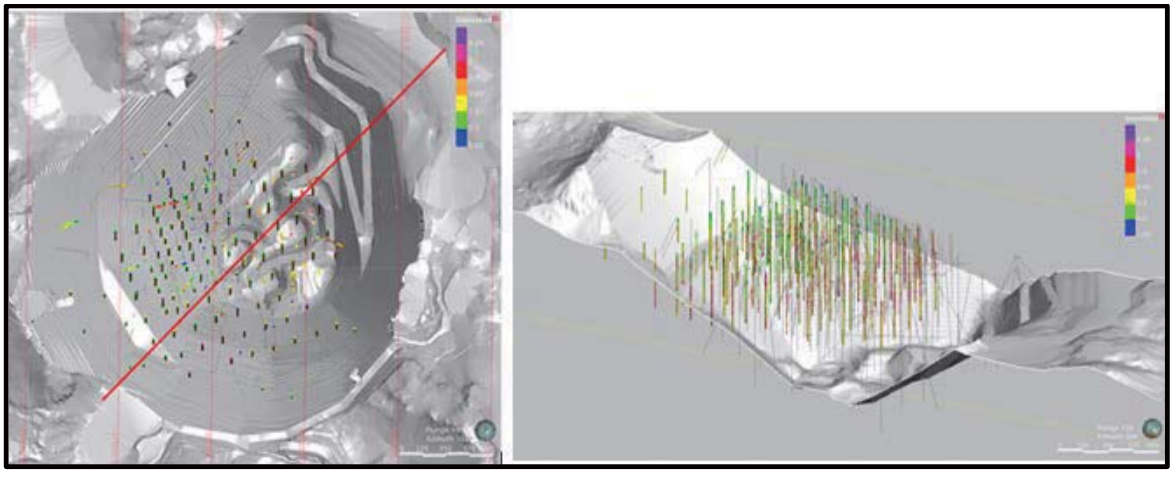


Figure 14: Distribution of density samples

3.6 Geological modelling

The geological modelling was carried out by MC and used by Golder, involved in interpretation and modelling of: lithology, alteration and mineral zones. Golder Associates S.A. carried out the estimation of grades and density. All the work was done under the supervision of Toromocho staff, and reviewed and validated by this Golder Competent Person.

The database was reviewed for inconsistencies, and no significant errors, such as overlaps or gaps intervals, were detected.

Both Chinalco and Golder reviewed the geological model and verified its robustness by a visual review and comparing the model against the original geological information using a back-flagging test.

The geological modelling methodology considered an on screen interpretation with Leapfrog Geo®. The lithology, mineral zone and alteration model followed the following procedure:

- Definition geological sequence for each variable
- Interpretation of vertical sections
- Interpolation and construction of three-dimensional model.

Table 8 details the geological codes and the grouping for model construction for the estimation units for TCu.

Table 8: Geological codes and grouping

Lithology

	Cod	Abrev	Description
Intrusive	1	Dior	Diorite
	2	Gran	Granodiorite
	3	Feld	Feldspar Porphyry
	4	Qtz	Quartz Porphyry
	5	Dac	Dacitic Porphyry
	6	Ynt	Yantac Porphyry
Hornfels	10	Horn	Hornfels
Skarn	11	Skn	Skarn
	12	Magsk	Magnetite Skarn
Sedimentary- Volcanic	13	Bslt	Montero Basalt
	14	Sed	Calcareous Sediment
	15	Shl	Shale
	16	Vol	Andesite
	17	Anh	Anhidrite
	18	Ss	Sandstone
Oby	100	Coll	Colluvial

Alteration

	Cod	Abrev	Description
Intrusive	2	Pot	Potassic
	3	Prop	Propylitic
	4	Seric	Sericitic
	5	Arg	Argilic
	6	Silic	Silicification
	7	End Sk	Endoskarn (diop+gam)
			Endoskarn (act-trem)
Skarn	9	Trem- Act	Green alteration
	10	Serp	Soft Greenish
	11	Grt- Diop	Gamet- dioside
	18	Mg	Magnetite
Hornfels	12	Diop	Diopside
		Bio- Qz	Biotite+ Qz
Sedimentary	15	Qz- Woll	Qz+ Wollastonit
		Marb	Marblized
	17	Shale	Shale
	19	Ss	Sandstone
Oby	100	Coll	Colluvial

Mineral Zone

	Cod	Abrev	Description
Lix	1	Leach	Leached
Secundary	2	Enrich	Stong-Moderate Cc Enrichment
	4	Weak	Weak Cc Enrichment
Primary	5	Prim	Primary
	6	Sulphate	Anhydrite
Oby	0	Coll	Colluvial

In order to confine the estimation to volumes with enough samples and to avoid excessive extrapolation, a Geological Information Limit (GIL) was also created, see Figure 15. The GIL was constructed in Leapfrog and defined considering a distance of 150 m from the farther sample with the distance measured in the horizontal or from the bottom of the drill hole.

Figure 16 provides plan view example of the lithology, alteration, Minz and geological information limit through 4400 m RL with composite data location shown. A cross section example of the same has been provided in Figure 17. The section line trace is marked on Figure 16.

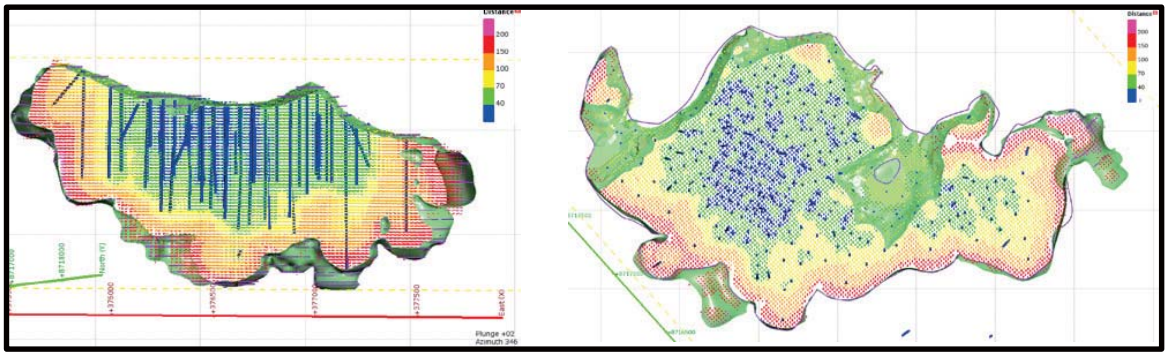


Figure 15: Limit of geological information

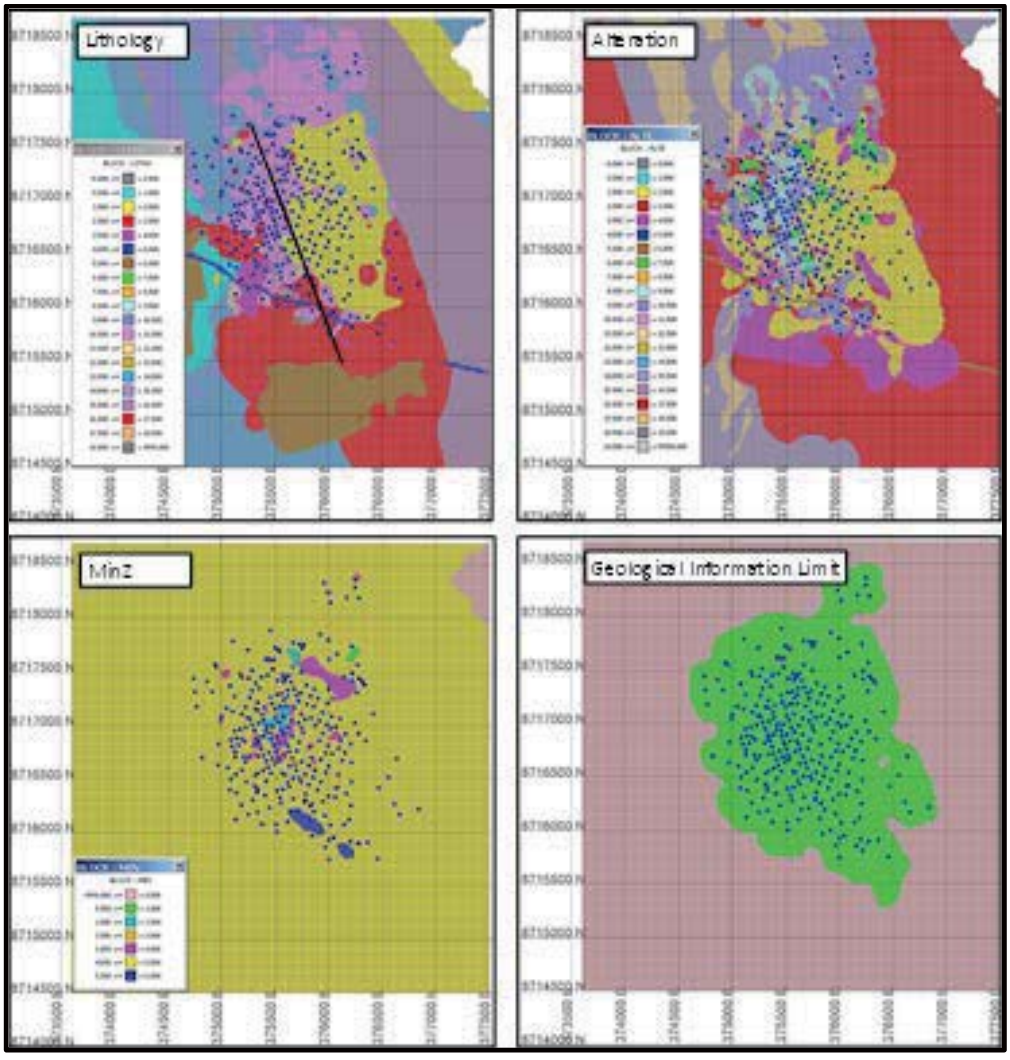
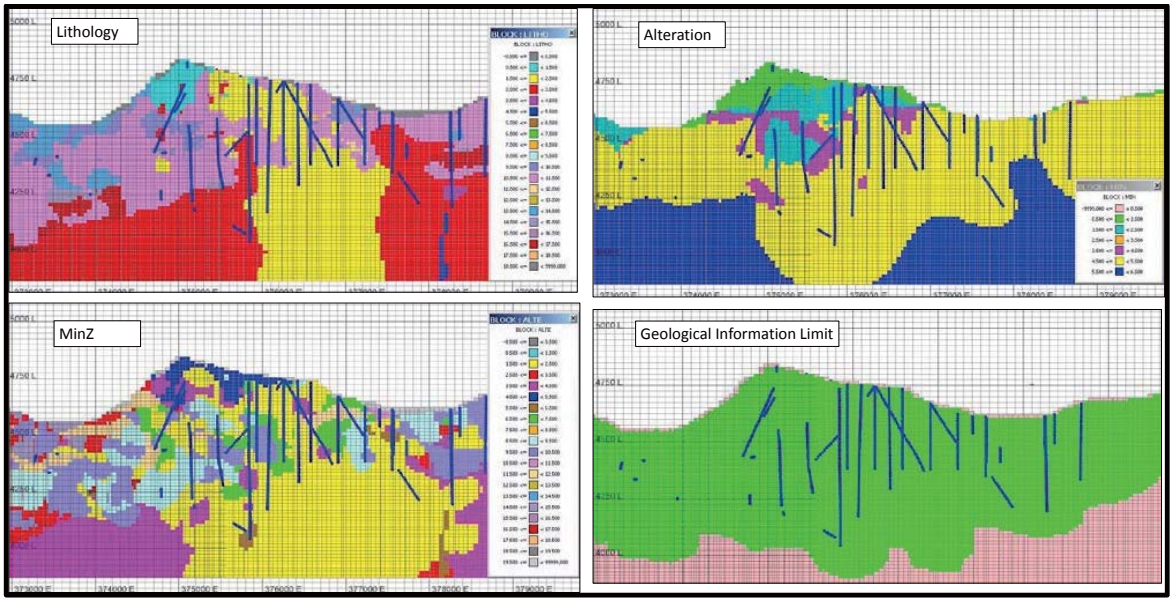


Figure 16: Plan view of block model lithology, alteration, Minz and geological information through 4400 m RL with composite data



Cross section trace is provided in the previous plot

Figure 17: Cross section view of the block model lithology, alteration, Minz and geological information with composite data location marked

3.7 Estimation databases

3.7.1 Data sources

The drillhole database used by Golder for the 2016 Mineral Resource estimation is combination of the historical drillhole data to 2003 (366 holes) and that drilled since 2003 (130 holes). Table 9 provides a summary.

Golder downloaded raw data, composite files and block model from the designated Intralink site as listed in Table 9 respectively. Golder converted and imported the data in to Vulcan software for this review.

Table 9: Summary of data used for mineral resource estimation

Variables	CuT	Mo	Ag	Zn	As	Pb	Au
Metres drilled	17 767.74	76 417.58	58 542.65	56 396.2	18 692.75	41 254.05	34 380.2
No. Samples	11 898	50 717	39 034	37 602	12 544	27 502	22 919
Historical Data	1.5 m	10 m bench	10 m bench	10 m bench	10 m bench	10 m bench	10 m bench
New Data	1.5 m	1.5 m	1.5 m	1.5 m	1.5 m	1.5 m	1.5 m
Variables	**Cuas**	**Cuascn**					
metros	128 258.51	128 258.51					
No. Samples	12 177	12 177					
Historical Data	10 m bench	10 m bench					
New Data	15 m	15 m					

3.7.2 Compositing

For the historical data (pre 2003), with the exception of CuT% assays, all other elements have used a 10 m bench height samples. CuT% has a consistent sampling length of 1.5 m.

For compositing purposes therefore a 4.5 m composite length was used for CuT% and 10.5 m for all other elements. For sequential coppers, the database was compiled in both original length, historical (10 m) and new drill length (15 m).

The resource estimates are based on a 4.5 m composite size. A compromised 10.5 m composite length was chosen for all other elements.

The majority of raw assays for CuT% data are equal or less than 1.5 m support (98% of assays) with the remaining 2% on irregular intervals between 1.5 m and 7 m (see Figure 18).

Considering a vertical block size of 15 m, a 4.5 m composite size for CuT% assays on angled holes is reasonable and also it provides sufficient resolution during estimation. Given the historical 10 m bench composites of minor elements against the recent 1.5 m length data, the 10.5 m composite length is considered as a fair compromise.

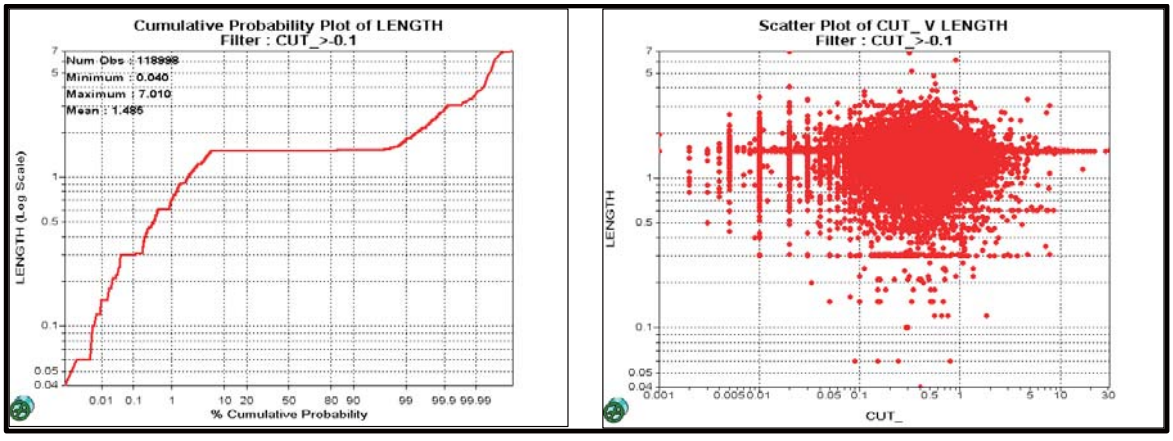


Figure 18: Left-Cumulative probability plot of raw assay lengths, Right-raw assay length Vs CuT%

3.7.3 Estimation domains

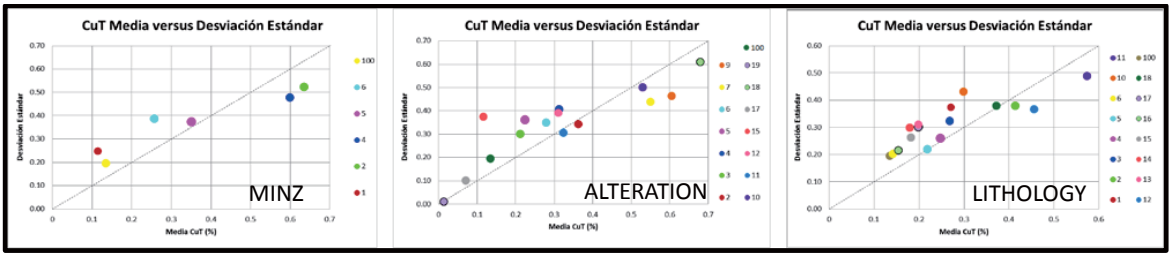
Estimation domains were investigated using various statistical approaches including cumulative log probability plots, scatter plots, histograms and descriptive univariate statistics. The details on procedures and results of various estimation domains has been provided in report "*149 215 1105IT017_revB.docx dated June 2016*".

Estimation domains and subsequent statistical analysis, variography and kriging estimation has been carried out on a number of elements including CuT%, soluble copper elements (CuAS and CUASCN), Ag g/t, Au g/t, Mo%, Zn%, Pb%, As% and Density.

The following sections provide a summary extract of the approach and results on key elements only, including CuT%, Ag g/t, Zn%, As% and Density.

3.7.3.1 CuT%

Figure 19 provides scatter plot of mean vs standard deviation for each of the Minz, Alteration and Lithology groups. A strong control is noted with Minz followed by a further secondary control imposed by alteration and then by lithology.



Minz (left); Alteration (middle); Lithology (right)

Figure 19: Mean vs standard deviation of CuT% composite assays

Further analysis of log cumulative probability distributions attributed to each of the individual Minz provides the following insight.

- Leached profile: Two populations are noted to be associated with alteration and no specific pattern arising from Lithology. The Alteration related populations are Endoskarn, skarn and hornfels as one group and other alterations as a second group.
- Strong and weak enrichments (Minz 2 & 4) were initially considered as a combined group as the statistics based on Minz appeared similar. However further checks based on alteration and lithology combinations showed that such combination can only be sustained for Intrusive Endoskarn plus skarn alterations and where material is defined as skarn or Mg skarn by lithology as two distinct estimation groups.
- The remainder of the strong and weak enrichment zones were kept separate and each were further divided into intrusive as one group and remainder as the second group.
- Zones defined as primary by enrichment surfaces were divided to two fundamental groups on a nominal CuT% grade below or above 0.15%. Material above the 0.15% CuT was further divided to skarn and intrusive endoskarns and the remainder.

The approach defined a total of eleven estimation domains for CuT% provided in Table 10. The relevant statistical summary is provided in Table 11.

Table 10: Estimation deomains for CuT%

UE	MINZ	Alterations	Lithology	Envelopes
1	Leached	Potassic Intrusive – Endoskarn Skarn Hornfels	All	
2		Remaining alterations	All	
3	Strong and weak enrichment zones	Intrusive Endoskarn Skarn	All	
4		Remaining alterations	Skarn Mg Skarn	
5	Strong Enrichment	Intrusives (excluding Endoskarn) Hornfels Sediments	Intrusives	
6			Hornfels Sediments – Volcanic	
7	Weak Enrichment		Intrusives	
8			Hornfels Sediments – Volcanic	
9	Primary and Anhydrite	All	All	CuT <0.15%
10		Intrusive Endoskarn Skarn	All	CuT ≥0.15%
11		Remaining alterations	All	

Table 11: Summary statistics by CuT% estimation units

UECUT	No. Composites	Min.	Max.	Mean	Median	Q1	Q3	Variance	Std. Dev.	C.V
1	502	0.001	4.24	0.28	0.19	0.07	0.39	0.11	0.33	1.17
2	2 221	0.001	4.28	0.08	0.02	0.01	0.06	0.04	0.21	2.70
3	3 718	0.01	7.00	0.76	0.65	0.44	0.93	0.28	0.53	0.70
4	559	0.01	8.00	0.69	0.54	0.37	0.84	0.41	0.64	0.94
5	2 361	0.001	4.81	0.54	0.42	0.26	0.68	0.21	0.46	0.85
6	406	0.001	3.67	0.54	0.46	0.29	0.69	0.19	0.43	0.80
7	2 219	0.001	5.46	0.49	0.41	0.25	0.62	0.16	0.40	0.80
8	513	0.001	4.64	0.46	0.34	0.22	0.53	0.21	0.46	1.02
9	7 113	0.001	8.00	0.09	0.07	0.04	0.12	0.02	0.15	1.65
10	10 309	0.01	8.00	0.52	0.42	0.27	0.65	0.18	0.43	0.82
11	11 358	0.001	8.00	0.35	0.27	0.19	0.42	0.11	0.33	0.93

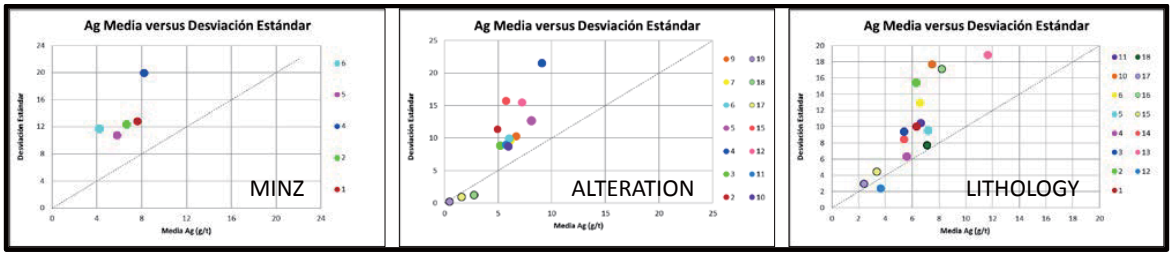
3.7.3.2 Silver (Ag g/t)

An initial examination of the scatter plots of mean versus standard deviation of Ag g/t grouped by each of major categories for Minz, alteration and lithology (see Figure 20) shows a much greater association with lithology than the copper enrichment zones or alterations. This conclusion also holds to some extent when cumulative log probability plots are used (Figure 21). Probability plots show lack of grouping where alterations are concerned but provides some distinction distributions within some of the copper enrichment profiles and very strongly with lithology.

Lithology and Minz were finally used as primary drivers as follows:

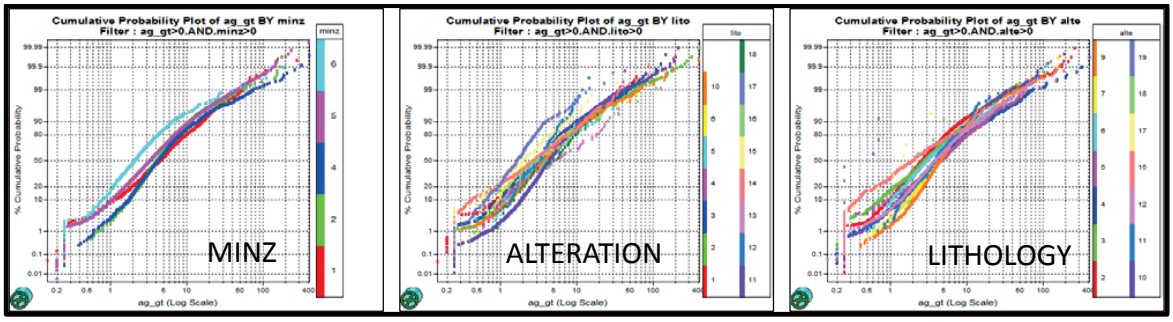
- Primary rock based on Minz appears to be showing a distinct behaviour compared to other enrichment material. As such the Primary material was considered separately.
- Feldspar (3), quartz (4), dacite (5) and Yantac Porphry (6) lithologies show similarities in their cumulative distribution plots but need separation based on primary plus anhydrite and the remainder.
- A similar subdivision by primary plus anhydrite and the remainder is noted for granodiorite (2) and grouped accordingly.
- Diorite (1) has a distinct behaviour for primary rock versus the remainder and grouped accordingly into two separate units.
- Hornfels (10), Basalt (13), skarn (11) and Mg skarns (12) were considered as one group. However, examination of spatial distribution of Ag shows that grade zoning potentially exists lending itself to separation by a nominal grade cut-off of 7 g/t Ag.
- Finally, an estimation domain was defined for Shales (15) and Anhydrite (17) as one group and Calcareous Sediment (14), andesite (16) and sandstones (18) lithologies as another group. These associations have geological and spatial coherence, and contain sufficient samples for interpolation purposes.

The final estimation domain categories are provided in Table 12 with associated statistics in Table 13.



Minz (Left), Alteration (middle) and Lithology (right)

Figure 20: Mean vs standard deviation of Ag g/t composite assays



Grouped by Minz (left), Alterations (Middle) and Lithology (right)

Figure 21: Cumulative log probability plots for Ag g/t

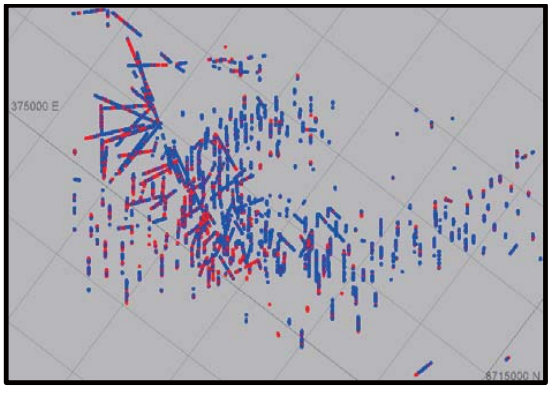


Figure 22: Spatial distribution of Ag g/t for above 7 g/t (red) and below 7 g/t (blue) within hornfels, basalt, skarn and mag skarn lithologies

Table 12: Estimation units for Ag g/t

UEAG	Lithology	Mineral Zone (MINZ)	Alteration	Envelopes
1	Diorite	Primary	All	
2		Remainder		
3	Granodiorite	Primary + Anh	All	
4		Remainder	All	
5	Porphrys: Feldspar, Qz, Dacite, Yantac	Primary + Anh	All	
6		Remainder		
7	Hornfel, Basalt, Skarn	All	All	Ag >7 g/t

UEAG	Lithology	Mineral Zone (MINZ)	Alteration	Envelopes
8	MgSkarn			Ag <7 g/t
9	Anhydrite, Shale	All	All	
10	Sed Calc, Andesite, Sandstone	All	All	

Table 13: Summary statistics by Ag g/t estimation units

UE	No Composites	Min.	Max	Mean	Median	Q1	Q3	Variance	Std. Dev	C.V
1	334	0.20	49	4.15	2.50	1.37	4.70	32	5.6	1.4
2	826	0.15	187	7.17	4.60	2.50	7.90	126	11.2	1.6
3	3 083	0.25	237	5.34	2.70	1.60	4.90	124	11.1	2.1
4	1 450	0.25	405	8.39	3.90	2.40	6.90	478	21.9	2.6
5	2 080	0.20	147	5.50	2.80	1.50	5.41	101	10.1	1.8
6	396	0.70	48	5.87	4.30	2.80	6.41	37	6.1	1.0
7	1 085	0.86	398	15.10	10.30	7.59	14.98	458	21.4	1.4
8	4 652	0.25	216	4.79	3.70	2.45	5.40	54	7.4	1.5
9	363	0.25	30	2.56	1.70	1.05	2.84	9	3.0	1.2
10	670	0.25	111	5.75	2.84	1.21	6.30	91	9.5	1.7

3.7.3.3 Arsenic (As%)

Arsenic is a contaminant element and is considered as one of critical element for the final concentrate.

Cumulative log probability plots for As% by alteration and lithology codes (Figure 23) show very little association between As% assays and that of the lithology or alteration interpretations. Stronger association is noted with mineral zones (MINZ) as presented in Figure 24.

- Arsenic behaviour is comparable in both the leached and high enrichment profiles.
- Both primary (5) and anhydrite (6) show similarities in their As% distribution (see Figure 25 left), therefore were combined into one group. Spatial examination of As% within these units suggest a potential zoning at a nominal cut-off grade of 0.007% As. An envelope was accordingly interpreted to encompass the higher grade As% data.

Table 14 provides the final estimation domains for As%. Associated statistics are presented in Table 15.

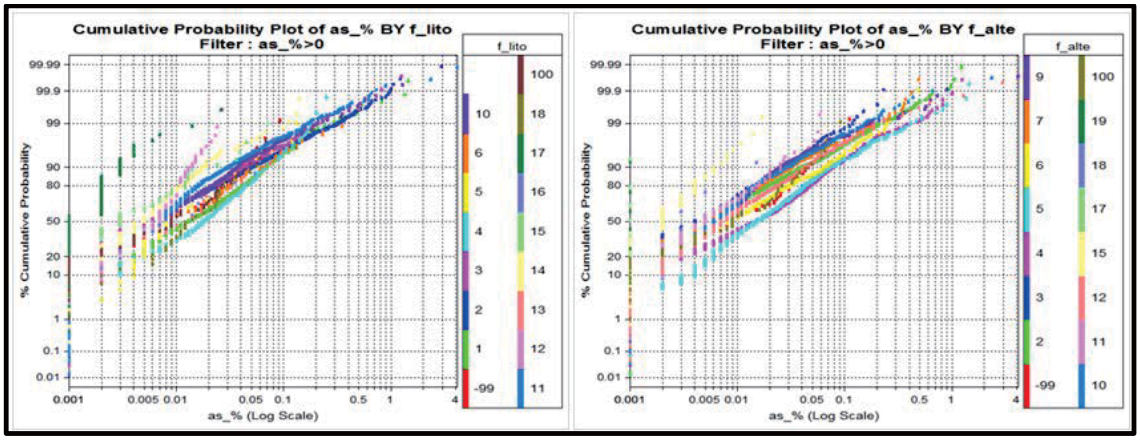


Figure 23: Cumulative log probability plots for As% grouped by lithology (left) and alteration (right)

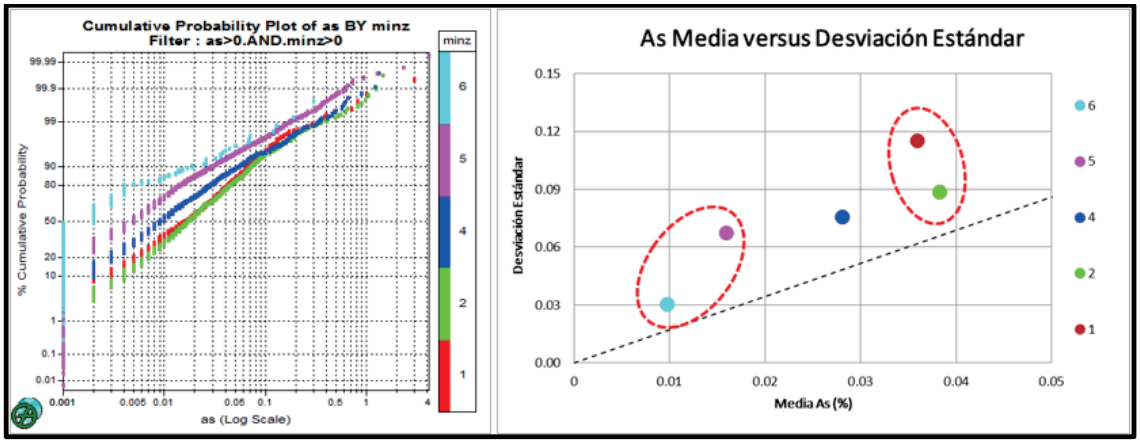


Figure 24: Cumulative log probability plot (left) and scatter plot of mean vs standard deviation (right) for As% by mineral zones (MINZ)

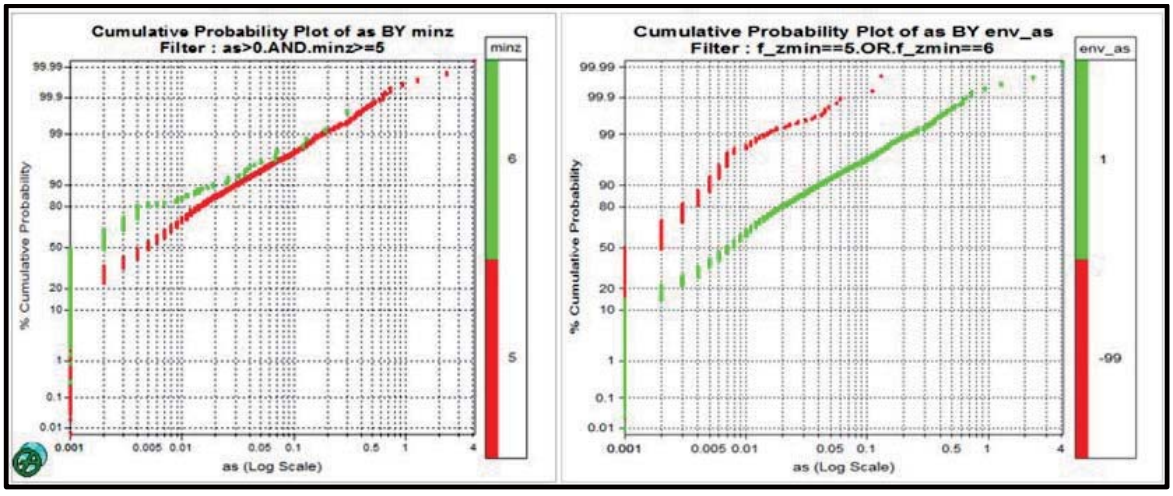


Figure 25: Cumulative log probability plots for As% for primary and anhydrite (left) and that separated by Arsenic envelope interpreted at 0.007% (right)

Table 14: Estimation units for As%

UEAS	Mineral Zones	Lithology	Alteration	Envelopes
1	Leached and High grade enrichment	All	All	
2	Low grade enrichment	All	All	
3	Primary and Anhydrite	All	All	As ≥0.007%
4				As <0.007%
100	Colluvium			

Table 15: Summary statistics by As% estimation units

UEAS	No Composites	Min	Max	Mean	Median	IQ1	IQ3	Variance	Std Devn	C.V
1	2359	0.001	2.950	0.038	0.017	0.008	0.037	0.010	0.102	2.688
2	1638	0.001	1.340	0.028	0.009	0.004	0.023	0.006	0.076	2.708
3	6128	0.001	4.120	0.021	0.007	0.003	0.016	0.006	0.078	3.776
4	2252	0.001	0.130	0.003	0.002	0.001	0.003	0.000	0.005	1.901
100	51	0.001	0.091	0.017	0.009	0.002	0.024	0.000	0.020	1.160

3.7.3.4 Zinc (Zn%)

Zinc is also a contaminant element and is considered as the second critical element for the final concentrate. For assessment and definition of estimation domains associated with Zn% composites, a series of cumulative log probability plots and mean versus standard deviation plots were generated grouped by mineral zones, alteration and lithology (Figure 26). A clear proportional effect is noted with all groups.

Distribution distinctions are not clearly obvious through the cumulative probability plots by mineral zones or alterations, although some association and grouping is noted. Lithology diagrams however show a much stronger possibility of grouping followed by mineral zone and then alterations. The following observations and groupings have been selected:

- Diorite (1) lithology shows a distinct behaviour and is used as a separate group. Examination by mineral zones however suggest that diorite would need to be further separated to high enrichment unit (2) and low enrichment (5) plus primary units.
- Granodiorite lithology (2) also appears distinctive with further sub-division required based on potassic and non-potassic alterations.
- Feldspar (3), quartz (4), dacite (5) and Yantac porphyry (6) lithologies were also considered for grouping into a unit separated by potassic or non-potassic alterations.
- Hornfels (10), Skarn(11), Mg skarn (12), basalt (13) and calcareous sediments (14) formed the next grouping. Mineral zones and alterations do not display any specific trend. However spatial inspection of Zn% for these lithologies demonstrate a potential zoning at 0.2% Zn threshold. Solids were accordingly interpreted and used as low and high grade zinc zones.
- Shale (15), Andesite (16), anhydrite (17) and sandstone (18) formed the final grouping for the zinc estimation units.

Table 16 provides final estimation domains for Zn% with statistics presented in Table 17.

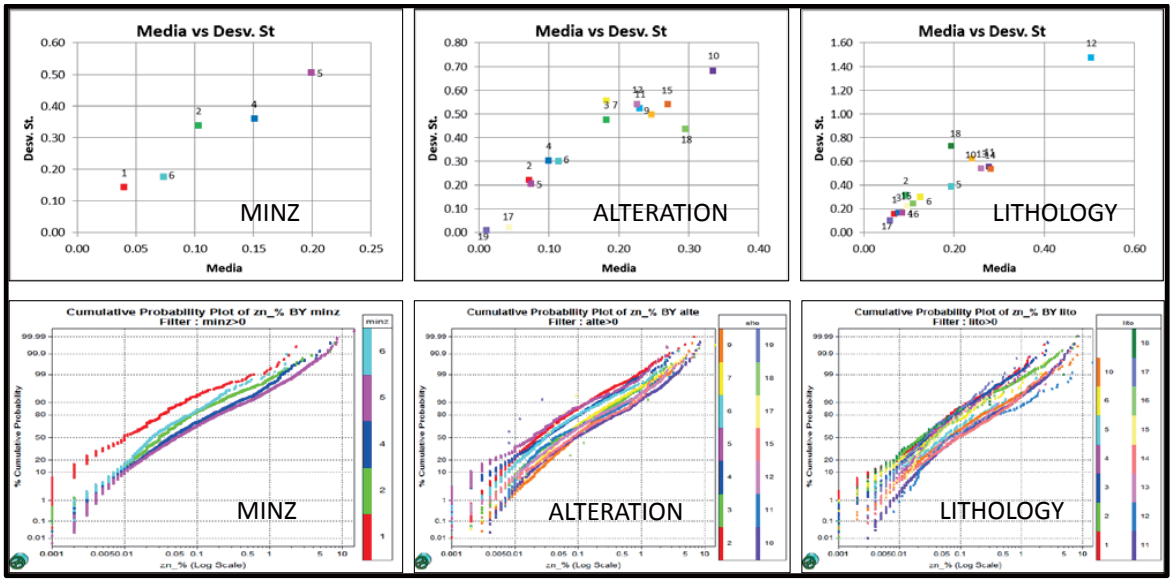


Figure 26: Mean vs Standard Deviation (upper row) and cumulative log probability plots (lower row) for Zn% composite assays grouped by Minz (Left column), Alteration (middle column) and Lithology (right column)

Table 16: Estimation units for Zn%

UEZN	Litology	Mineral Zones	Alteration	Grade Envelopes
1	Diorite	High enrichment	All	
2		Low enrichment and Primary	All	
3	Granodiorite	All	Potassic	
4			Remaining alterations	
5	Porphrys: Feldspar, Qz, Dacitie, Yantac	All	Potassic	
6			Remaining alterations	
7	Hornfels, Skarn, Magnetite Skarn, Basalt, Calcareous sediment	All	All	>0.2%
8				<0.2%
9	Shale, andesite, Anhydrite, sandstone	All	All	
10	All	Leached	All	

Table 17: Summary statistics for Zn% estimation units

	No. Obs	Min.	Max	Mean	Median	IQ1	IQ3	Variance	Std. Dev.	C.V
1	412	0.001	2.36	0.06	0.03	0.01	0.05	0.03	0.16	2.50
2	534	0.004	2.20	0.11	0.05	0.03	0.11	0.04	0.20	1.74
3	2 846	0.001	6.83	0.07	0.02	0.01	0.04	0.06	0.25	3.43
4	1 685	0.001	7.90	0.14	0.04	0.02	0.10	0.18	0.42	2.95
5	921	0.002	1.48	0.06	0.03	0.01	0.05	0.01	0.11	1.94
6	1 621	0.001	2.66	0.11	0.04	0.02	0.09	0.05	0.23	2.18
7	1 676	0.009	14.58	0.77	0.46	0.25	0.91	0.94	0.97	1.26

	No. Obs	Min.	Max	Mean	Median	IQ1	IQ3	Variance	Std. Dev.	C.V
8	5 353	0.003	8.47	0.12	0.06	0.03	0.12	0.09	0.30	2.39
9	460	0.002	4.90	0.09	0.03	0.02	0.07	0.08	0.28	3.09
10	1 193	0.001	2.32	0.04	0.01	0.00	0.03	0.02	0.14	3.64
Total	16 701	0.001	14.58	0.17	0.04	0.02	0.12	0.20	0.45	2.69

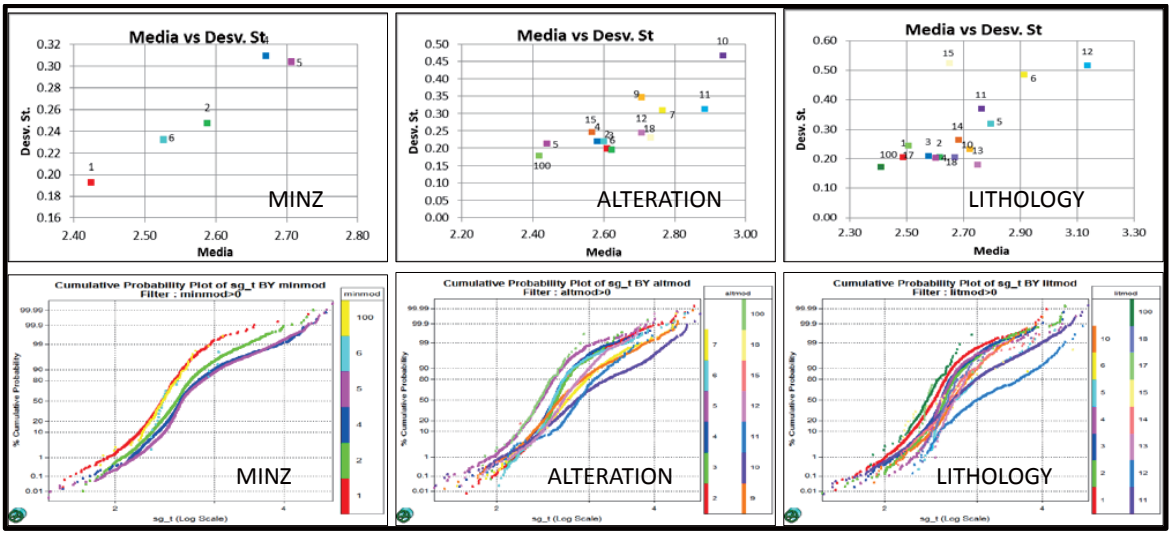
3.7.3.5 Density

The database used for density values corresponding to raw density measurements. The geological codes are those flagged using the geological block model. The final dataset used excludes four potentially anomalous values greater than 6 g/cm^3.

For determination of estimation domains associated with density measurement a series of cumulative log probability plots and mean versus standard deviation plots were generated grouped by mineral zones, alteration and lithology (Figure 27). Three separate groupings are noted using the mineral zone codings. These include Leach material, high enrichment zone and combined low enrichment, primary and anhydrite zones.

Additional control is noted on the last group by examining the lithology and alterations. Magnetic skarn (12) appears as an outlier on the graph requiring to be treated separately. For the remainder of the group alterations argelic (5) and endo skarn (7) stand out as separate domains while the remainder form a similar population.

Final estimation domains for density are provided in Table 18 and associated statistics in Table 19.



Grouped by Minz (Left column), Alteration (middle column) and Lithology (right column)

Figure 27: Mean vs standard deviation (upper row) and cumulative log probability plots (lower row) for density measurements

Table 18: Estimation units for density

UEDENS	Mineral Zones	Lithology	Alteration
1	Gravel	Gravel	Gravel
2	Leached	All	All
3	High enrichment	All	All
4	Low enrichment + primary + anhydrite	All less mag skarn (12)	arg (5)
5		All less mag skarn (12)	All less arg (5) -end sk (7)- mg (18)
6		All less mag skarn (12)	end sk (7)
7		magk (12)	mg (18)

Table 19: Summary statistics by density estimation units

UEDENS	No. Obs	Min.	Max	Mean	Median	IQ1	IQ3	Std. Dev.	C.V
1	2 639	1.61	4.42	2.42	2.42	2.32	2.52	0.19	0.08
2	4 993	1.75	4.51	2.59	2.57	2.45	2.69	0.25	0.1
4	3 504	1.61	4.76	2.67	2.61	2.51	2.77	0.31	0.12
5	15 411	1.52	4.89	2.71	2.63	2.54	2.8	0.3	0.11
6	22	2.32	3.06	2.53	2.43	2.39	2.57	0.23	0.09
100	124	1.88	3.11	2.44	2.43	2.35	2.54	0.18	0.07

3.8 Spatial correlation and variography

Spatial continuity of each estimation domain was analysed using variography. 3D experimental variograms were generated and modelled along drillhole (DTH) and by directional (3D). Variography was carried out using OBO V11.05® software. The variograms were calculated for each Estimation domain separately. Golder conducted the variography through the following process which included:

- Calculation of variogram maps.
- Calculation of downhole and 3D experimental variograms.
- Derivation of the nugget effect downhole DTH variograms.
- Modelling experimental variogram in three principal orientation of major, semi-major and minor directions.

Model variogram parameters for key variables of CuT%, Ag g/t, As%, An% and Density and for each estimation domain are provided in Table 20 to Table 24. Example variogram plots are presented in Figure 28 to Figure 32.

Table 20: Variogram model parameters for CuT% by estimation domains

UECUT	Direction	Nugget	First Structure			Second Structure		
			Sill	Type	Range	Sill	Type	Range
1	0°	0.16	0.41	Sph	17	0.43	Sph	310
	0°				17			310
	0°				17			310
2	0°	0.21	0.34	Sph	83	0.45	Sph	108
	0°				40			108
	0°				53			64
3	120°	0.34	0.43	Sph	54	0.23	Sph	296
	0°				23			280
	0°				35			420
4	30°	0.32	0.35	Sph	124	0.33	Sph	231
	0°				13			123
	0°				10			404
5	55°	0.28	0.44	Sph	84	0.28		300
	0°				25			155
	0°				40			140
6	0°	0.10	0.52	Sph	17	0.38	Sph	205
	0°				17			205
	0°				17			205
7	115°	0.36	0.24	Sph	67	0.40	Sph	446
	0°				21			225
	0°				42			170
8	0°	0.22	0.01	Sph	87	0.77	Sph	281
	0°				87			281
	0°				87			281
9	60°	0.32	0.27	Sph	71	0.41	Sph	233
	0°				15			237
	0°				10			264
10	0°	0.36	0.22	Sph	39	0.42	Sph	420
	0°				100			320
	0°				28			200
11	100°	0.38	0.38	Sph	124	0.24	Sph	515
	0°				115			336
	0°				95			308

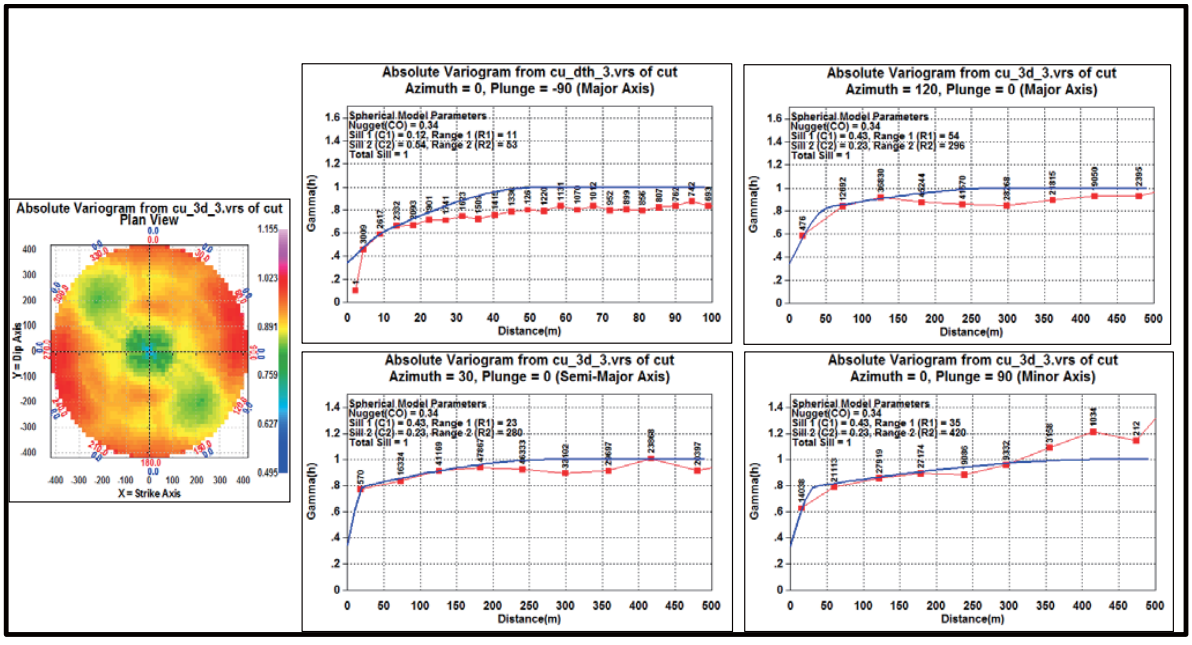


Figure 28: Experimental and modelled variograms for estimation domain 3 – CUT%

Table 21: Variogram model parameters for Ag g/t by estimation domains

UEAG	Direction	Nugget	First Structure			Second Structure			Direction		
			Sill	Type	Range	Sill	Type	Range	Sill	Type	Range
1	0°	0.5	0.7	Sph	200						
	0°				200						
	0°				200						
2	0°	0.2	0.43	Sph	31	0.2	Sph	230			
	0°				31			230			
	0°				31			230			
3	15°	0.35	0.18	Sph	40	0.23	Sph	180	0.24	Sph	220
	0°				40			220			260
	0°				35			35			350
4	155°	0.35	0.4	Sph	160	0.25	Sph	250			
	0°				75			350			
	0°				22			250			
5	0°	0.4	0.4	Sph	200	0.2	Sph	360			
	0°				100			200			
	0°				75			9999			
6	0°	0.3	0.45	Sph	52	0.37	Sph	120			
	0°				52			120			
	0°				52			120			
7-8	45°	0.4	0.32	Sph	40	0.13	Sph	350	0.15	Sph	9999
	0°				200			350			9999
	0°				50			500			500

UEAG	Direction	Nugget	First Structure			Second Structure			Direction		
			Sill	Type	Range	Sill	Type	Range	Sill	Type	Range
9	0°	0.2	0.33	Sph	25	0.27	Sph	200			
	0°				25			200			
	0°				25			200			
10	0°	0.4	0.2	Sph	28	0.56	Sph	250			
	0°				28			250			
	0°				28			250			

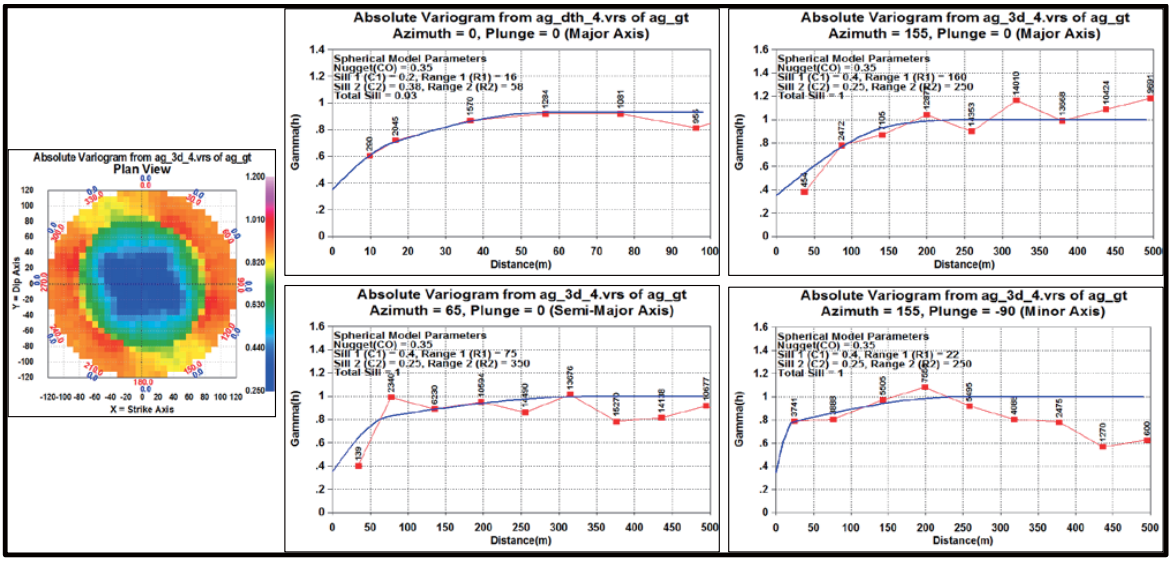


Figure 29: Experimental and modelled variograms for estimation domain 4 – Ag g/t

Table 22: Variogram model parameters for As% by estimation domains

UEAG	Direction	Nugget	First Structure			Second Structure			Direction		
			Sill	Type	Range	Sill	Type	Range	Sill	Type	Range
1	0°	0.2	0.34	Sph	80	0.46	Sph	480			
	0°				80			480			
	0°				80			480			
2	0°	0.4	0.16	Sph	310	0.44	Sph	520			
	0°				310			520			
	0°				310			520			
3	15°	0.05	0.04	Sph	150	0.11	Sph	200	0.15	Sph	500
	0°				120			330			99 999
	0°				60			574			99 999
4	155°	0.2	0.36	Sph	90	0.09	Sph	600			
	0°				90			600			
	0°				90			600			

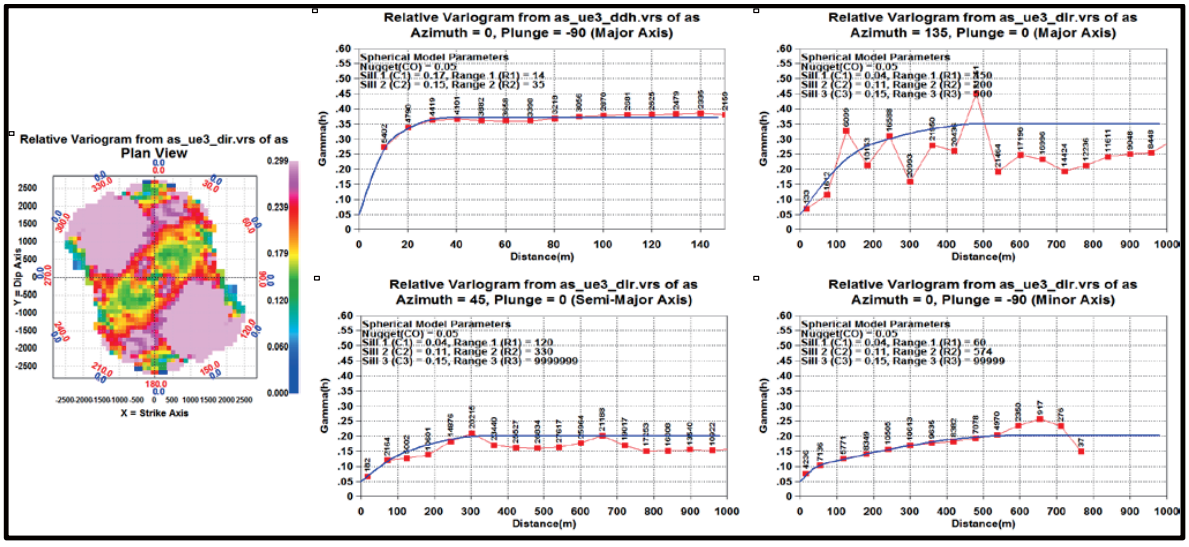


Figure 30: Experimental and modelled variograms for estimation domain 3 – As%

Table 23: Variogram model parameters for Zn% by estimation domains

UEZN	Direction	Nugget	First Structure			Second Structure			Direction		
			Sill	Type	Range	Sill	Type	Range	Sill	Type	Range
3	120	0.65	0.19	SPH	100	0.16	SPH	300			
	0				180			180			
	0				50			270			
4	130	0.40	0.30	SPH	110	0.10	SPH	160	0.20	SPH	260
	0				250			400			500
	0				25			111			9 999
6	120	0.20	0.56	SPH	300	0.04	SPH	400	0.40	SPH	500
	0				250			280			9 999
	0				23			100			9 999
7	50	0.30	0.51	SPH	130	0.19	SPH	150	0.20	SPH	9 999
	0				40			200			9 999
	0				20			140			180
8	155	0.30	0.58	SPH	58	0.12	SPH	300	0.10	SPH	9 999
	0				50			100			150
	0				21			100			9 999
10	0	0.20	0.13	SPH	250	0.16	SPH	300	0.51	SPH	9 999
	0				235			9999			99 999
	0				180			190			200
1	0°/0°/0°	0.4	0.10	SPH	37	0.50	SPH	245			
2	0°/0°/0°	0.4	0.10	SPH	37	0.50	SPH	245			
5	0°/0°/0°	0.3	0.35	SPH	23	0.10	SPH	150			
9	0°/0°/0°	0.4	0.10	SPH	33	0.50	SPH	250			

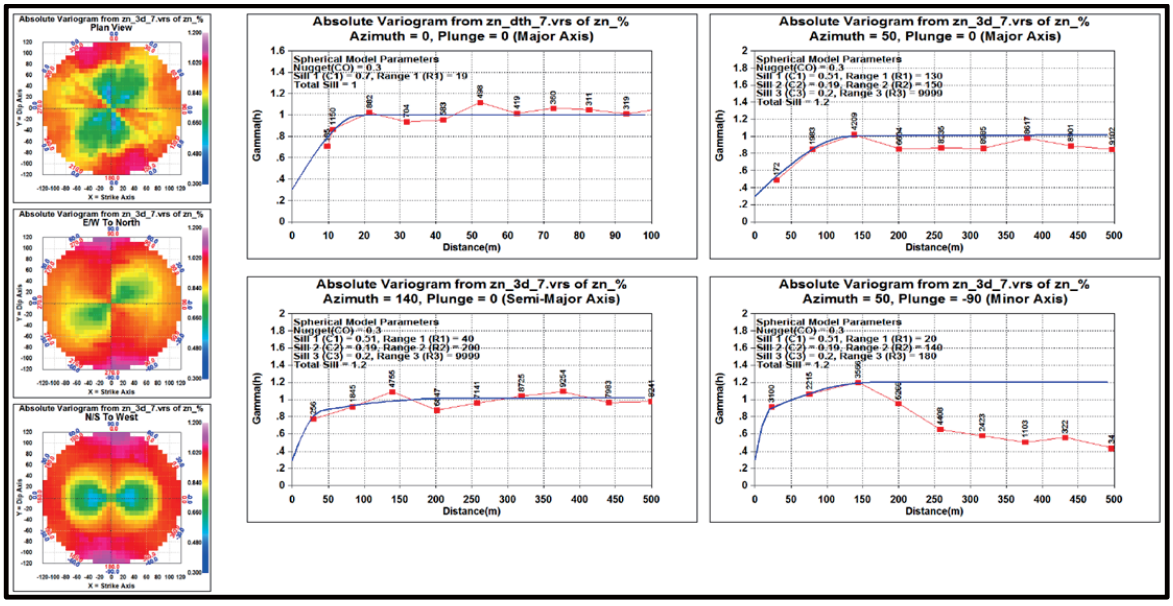


Figure 31: Experimental and modelled variograms for estimation domain 7 – Zn%

Table 24: Variogram model parameters for density by estimation domains

UEDEN	Direction	Nugget	First Structure			Second Structure		
			Sill	Type	Range	Sill	Type	Range
2	45	0.38	0.26	SPH	36	0.36	SPH	246
	0				36			166
	0				20			124
3	130	0.52	0.37	SPH	140	0.11	SPH	400
	0				112			300
	0				30			200
4*	0	0.43	0.26	SPH	34	0.31	SPH	250
	0				34			250
	0				34			250
5	105	0.44	0.19	SPH	53	0.37	SPH	286
	0				20			142
	0				20			231
6	90	0.41	0.47	SPH	118	0.12	SPH	185
	0				160			250
	0				21			160
7*	0	0.15	0.58	SPH	170	0.27	SPH	478
	0				170			478
	0				170			478

Note: * Due to data sparsity and quantity of the available data an omnidirectional variogram was used for estimation units 4 and 7

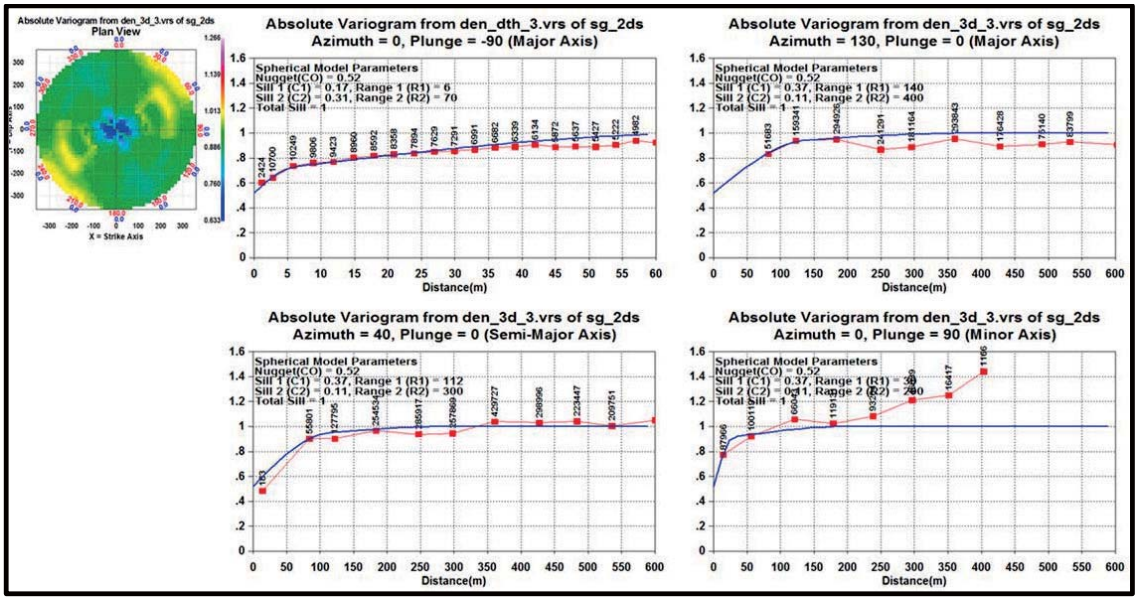


Figure 32: Experimental and modelled variograms for estimation domain 3 – density

3.8.1 Contact analysis

Contact analysis were carried out on the composite samples to establish the approach for treatment of each domain contacts during the interpolation process. For assessment of the style of contacts, the contact analysis plots were used. Plots (Figure 33 to Figure 37) show the average grade (solid blue and average dotted blue to the right and solid green and average dotted green to the left) and number of samples (shaded grey area). Left on the X-Axis is above the contact, and right on the X-Axis is below the contact. Three styles of contacts were determined concerning each estimation domain.

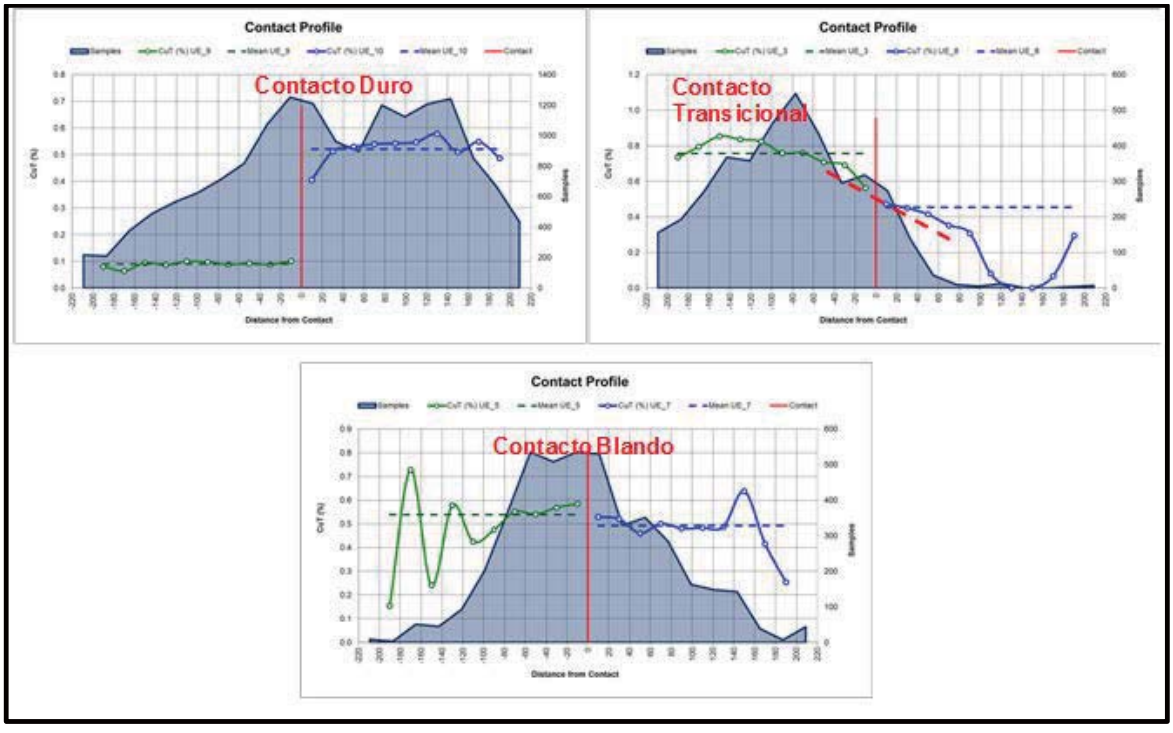
- Hard boundary contacts, where the blocks are estimated using the composites from the estimation domain being estimated
- Transitional boundary contacts, where the block estimates are allowed to be influenced by neighbouring estimation domain samples within short distances (e.g. for pass 1 or 2 estimates)
- Soft boundary contacts where estimated blocks are allowed to be influenced by samples from neighbouring estimation domains for all distances.

Results of the analysis are presented in Table 25 to Table 29 with contact plot examples provided in Figure 33 to Figure 37 for Cut%, Ag g/t, As%, Zn% and Density.

Table 25: Contact type for CUT%

UE	1	2	3	4	5	6	7	8	9	10	11
1		D	D	D	D	D	D	T	D	T	D
2			D	D	D	D	T	T	D	T	T
3				T	D	D	D	T	D	T	D
4					B	D	D	D	D	D	T
5						D	B	D	T	D	D
6							D	D	D	D	B
7								D	T	D	B
8									D	B	T
9										D	D
10											D
11											

Contact Types: D = hard; T = transitional; B = soft



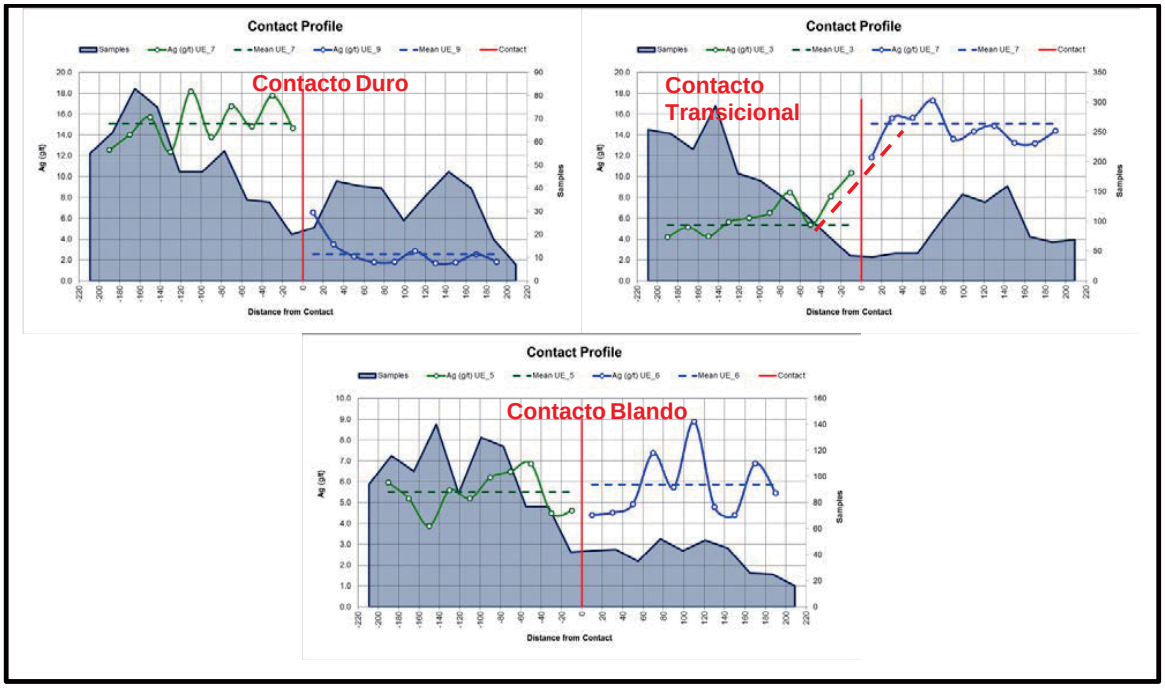
Showing hard contact between domains 9 and 10 (upper left), transitional contact between domains 3 and 8 (upper right) and soft contact between domains 5 and 7 (lower).

Figure 33: Example of contact analysis plot for CUT

Table 26: Contact type for Ag g/t

UEAG	1	2	3	4	5	6	7	8	9	10
1		T	D	D	D	D	D	D	D	D
2			D	T	T	D	D	T	D	T
3				D	T	D	T	D	D	D
4					D	D	D	T	D	T
5						B	D	T	D	D
6							T	T	D	D
7								T	D	D
8									D	D
9										B
10										

Contact Types: D = hard; T = transitional; B = soft



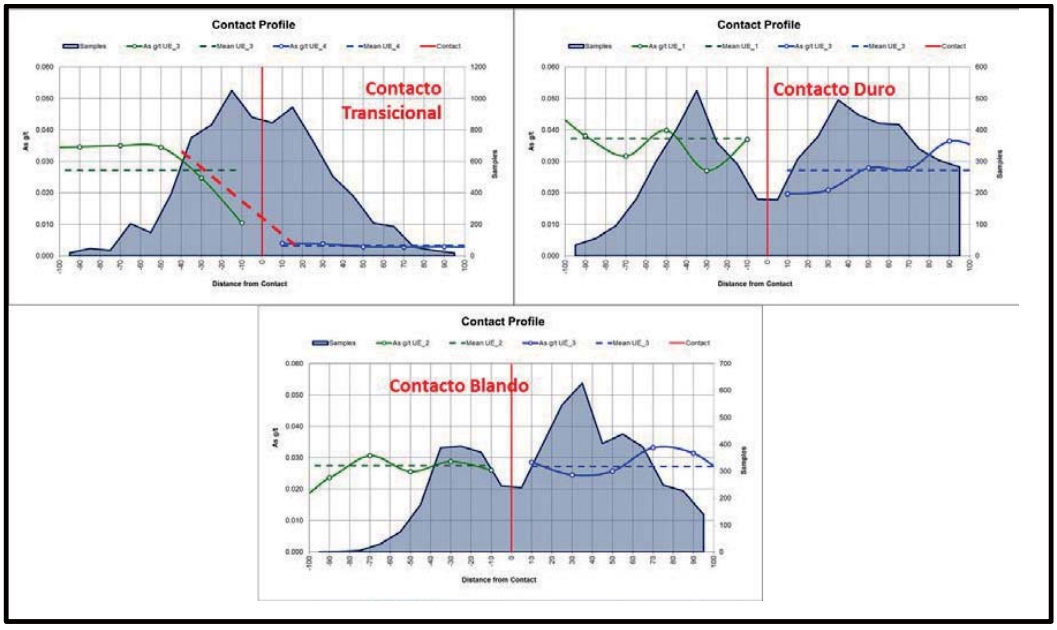
Showing hard contact between domains 7 and 9 (upper left), transitional contact between domains 3 and 7 (upper right) and soft contact between domains 5 and 6 (lower).

Figure 34: Example of contact analysis plot for Ag g/t

Table 27: Contact type for As%

UE	1	2	3	4
1		D	D	D
2			B	D
3				T
4				

Contact Types: D = hard; T = transitional; B = soft



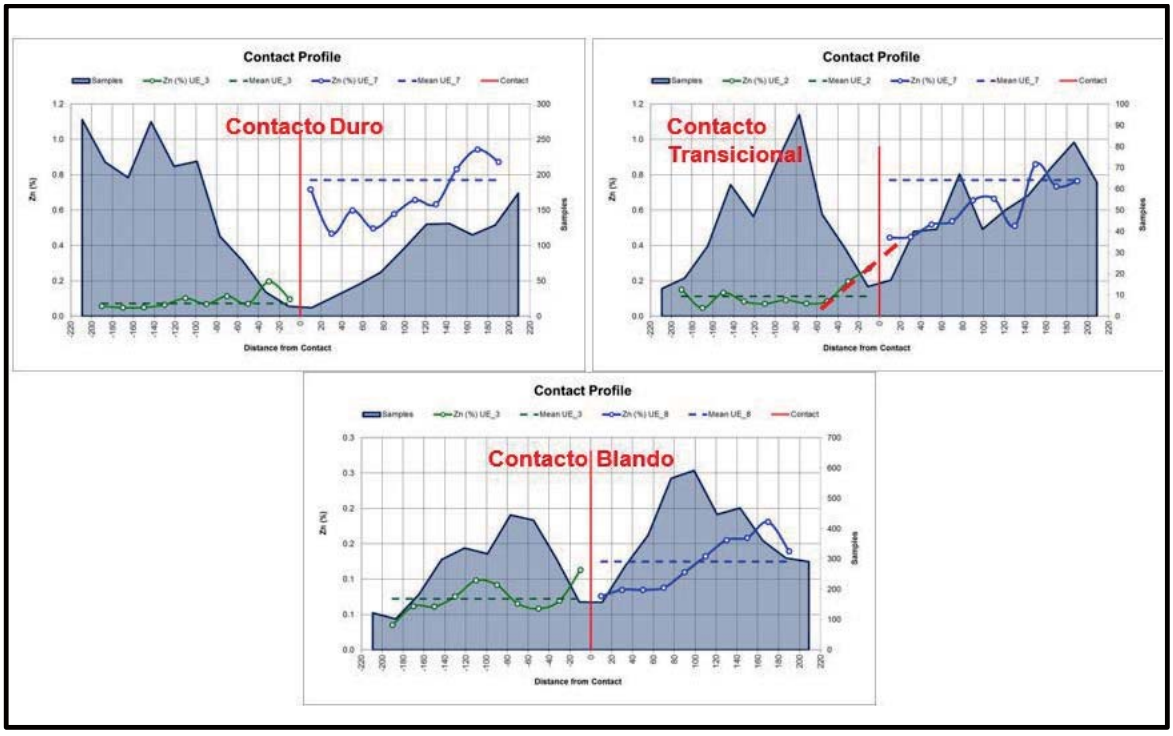
Showing hard contact between domains 3 and 4 (upper left), transitional contact between domains 1 and 3 (upper right) and soft contact between domains 2 and 3 (lower).

Figure 35: Example of contact analysis plot for As%

Table 28: Contact type for Zn%

UE	1	2	3	4	5	6	7	8	9	10
1		D	D	D	D	D	D	D	D	D
2			D	D	D	D	T	D	D	D
3				D	D	D	D	B	D	D
4					D	D	T	D	D	T
5						D	B	D	D	D
6							T	D	D	D
7								T	B	D
8									D	T
9										D
10										

Contact Types: D = hard; T = transitional; B = soft



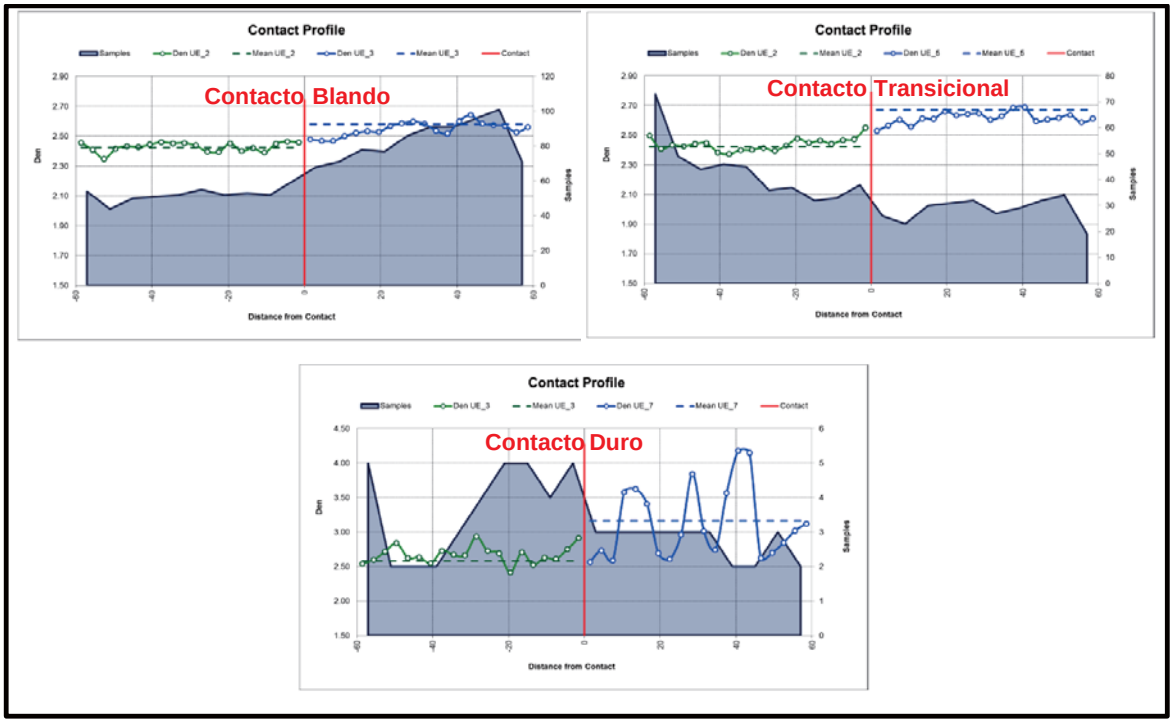
Showing hard contact between domains 3 and 7 (upper left), transitional contact between domains 2 and 7 (upper right) and soft contact between domains 3 and 8 (lower).

Figure 36: Example of contact analysis plot for Zn%

Table 29: Contact type for density

UE	1	2	3	4	5	6	7
1		T	T	D	D	D	D
2			B	T	T	D	D
3				T	B	T	D
4					T	D	D
5						B	T
6							D
7							

Contact Types: D = hard; T = transitional; B = soft



Showing hard contact between domains 2 and 3 (upper left), transitional contact between domains 2 and 5 (upper right) and soft contact between domains 3 and 7 (lower).

Figure 37: Example of contact analysis plot for density

3.9 Grade estimation

Grade interpolation by Ordinary Kriging was implemented using a combination of hard, transition and soft boundary (Section 3.8.1) conditions for each of the estimation domains. The process of estimation involved three passes.

Kriging was based on the 4.5 m composites for CuT% and 10.5 m composites for all other elements with the exception of Density that used the original raw sample measurements.

Kriging was performed for CuT%, Soluble Copper (CuAS and CuASCN), Mo%, Ag g/t, Au g/t, Pb%, As%, Zn% and Density.

The search distance was progressively increased for each pass to enable estimation of more blocks in the block model. Other considerations were the minimum and maximum number of samples used per octant and the maximum number of samples per drill hole. Table 30 provides the overall search distances for each kriging pass. These distances have been applied every domain and every variable being interpolated. Other search parameters used are tabulated in Table 31.

Table 30: Overall search distances used for all elements by pass

UE	Axis	Pass 1	Pass 2	Pass 3	Pass 4
All	Major	60	120	240	360
	Semi	60	120	240	360
	Minor	30	60	120	180

Table 31: Search parameters used for estimation for Cut/Ag/Zn/As

UG	Pass	Min Comps	Max Comps	Max Samps Per Oct	Outlier Treatment	HYR Radius	Max Samp Per DH
1	1	5/4/4/4	12/12/12/12	2/-/-/2	-/Cap/Yes/Yes	40 × 40 × 20/-/30 × 30 × 22.5/10 × 10 × 7.5	-/3/3/2
	2	6/4/4/4	14/12/12/12	2/-/-/2	-/Cap/Yes/Yes	40 × 40 × 20/-/30 × 30 × 22.5/10 × 10 × 7.5	-/3/3/2
	3	6/4/4/4	16/16/16/16	3/-/-/-	Cap/Cap/cap/-	40 × 40 × 20/-/-/-	3/2/2/1
	4	4/4/4/4	24/16/16/16	3/-/-/-	Cap/Cap/cap/-	40 × 40 × 20/-/-/-	-/2/2/1
2	1	5/4/4/4	12/12/12/12	2/-/-/-	-/-/Yes/Yes	40 × 40 × 20/-/30 × 30 × 22.5/10 × 10 × 7.5	-/3/3/3
	2	6/4/4/4	14/12/12/12	2/-/-/-	-/-/Yes/Yes	40 × 40 ×/-/30 × 30 × 22.5/10 × 10 × 7.5	-/3/3/3
	3	6/4/4/4	16/16/16/16	3/-/-/-	Cap/Cap/cap/-	-/-/-/-	3/2/2/2
	4	4/4/4/4	24/16/16/16	3/-/-/-	Cap/Cap/cap/-	-/-/-/-	-/2/2/2
3	1	5/4/4/4	12/12/12/12	2/-/-/2	-/-/-/Yes	60 × 60 × 30/-/-/10 × 10 × 7.5	3/3/3/2
	2	6/4/4/4	14/12/12/12	2/-/-/2	-/-/-/Yes	60 × 60 × 30/-/-/10 × 10 × 7.5	3/3/3/2
	3	6/4/4/2	16/16/16/16	3/-/-/-	Cap/Cap/cap/-	60 × 60 × 30/-/-/-	3/2/2/1
	4	4/4/4/2	24/16/16/16	3/-/-/-	Cap/Cap/cap/-	60 × 60 × 30/-/-/-	-/2/2/1
4	1	5/4/4/4	12/12/12/12	2/-/-/-	-/-/-/Yes	60 × 60 × 30/-/-/10 × 10 × 7.5	3/3/3/3
	2	6/4/4/4	14/12/12/12	2/-/-/-	-/-/-/Yes	60 × 60 × 30/-/-/10 × 10 × 7.5	3/3/3/3
	3	6/4/4/4	16/16/16/16	3/-/-/-	Cap/Cap/cap/-	-/-/-/-	3/2/2/2
	4	4/4/4/4	24/16/16/16	3/-/-/-	Cap/Cap/cap/-	-/-/-/-	-/2/2/2
5	1	5/4/4/	12/12/12/	2/-/-/	-/Cap/Yes/	60 × 60 × 30/-/30 × 30 × 22.5/	3/3/3/
	2	6/4/4/	14/12/12/	2/-/-/	-/Cap/Yes/	60 × 60 × 30/-/30 × 30 × 22.5/	3/3/3/
	3	6/4/4/	16/16/16/	3/-/-/	Cap/Cap/cap/	-/-/-/	3/2/2/
	4	4/4/4/	24/16/16/	3/-/-/	Cap/Cap/cap/	-/-/-/	-/2/2/
6	1	5/4/4/	12/12/12/	2/-/-/	-/Cap/Yes/	60 × 60 × 30/-/30 × 30 x22.5/	3/3/3/
	2	6/4/4/	14/12/12/	2/-/-/	-/Cap/Yes/	60 × 60 × 30/-/30 × 30 × 22.5/	3/3/3/
	3	6/4/4/	16/16/16/	3/-/-/	Cap/Cap/cap/	-/-/-/	3/2/2/
	4	4/4/4/	24/16/16/	3/-/-/	Cap/Cap/cap/	-/-/-/	-/2/2/
7	1	5/4/4/	12/12/12/	2/-/-/	-/Cap/cap/	60 × 60 × 30/-/-/	3/3/3/
	2	6/4/4/	14/12/12/	2/-/-/	-/Cap/cap/	60 × 60 × 30/-/-/	3/3/3/
	3	6/4/4/	16/16/16/	3/-/-/	Cap/Cap/cap/	-/-/-/	3/2/2/
	4	4/4/4/	24/16/16/	3/-/-/	Cap/Cap/cap/	-/-/-/	-/2/2/
8	1	5/4/4/	12/12/12/	2/-/-/	-/Cap/cap/	60 × 60 × 30/-/-/	3/3/3/
	2	6/4/4/	14/12/12/	2/-/-/	-/Cap/cap/	60 × 60 × 30/-/-/	3/3/3/
	3	6/4/4/	16/16/16/	3/-/-/	Cap/Cap/cap/	60 × 60 × 30/-/-/	3/2/2/
	4	4/4/4/	24/16/16/	3/-/-/	Cap/Cap/cap/	60 × 60 × 30/-/-/	-/2/2/
9	1	5/4/4/	12/12/12/	2/-/-/	-/Cap/Yes/	40 × 40 × 20/-/10 × 10 × 7.5/	3/3/3/
	2	6/4/4/	14/12/12/	2/-/-/	-/Cap/Yes/	40 × 40 × 20/-/10 × 10 × 7.5/	3/3/3/
	3	6/4/4/	16/16/16/	3/-/-/	Cap/Cap/cap/	-/-/-/	3/2/2/
	4	4/4/4/	24/16/16/	3/-/-/	Cap/Cap/cap/	-/-/-/	-/2/2/

UG	Pass	Min Comps	Max Comps	Max Samps Per Oct	Outlier Treatment	HYR Radius	Max Samp Per DH
10	1	5/4/4/	12/12/12/	2/-/-/	-/Cap/Yes/	60 × 60 × 30/-/10 × 10 × 7.5/	3/3/3/
	2	6/4/4/	14/12/12/	2/-/-/	-/Cap/Yes/	60 × 60 × 30/-/10 × 10 × 7.5/	3/3/3/
	3	6/4/4/	16/16/16/	3/-/-/	Cap/Cap/cap/	-/-/-/	3/2/2/
	4	4/4/4/	24/16/16/	3/-/-/	Cap/Cap/cap/	-/-/-/	-/2/2/
11	1	5	12	2	-	40 × 40 × 20	3
	2	6	14	2	-	40 × 40 × 20	3
	3	6	16	3	Cap	-	3
	4	4	24	3	Cap	-	-

3.9.1 High-grade cutting

Definition and control of high grade outlier samples is a critical and necessary step in most interpolations, helping to avoid over-estimation of grades.

A combination of two approaches were used at Toromocho:

- Capping – In this approach anomalous values were defined as the upper 1% of the cumulative probability distribution plots. Capping considers outliers globally.
- Restraining – In this approach the influence of high grades are spatially restrained. Outliers values for re-straining purposes were defined by a cross-validation approach in that each sample position is estimated using average of neighbouring samples but excluding the sample being estimated (true value). If the true value is higher than the two standard deviation of samples within the neighbourhood, then that sample is flagged as an outlier. Samples defined as a restraining outlier are controlled using High Yield (HYR) approach that restricts the influence of such samples to within 2 to 3 blocks in the neighbourhood.

Table 32 provides summary of the high grade capping thresholds used for estimation purposes.

Although high-grade cutting is considered by Golder as essential. Application of cutting or re-straining on penalty elements such as As% and Zn% may equally cause undesirable levels of under-estimations.

Golder recommends further sensitivity analysis to fine tune the level of high grade control on penalty elements.

Table 32: High grade capping thresholds used for various domains and variables

UE	CuT%	Ag G/t	As%	Zn%
1	1.11	32.12	0.36	0.57
2	0.85	46.55	0.33	0.94
3	2.93	52.88	0.29	1
4	2.65	72.73	0.02	1.85
5	2.45	51.44		0.61
6	2.03	37.36		1.22
7	1.91	102.63		4.61
8	2.33	23.95		1.29
9	0.4	14.42		0.89

UE	CuT%	Ag G/t	As%	Zn%
10	2.07	41.62		0.55
11	1.45			

3.10 Block model validation

This section contains details of a series of validation checks undertaken by Golder on the Mineral Resource block model against the 4.5 m and 10.5m composite data.

3.10.1 Global statistics

Global statistics of the block model (split by Domain) were compared to cell-declustered 4.5 m composites for CuT% estimates and 10.5 m composite statistics for other elements, to check for reproduction of global mean grades. Table 33 shows an example of such statistical comparison for CuT%.

The initial comparisons indicated that the block model grades are largely lower than the composite averages. This is an expected behaviour due to the application of high grade cutting and restraining.

As a general rule, block average grade estimates should be within ±10% when compared to the corresponding composite grades. With the exception of domain 9, which is a very low grade domain, all other domains appear to perform well against the composite averages.

3.10.2 Swath plots

Swath plots are used to assess the block model estimates for global bias. The estimates should have a close relationship to the drill hole composite data used for estimation. The plots are useful for assessing average grade conformance, and also to detect for potential interpolation issues. The relationship between model and sample panel averages was assessed in the form of scatter plots and Q-Q plots. This allows some assessment of the smoothing effect of the performed interpolation.

Swath plots were produced for each domain and each element for block model overlaid with composite data. An example is shown in Figure 38.

All the swath plot validations show good conformance for material below 0 m RL. A marked difference is noted for blocks above 0 m RL where average block grades are lower than composite data. Although the differences are lower for the Cut Au_0.9 composites the conservatism of the model Au grade for material above 0 m RL remains.

The swath plot validations are acceptable in confirming the reproduction of local grade variations below 0 m RL. Above this level the block model appears to be lower than the data supplied.

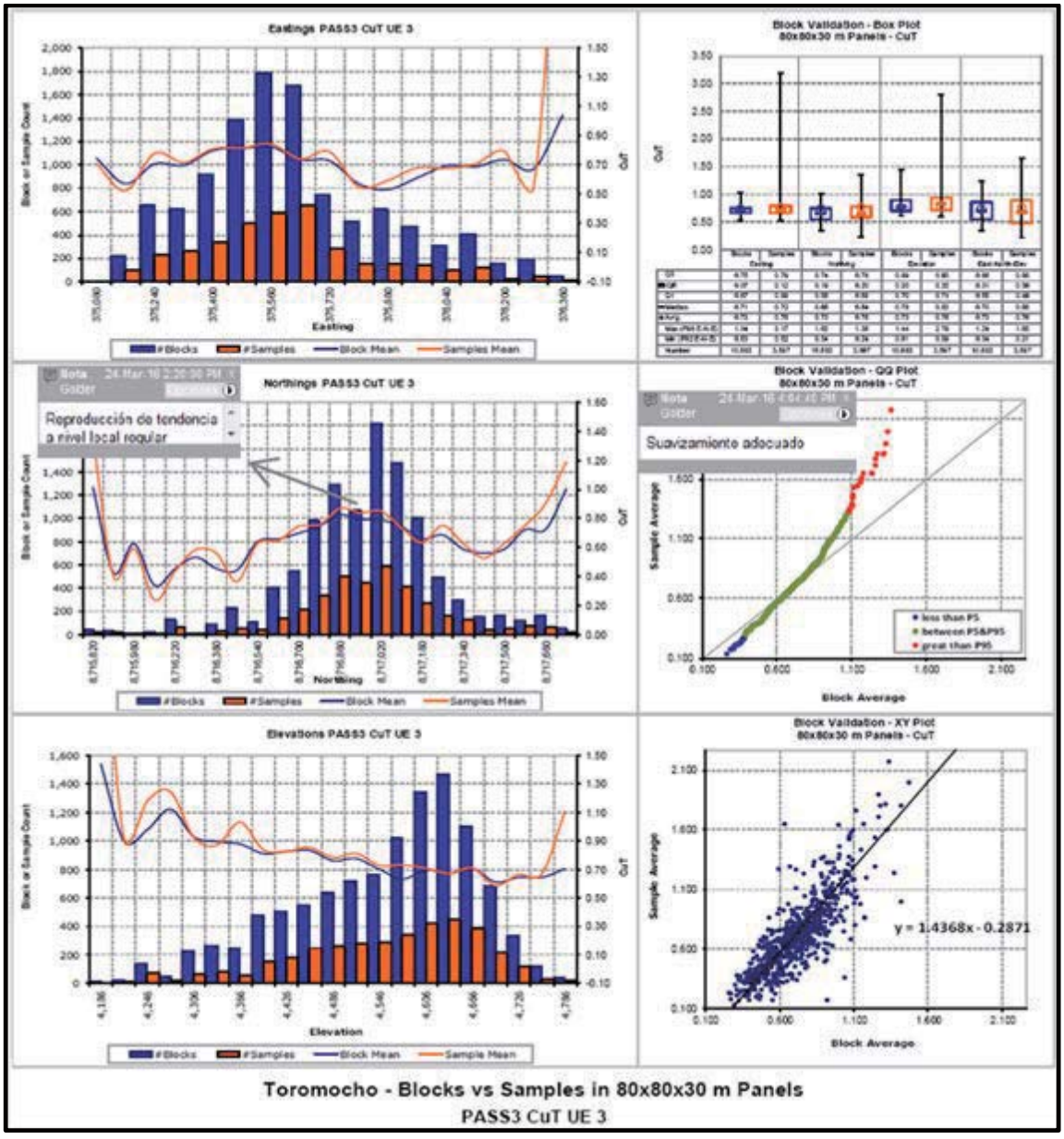


Figure 38: Estimation domain 3 – swath plots for CuT

Table 33: Global statistical comparison between block grades and 4.5 m composite grades (declustered) split by domain for CuT%

UE	No. Observations		Minimum		Maximum		Mean		Relative Difference% (OK-DH)/DH
	Comps	Blocks	Comps	OK	Comps	OK	Comps	OK	
1	502	4788	0.00	0.00	4.24	1.06	0.28	0.26	-6.8%
2	2221	15040	0.00	0.00	4.28	1.30	0.07	0.06	-16.9%
3	3718	18230	0.01	0.15	7.00	2.51	0.75	0.72	-3.6%
4	559	7604	0.01	0.10	8.00	3.24	0.69	0.66	-5.3%

UE	No. Observations		Minimum		Maximum		Mean		Relative Difference% (OK-DH)/DH
	Comps	Blocks	Comps	OK	Comps	OK	Comps	OK	
5	2361	13774	0.00	0.01	4.81	2.63	0.48	0.46	-3.2%
6	406	2832	0.00	0.01	3.67	1.70	0.41	0.38	-6.0%
7	2219	16377	0.00	0.01	5.46	1.91	0.48	0.46	-3.7%
8	513	2457	0.00	0.03	4.64	2.39	0.53	0.40	-25.2%
9	7113	148793	0.00	0.00	8.00	2.37	0.10	0.08	-12.0%
10	10309	93817	0.01	0.09	8.00	3.23	0.52	0.50	-3.4%
11	11358	169081	0.00	0.03	8.00	3.02	0.33	0.31	-7.3%

3.11 Metallurgical factors and assumptions

The JORC Code (2012 edition) clearly states that all reports of Mineral Resources must satisfy the requirement that there are reasonable prospects for eventual economic extraction. The term 'reasonable prospect for eventual economic extraction' implies an assessment (albeit preliminary), by the Competent Person, in respect to all matters likely to influence the prospect of economic extraction. Included in this is the basis for assumptions or predictions regarding the metallurgical amenability.

The process recovery estimate has assumed a metallurgical copper recovery of 80 to 85% (average 82%). The actuals to date suggest an average copper recovery of approximately 70%. Latest recovery factors reported by the processing plant for 2016 suggests and improved recovery to 72%.

The improvement required from the current ±70% metallurgical recovery to the planned average 82% recovery is dependent upon a series of steps in the improving the grinding circuit, optimising reagents, and using CMS in the cleaners for talc depression.

Although assumed average recovery of 82% is considered to be optimistic, Golder believes that the condition of reasonable prospects for eventual economic extraction has already been proven by current operation.

3.12 Cut-off grade

A cut-off grade of 0.2% CuT has been used for Mineral Resource reporting purposes. The current mine designs have not used any specific cut-off grade and the Mineral Reserve reporting has been based on average grade of mineralised material within designed increments. However, it is noted that on

The cut-off grade, expressed as Cu Equivalent (EqCu) per tonne of rock, was calculated using the following formula:

Cut-off Grade (CuEq%) Breakeven = (Mining Cost ($/t) + Milling Cost ($/t) + Admin Cost ($/t))/(Cu Price ($/lb) – Penalties ($/lb)) * Recovery factor * lb to Mt factor)

Cut-off Grade (CuEq%) = (1.44 + 6.33 + 1.2)/(2.74 – 0.73) * 0.82 * 2204.62 = 0.25%

Cut-off Grade (CuEq%) Marginal = (Milling Cost ($/t) + Admin Cost ($/t))/(Cu Price ($/lb) – Penalties ($/lb)) * Recovery factor * lb to Mt factor)

Cut-off Grade (CuEq%) = (6.33 + 1.2)/(2.74 – 0.73) * 0.82 * 2204.62 = 0.21%

Accounting for the Mo% and Ag g/t components in the CuEq cut-off a breakeven cut-off grade of 0.2% CuT is supportable.

3.13 Environmental factors and assumptions

JORC 2012's states that requirement of reasonable prospects for eventual economic extraction also extends to environmental factors and assumptions. The assumptions are related to the possible waste and process residue disposal options. As a result, classification and definition of the Mineral Resource requires an understanding of the potential environmental impacts of the mining and processing operation.

All the required mining and processing permits are in place. In November 2012, Behre Dolbear Asia carried out an update of their April 2012 Independent Technical Review ITR). The focus was primarily on social, permitting, and environmental issues. Golder is not aware of any high risk environmental issues. The only outstanding issue is the resettlement of small number of residents remaining behind in the old town of Morococha. This is currently being managed at mine level.

Golder believes that the overall risk to the project value is low.

3.14 Block model post-processing

The Toromocho block model is a model constructed by proportion of each geology code and estimation domain code for each block. The following post processing steps were carried out;

- Un-estimated blocks within the LIG were assigned default grades equal to the median value of pass 3 and 4 estimates and also were assigned pass 5 for easy identification.
- Additionally all blocks corresponding to Colluvium were assigned detection limit values.
- The final estimates for each blocks were calculated by proportion weight of each domain category.
- CuT estimates re-adjusted using the following approach to Cus (i.e. CuAS + CuASCN) if the CuT estimate exceeds the CuS estimate;

$$If \quad \text{“CuS} > \text{CuT”}$$

$$\text{Asignar:} \quad \text{CuSf} = \text{CuT}$$

$$\text{CuASf} = \frac{CuAS}{CuS} * \text{CuSf}$$

$$\text{CuASCNf} = \frac{CuASCN}{CuS} * \text{CuSf}$$

3.15 Resource classification

Mineral Resource classification has been carried out using certain thresholds on estimation errors calculated on the quarterly and annual production parcel sizes. The approach amounts to defining the minimum drill spacing required to achieve certain levels of error of estimations on different size mining volumes (quarterly or annual size parcels). Steps involved are:

- Volumetric analysis of variability using indicator approach with specific cut-off grade
- Preparation of hypothetical data sets representing different drill spacing
- Calculation of kriging variances associated using CuT% variograms and different dill data spacing for various production volume sizes
- Determination of the kriging variance threshold that reflects a specific expected error on a production size volume.

Details of the classification approach is provided in report "*149 215 1105IT017_revB June 2016*".

Figure 39 provides the calculated theoretical error of estimation using various drill spacing on quarterly and annual size volumes. The two horizontal lines reflect the expected thresholds conforming to Measured and Indicated material.

The relative drill spacing was calculated for each block and converted to an equivalent mesh. The results were visually validated (see Figure 40 left) and subsequently used to arrive with an initial classification of Measured, Indicated and Inferred. Final classification results were smoothed using a 5 m × 5 m × 3 m window. Figure 40 right provides example of the final classification used.

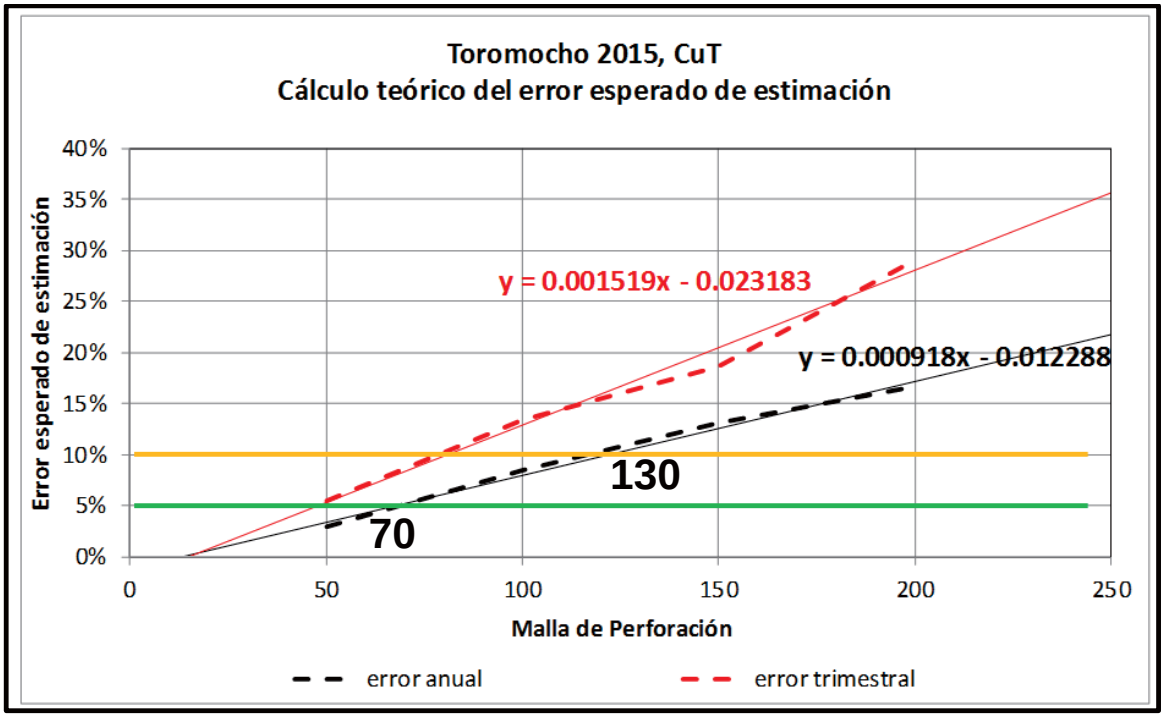


Figure 39: Theoretical error of estimation and the thresholds used for Measured and Indicated

Table 34: Minimum drill spacing thresholds used as a guide for classification to Measured and Indicated

Resource Category	Drill Spacing
Measured	70
Indicated	130
Inferred	LIG

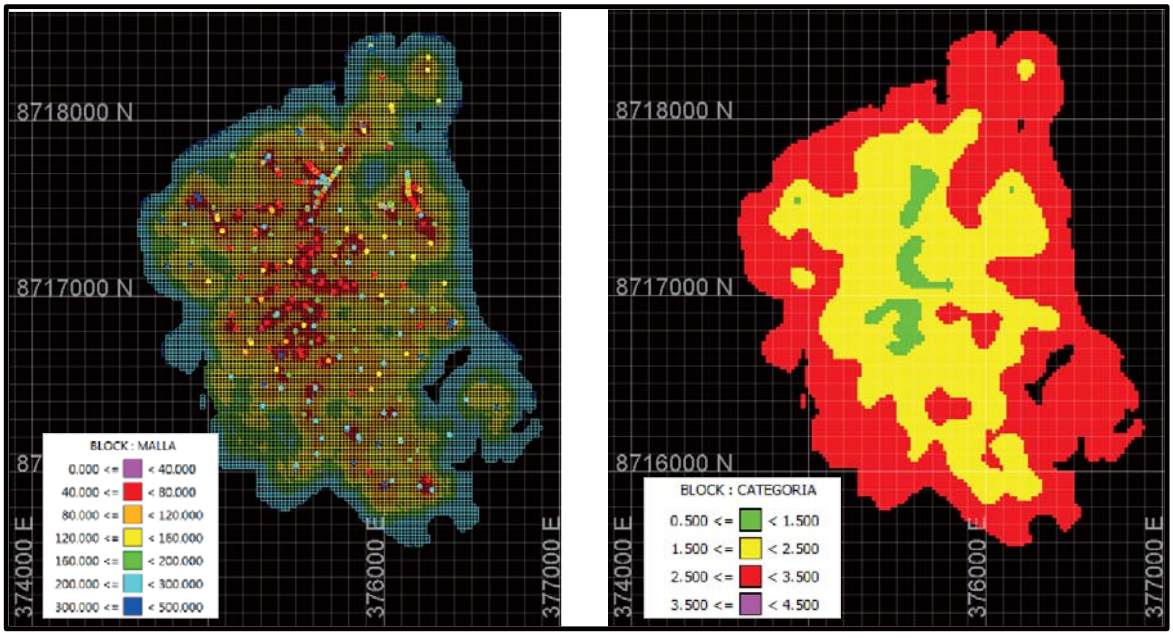


Figure 40: Example plan view of calculated equivalent mesh from block model (left) and final smoothed classification (right)

3.16 Mineral Resource statement

The requirement for reasonable prospects for eventual economic extraction under JORC Code (2012 edition), also necessitates for the Mineral Resources report to be confined to within an economically minable pit limit that satisfies potential future economic extraction.

In order to establish the required economic envelope, a pit optimisation was carried out using Whittle4X® software and the economic parameters provided by Chinalco and documented in "*149 215 1105IT017_revB June 2016*".

The most recent available published Mineral Resources are those declared as part of the Toromocho Project Feasibility Study and last published on the 31st December 2015 in the annual report of the Company. The Mineral Resources were estimated by Independent Mining Consultants for Aker Kavarener as part of the feasibility study. Golder has reviewed the Mineral Resources for the Toromocho Project and is satisfied that the overall methodology employed for the Mineral Resources estimation is in compliance with JORC 2012 requirements.

Table 35 provides a summary of Mineral Resources as at 31 December 2015 mine position using 0.2% CuT cut-off grade. **No account of existing underground workings has been made.**

Table 35: Mineral resources as at 31 December 2015

JORC Measured and Indicated Mineral Resources Category	Tonnes	Grade			Metal Content		
		Copper	Molybdenum	Silver	Copper	Molybdenum	Silver
	(Millions)	(%)	(ppm)	(gpt)	(Mt)	(tonnes)	(tonnes)
Measured	156	0.41	140	6.2	0.64	22,000	1,000
Indicated	364	0.36	120	6.1	1.31	44,000	2,200
Total	**520**	**0.38**	**130**	**6.2**	**1.95**	**66,000**	**3,200**

Mineral Resources are reported as Exclusive of Ore Reserves

JORC Inferred Mineral Resources Category	Tonnes	Grade			Metal Content		
		Copper	Molybdenum	Silver	Copper	Molybdenum	Silver
	(Millions)	(%)	(ppm)	(gpt)	(Mt)	(tonnes)	(tonnes)
Inferred	174	0.46	150	11.5	0.80	26,000	2,000

Mineral Resources are reported as Exclusive of Ore Reserves

4.0 MINING

4.1 Introduction

The Toromocho Project is located in central Peru, approximately 140 kilometres (km) east of Lima, Peru in the Morococha mining district, Yauli Province, Junin Department. The area adjacent to the Toromocho mine is presently being worked by the Pan American Silver company at its Morococha underground silver mine. The Yauli province has a history of silver mining going back many decades (Section 2.3) that has provided the area with a comprehensive infrastructure of paved roads and a primary rail link.

The paved main highway from Lima passes through Morococha. The region has steep topography with elevations over the deposit ranging from 4700 metres (m) to over 4900m above sea level. The valleys in the area are of glacial origin.

The centre of the Toromocho deposit is about 2.5 km from the town of Morococha in the Morococha mining district. Lima to Morococha is about 142 km by road and about 173 km by rail. The former copper smelter plant at La Oroya is no longer in operation, although at the time of the feasibility study it was anticipated that the La Oroya smelter may have been able to take some of the copper concentrate from Toromocho. Concentrate from the Toromocho mine is now exclusively railed to the coast using the central railway (Figure 41).

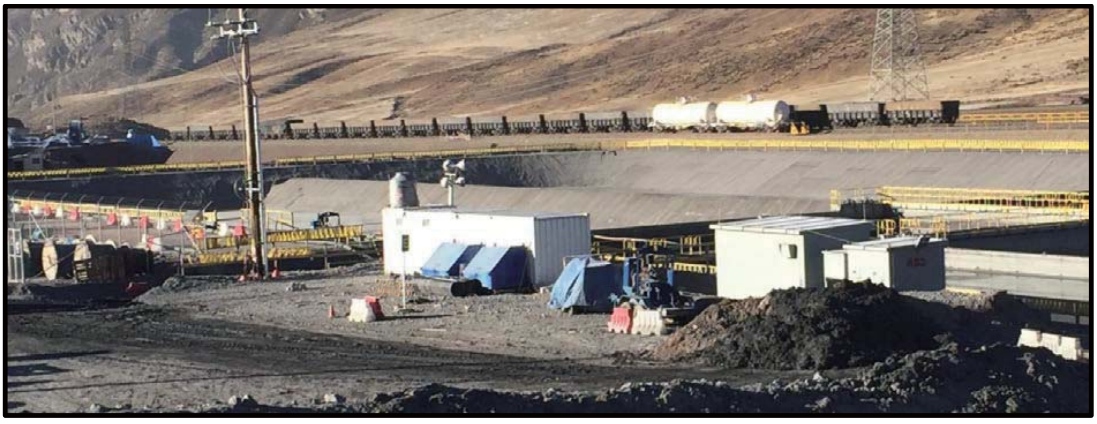


Figure 41: Train loaded with concentrate on central railway line adjacent to Toromocho processing facility

Waste stripping and ore processing commenced in December 2013 following the construction of mining access and the completion of the processing plant facilities. Tonnage ramp-up at the process plant has been relatively rapid since June 2015, although throughput rates are impacted negatively if the Potassic ore zone is not adequately fragmented at the blasting stage. The Potassic is notably harder than the Skarn or Hornfels ore zones and requires a markedly higher blasting powder factor and smaller drill pattern to ensure satisfactory throughput rates through the SAG mill and Ball Mills.

4.2 Mine planning

In 2015 Toromocho had the Life of Mine estimated reserves reviewed by Tetra Tech using updated cost inputs and price estimated for the optimisation process (Table 36). Long term price forecasts have been used for Gold, Silver and Molybdenum with the final pit shell being selected at a revenue factor (RF) of 0.84. The initial phases within the life of mine represent higher value (lower RF) pit shells within the optimisation.

Table 36: Tetra Tech 2015 Whittle optimisation parameters

Item	Unit	Value
Mined material	US$/t mined	1.1463
Bench Increment per 15m bench	Cents per bench	2.5c

Item	Unit	Value
Mill Processing Cost	US$/t Ore Milled	6.33
General and Administration	US$/t Ore Milled	1.20
Copper Price	US$/Lb	2.74
Molybdenum	US$/Lb	10.00
Silver Price	US$/t.oz	18.00
Payable Copper	CuT %	96.5
Payable Molybdenum	%	100
Payable Silver	%	90
Concentrate grade	%	30
TC/RC and penalties – see Figure 42		

It is noted that the bench incremental mining cost of US 2.5c per 15m bench is in line with expectations for the current diesel price and ultra-class truck in use at Toromocho. The base unit mining cost is some 15% higher than that estimated over the LOM compared to the FS report; however the estimate provided here is more appropriate given the degree of blending required to ensure minimisation of the talc quantity being delivered to the process plant during any period.

Refining and Selling cost parameters for 2015 optimisation inputs

Selling		
TC - Cu		
As in Conc ≤ 0.5 %	US$/dmt conc	107.0
0.5% < As in Conc ≤ 1.0%	US$/dmt conc	180.0
1.0% < As in Conc ≤ 1.5%	US$/dmt conc	230.0
1.5% < As in Conc ≤ 3.0%	US$/dmt conc	270.0
RC - Cu		
As in Conc ≤ 0.5 %	US$/lb Cu pay	0.107
0.5% < As in Conc ≤ 1.0%	US$/lb Cu pay	0.180
1.0% < As in Conc ≤ 1.5%	US$/lb Cu pay	0.230
1.5% < As in Conc ≤ 3.0%	US$/lb Cu pay	0.270
Selling - Cu		
6% of payable	US/lb	0.1586
RC - Ag		
0.5 per oz payable Silver	US/t.oz	0.50
Selling - Mo		
Laboratory	US$/dtm MoO_3	71.0
Logistics	US$/dtm MoO3	50.0
Freight	US$/dtm MoO3	80.0

Figure 42: Tetra Tech 2015 refining and selling cost parameters

The arsenic penalties in concentrate have been handled as both a treatment cost per tonne of concentrate and a deduction per unit price for the copper in concentrate; this reflects the current market position for heavy penalties for arsenic in concentrate. The arsenic in the copper concentrate is believed to be primarily associated with the Enargite mineral (Cu_3AsS_4) and appears to be unevenly distributed throughout the initial mining phases but coincident with relatively high-grade copper zones. For example, the grade tonnage curve within the first two mining phases shows a peak zone of arsenic over a relatively small tonnage of ore but with copper grade in the range of 1% (Figure 43). It would obviously be advantageous to separately stockpile this ore and consider separate processing or blending in with lower Arsenic level ore at a future point in the mine life.

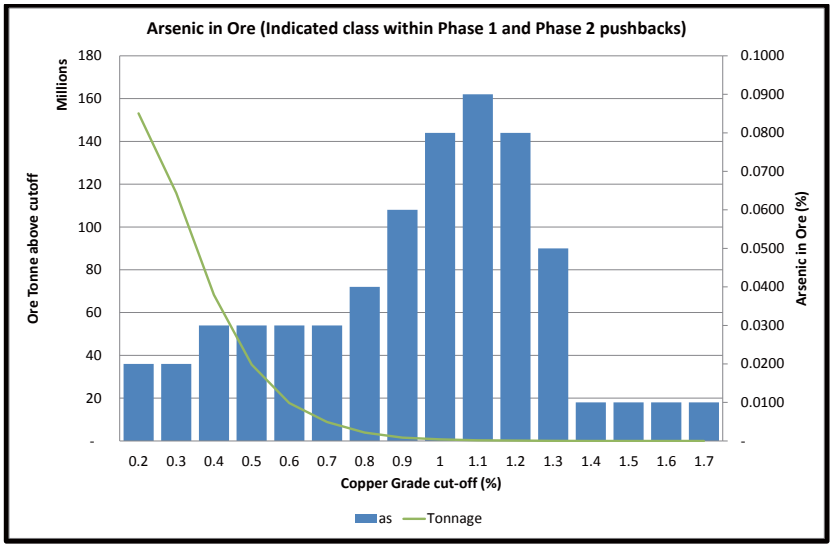


Figure 43: Example of Arsenic levels in ore within phase 1 and 2 by copper grade cutoff

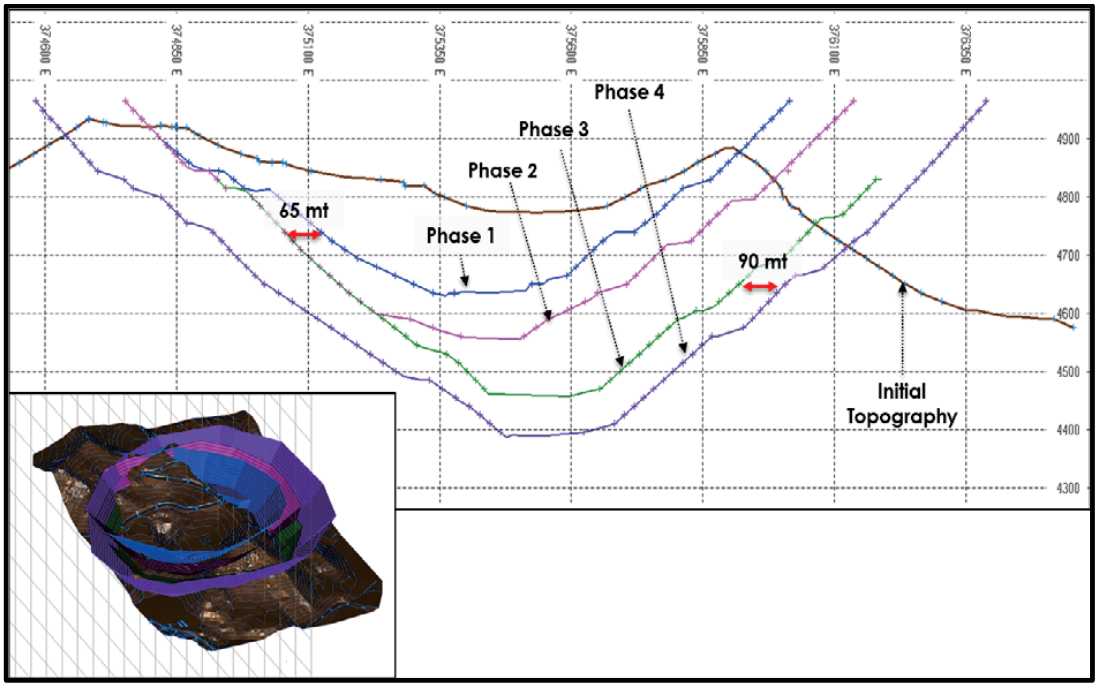
Golder considers that the LOM pit optimisation method and inputs are appropriate and agrees with the methodology and phase selection within the ultimate LOM pit shell. Initial phases within the LOM pit represent markedly lower copper price points than the ultimate pit shell and this provide a degree of flexibility in that all subsequent phases do not have to be committed to at the commencement of operations.

4.2.1 Mine design criteria

The FS report had considered multiple pushbacks or phases within the LOM pit shell as a way of ensuring an adequate available blend of ore types and a practical approach to deferring the waste stripping within the pit.

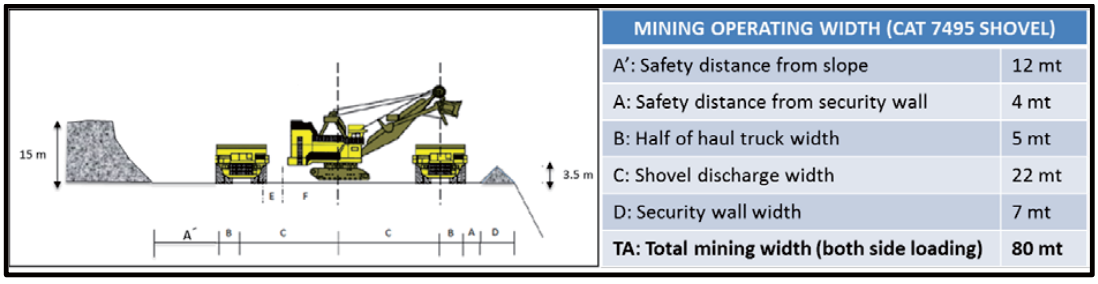
The phasing selected within the FS (Figure 44) appears appropriate; however as has been highlighted by the mine planning department on site some of the phases appear too tight for the size of shovel fleet that has been acquired on the mine. The minimum pushback distance on some of the planned phases is below the 160 m required for a practical pushback width with this size of equipment (Figure 45). It is however normal that for a mine with such a long mine life that detailed phase designs are only produced up to two or three phases in advance as geotechnical and structural information will continue to evolve as the mining operations progress.

Golder would agree that a planned minimum practical overall pushback width of 200 m would be appropriate for this class of equipment to ensure efficient and safe loading operations, with a minimum panel width of 80 m being required for the loading operations on any panel.



Source: 160202 REVISION PLAN IMC R4.pptx

Figure 44: FS phase widths for Toromocho



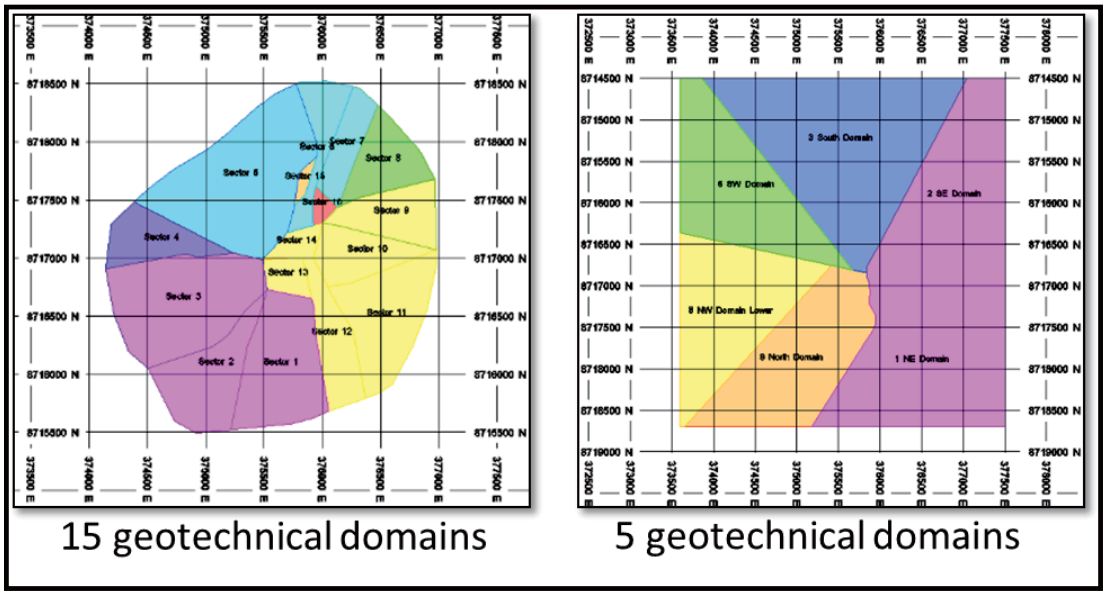
MINING OPERATING WIDTH (CAT 7495 SHOVEL)	
A': Safety distance from slope	12 mt
A: Safety distance from security wall	4 mt
B: Half of haul truck width	5 mt
C: Shovel discharge width	22 mt
D: Security wall width	7 mt
TA: Total mining width (both side loading)	**80 mt**

Source: 160202 REVISION PLAN IMC R4.pptx

Figure 45: Minimum panel width for Cat' 7495 rope shovel

4.3 Geotechnical

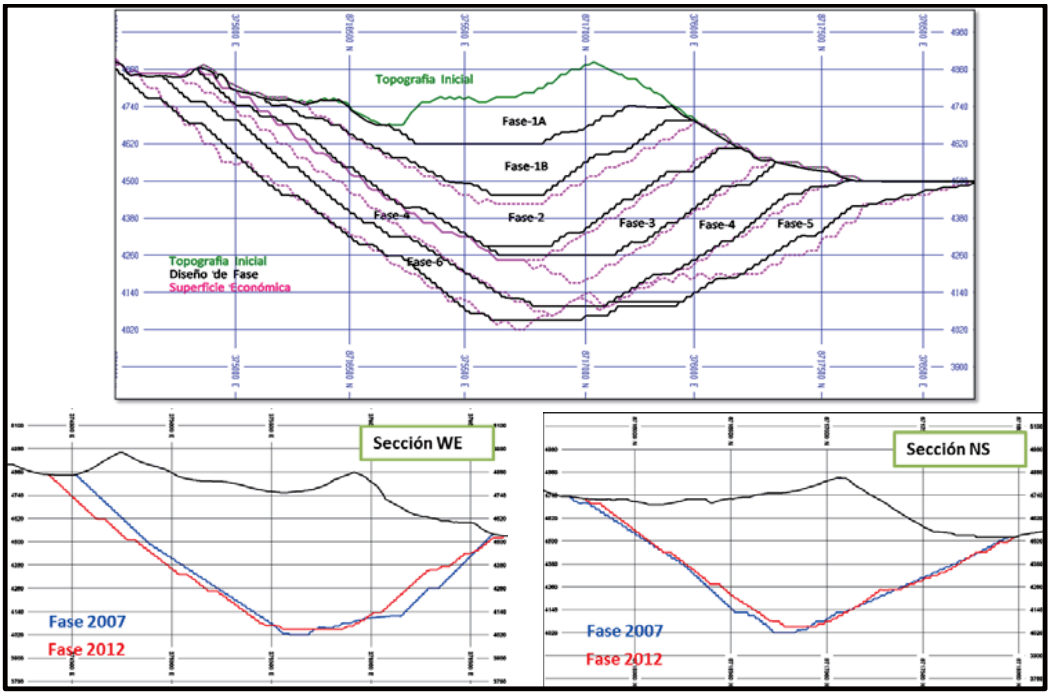
In 2014, the number of geotechnical zones associated with the open pit was reduced from 15 separate zones to five geotechnical zones (Figure 46). The simplification of the geotechnical zones into five regions simplifies the planning and design process for the pit walls.



Source: "160202 REVISION PLAN IMC R4.pptx"

Figure 46: Simplification of geotechnical zones at Toromocho open pit

The overall changes resulting from the updated geotechnical zones necessitated re-design of the pit phases; however comparisons between the 2007 mine design phases and the updated 2014 mine design phases show a minimal change with some ore losses and some ore gains (Figure 47).

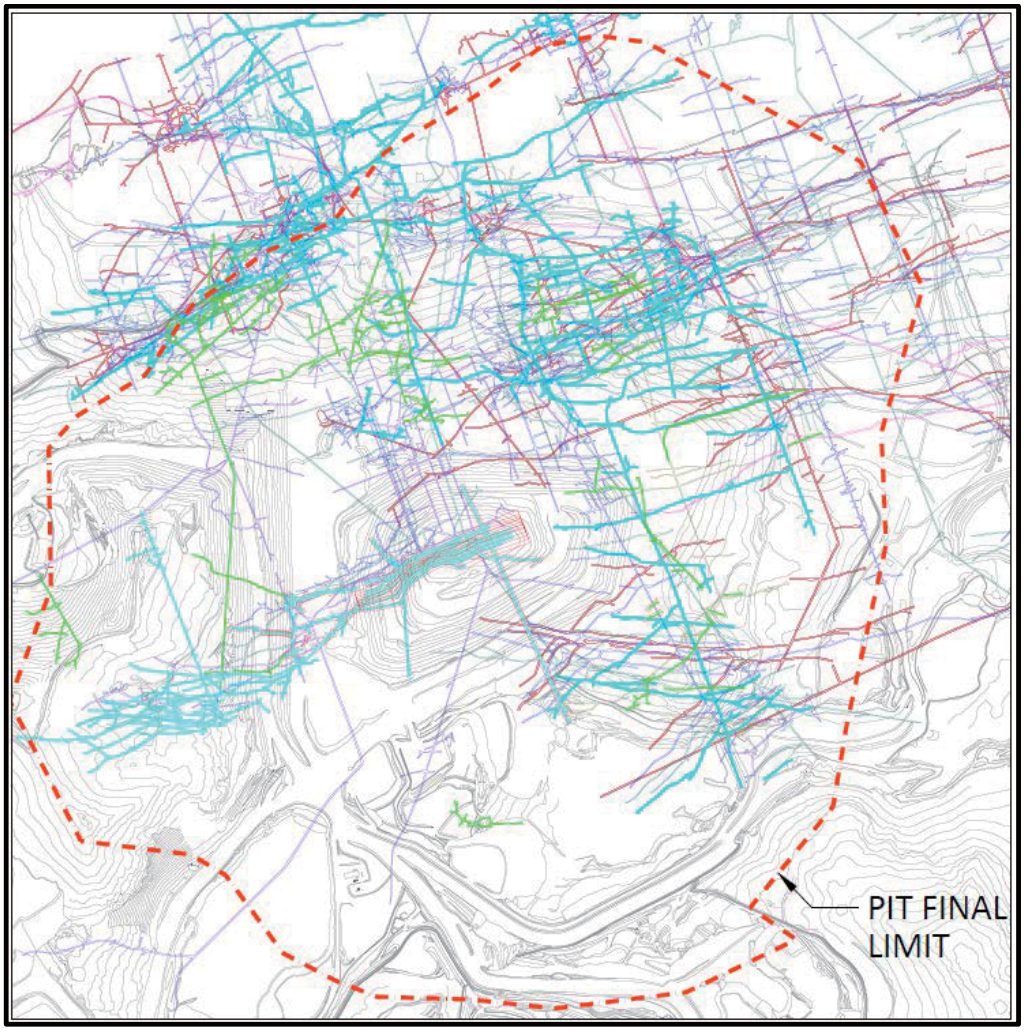


Source: "160202 REVISION PLAN IMC R4.pptx"

Figure 47: Toromocho phase redesigns 2007 c/w 2014 updated designs

Golder believes that the geotechnical slope parameters established by CNI are appropriate and have been derived from adequate due process. As further information is obtained with progressive mining, the design parameters will continue to be reassessed and adjusted accordingly throughout the mine life. Localised failures, particularly within the Skarn material can be expected and early identification and careful monitoring of these regions will be required to ensure operator and equipment safety.

An issue that will require careful ongoing management over the life of the operation is the presence of historical underground workings from the silver mining that has been executed in that area. Many of the historic workings directly intersect the planned open pit (Figure 48). Particular care with regard to void management is needed to protect equipment and personnel. Void management plans and working procedures for the approach to or working through pre-existing underground workings will require ongoing enforcement and careful management. One additional point of note is the increased probability of scrap steel entering the ore stream when mining through old workings. Small items such as roof-bolts and relatively small pieces of scrap metal cannot readily be seen in the blasted ore piles and do not always get collected by the belt magnets or picked up by the over band metal detectors on the conveyor belts.



Source: “GESTION DE RIESGOS GEOTECNICOS EN MINA JUNIO 2016.pptx”

Figure 48: Historic underground workings on edge of Toromocho open pit

4.4 Production scheduling

The updated LOM plan from 2015 (Figure 49) shows a planned ore feed in line with current plant capacity and from 2019 onwards the expanded plant capacity is assumed.

Total material moved remains relatively consistent over the period of 2018 to 2029 approximating some 155Mt p.a. total movement. However there is a requirement to stockpile and reclaim some 325Mt of ore over the LOM plan. The stockpiling includes some 169Mt of 'complex' (high-As) ore. The high-As ore presently results in high penalty costs within the treatment and refining costs at the downstream smelter. Consideration to alternative processing methods for the high-As ore has been highlighted during the FS and further work is envisaged in this regard.

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
ORE TO CRUSHER																	
Tonnage	Ton	42,779	46,511	62,013	62,184	62,014	62,014	62,014	60,184	62,013	62,012	62,015	62,184	62,015	62,014	62,012	62,182
Cu	%	0.610	0.620	0.600	0.600	0.600	0.600	0.601	0.494	0.483	0.483	0.489	0.481	0.504	0.455	0.310	0.394
Ag	gr/Ton	6.42	7.19	6.20	5.71	5.42	5.75	6.05	7.11	6.51	6.42	6.04	5.49	5.52	5.65	6.58	5.52
Mo	%	0.015	0.012	0.018	0.021	0.024	0.025	0.029	0.021	0.020	0.013	0.015	0.019	0.028	0.026	0.029	0.014
WASTE																	
Tonelaje	Ton	50,873	52,617	16,353	19,938	43,223	46,040	62,998	81,039	72,232	62,771	73,860	86,292	53,960	61,992	32,541	37,196
TOTAL PRODUCTION																	
Tonelaje	Ton	93,652	99,128	78,366	82,122	105,237	108,055	125,012	141,223	134,245	124,783	135,875	148,476	115,975	124,007	94,554	99,379
ORE TO MID-GRADE STOCK																	
Tonnage	Ton	2,122	11,125	18,369	28,401	13,220	19,797	3,431						21,809			
Cu	%	0.361	0.391	0.389	0.399	0.386	0.387	0.340						0.788			
Ag	gr/Ton	4.893	5.329	5.216	5.549	4.679	4.131	4.238						7.596			
Mo	%	0.011	0.008	0.008	0.012	0.009	0.015	0.018						0.030			
ORE TO LOW-GRADE STOCK																	
Tonnage	Ton	15,181	34,258	45,180	28,258	26,308	15,803	13,635	8,439	14,727	25,637	16,118	4,945	11,667	5,976		
Cu	%	0.277	0.297	0.293	0.302	0.291	0.303	0.265	0.204	0.229	0.277	0.280	0.250	0.223	0.203		
Ag	gr/Ton	4.730	3.935	4.087	4.212	3.886	3.363	5.102	4.696	4.244	3.944	3.092	1.749	3.081	3.241		
Mo	%	0.006	0.005	0.007	0.008	0.008	0.009	0.008	0.008	0.011	0.009	0.007	0.012	0.024	0.015		
HIGH ARSENIC STOCK - NOT CONSIDERED IN ORE RESERVES																	
Tonnage	Ton	5,115	10,249	12,845	16,403	9,995	11,104	12,682	5,522	5,788	4,340	2,767	1,763	5,309	4,777	943	3,573
Cu	%	0.705	0.608	0.569	0.515	0.644	0.647	0.455	0.453	0.460	0.641	1.054	1.038	0.539	0.344	0.329	0.338
Ag	gr/Ton	11.923	14.748	14.657	14.293	17.039	14.693	13.409	14.103	11.077	13.085	17.192	11.914	12.353	10.168	6.202	9.291
Mo	%	0.016	0.013	0.011	0.008	0.015	0.021	0.010	0.012	0.020	0.009	0.010	0.018	0.031	0.014	0.010	0.014
TOTAL MINED MATERIAL																	
Tonelaje	Ton	116,070	154,760	154,760	155,184	154,760	154,760	154,760	155,184	154,760	154,760	154,760	155,184	154,760	108,730	85,467	69,063
TOTAL MOVED MATERIAL																	
Tonelaje	Ton	116,070	154,760	154,760	155,184	154,760	154,760	154,760	155,184	154,760	154,760	154,760	155,184	154,760	134,760	95,497	102,952

Source: 150118 Plan de Minado LOM EXP 2018.pptx

Figure 49: Summary material movement

Golder notes that the total required stockpiling capacity of some 325 Mt in three or more distinct locations will require a large footprint and careful management to avoid contamination and dilution.

From the 2007 FS designs through to 2016 there have been minor changes to the overall pit designs with the majority of modifications being targeted at improved geotechnical stability and achieving practical stage access. The most current revisions to the mining phases have been carried out by Tetra Tech in 2016. There are in total nine (9) phases designed for the Toromocho deposit over the mine life. The Ore Reserves (31st December 2015) contained within the final LOM pit amounts to 1 593 Mt of Proven and Probable classifications at a head grade of 0.459% Cu, 5.78 g/t Ag, and 0.017% Molybdenum (*source: "Informe Etapa II Estimación de Reservas Mina Toromocho_Rev0.pdf"*). There is an additional 130 Mt of Inferred Resource material contained within the LOM pit that may be converted to Indicated or better and has not been included within the Ore Reserves. The Tetra Tech mining study completed in December 2015, has to date not been published. Golder believes that the Tetra Tech study presented updated parameters to the IMC 2007 study, with the Tetra Tech study presenting a similar ore reserves albeit more favourable estimate to the IMC 2007 estimate. As the Tetra Tech study result is not published, Golder is of the view that it is acceptable and correct to use the Mineral Resources and Ore Reserves as declared in 2015 (based upon the 2007 study) as 1) it is in compliance with the JORC 2012 standard and 2) it shows a more conservative estimate when compared to the 2015 mining study.

The most recent available published Ore Reserves are those declared as part of the Toromocho Project Feasibility Study and last published on the 31st December 2015 in the annual report of the Company. The Ore Reserves were estimated by Independent Mining Consultants for Aker Kavarener as part of the

feasibility study. Golder has reviewed the Ore Reserves for the Toromocho Project and is satisfied that the overall methodology employed for the Ore Reserves estimation is in compliance with JORC 2012 requirements.

Table 37: Toromocho Ore Reserves at 31 December 2015

JORC Ore Reserve Category	Tonnes (Millions)	Grade			Metal Content		
		Copper (%)	Molybdenum (ppm)	Silver (gpt)	Copper (Mt)	Molybdenum (tonnes)	Silver (tonnes)
Proved	690	0.51	200	6.4	3.53	138,000	4,400
Probable	784	0.43	180	7.3	3.40	141,000	5,700
Total	**1,474**	**0.47**	**190**	**6.9**	**6.93**	**279,000**	**10,100**

The Ore Reserves for Toromocho have been estimated by Independent Mining Consultants using an industry-recognised methodology and approach.

Golder supports the Ore Reserves for the Toromocho project as declared at 31st December 2015.

A summary of the ore within each phase (Figure 50) shows that as would be expected the proportion of lower grade material is greater in the initial phases, this is a result of the later phases specifically targeting the deeper seated ores within the pit. The high-As level ores however do appear to be distributed more evenly throughout the mining phase and result in an average of some 10.6% of total ore contained within the LOM pit. Given the apparent dispersed nature of the high-As ore throughout the mining phases, adequate stockpiling capacity or an alternative treatment method will be required throughout the LOM.

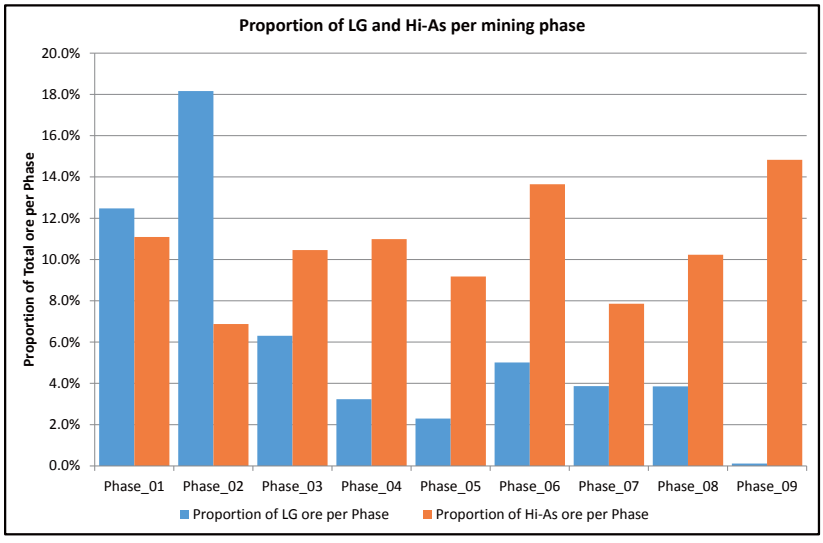


Figure 50: Proportion of high-arsenic ore and low grade ore per mining phase

Tetra Tech in their 2016 has provided a breakdown of the Ore Reserves within the LOM pit for the first six (6) mining phases. The direct feed ore being targeted within the first six phases represents a higher average grade than for the LOM average. Phases 1 through to 6 deliver on average an 11% higher copper equivalent grade to the mill when compared to the total LOM phases 1 through to 9. Golder recognises that targeting the higher grade ore in the initial portion of the mine life will assist in maximising the opportunity to recover capital costs and improve NPV. The average direct feed ore grade (CuEq %) per mining phase along with the ore tonnage for direct feed per phase is shown in Figure 51 below.

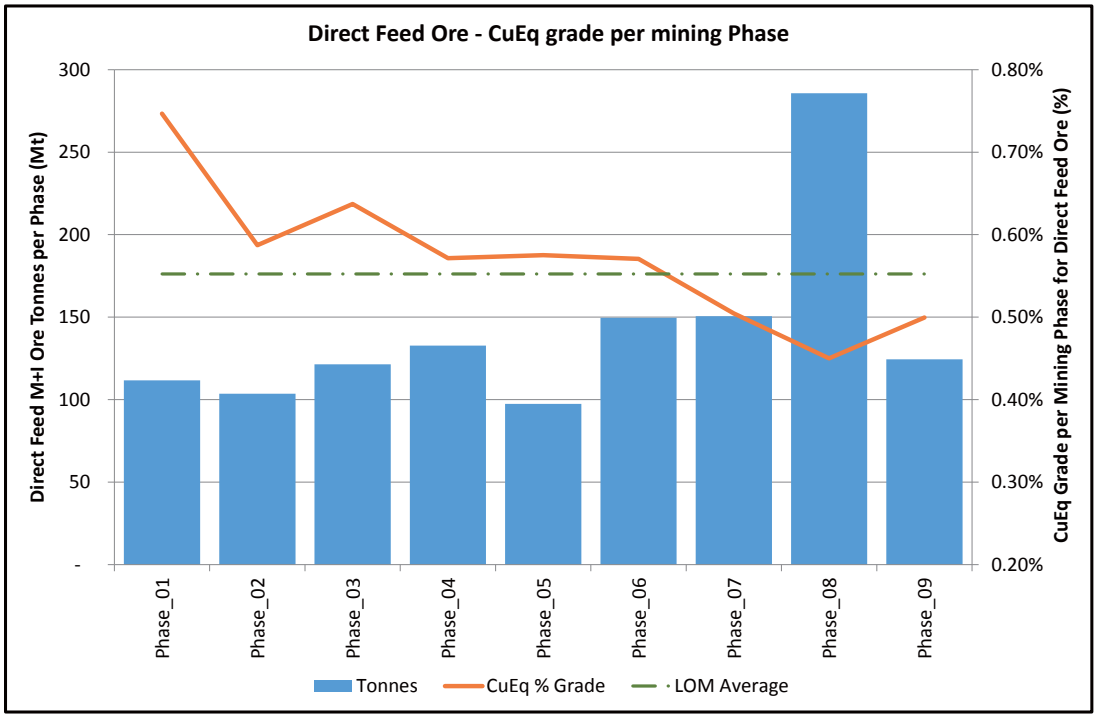


Figure 51: Direct feed ore CuEq grade per phase with phase tonnage

The planned annual material movement over the LOM remains fairly constant at 128 Mt over the period 2021 through to 2036 and then declines over the remainder of the LOM as ex-pit waste material movement is exhausted (Figure 52). The average planned daily movement equates to some 350kT with the daily movement requirements only declining after 2036 (Figure 53).

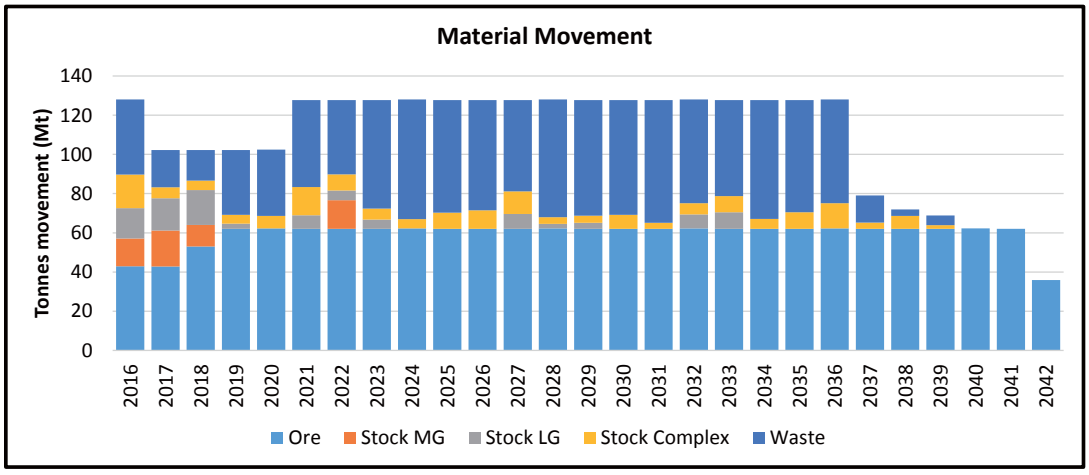


Figure 52: Planned total material movement over LOM for Toromocho project

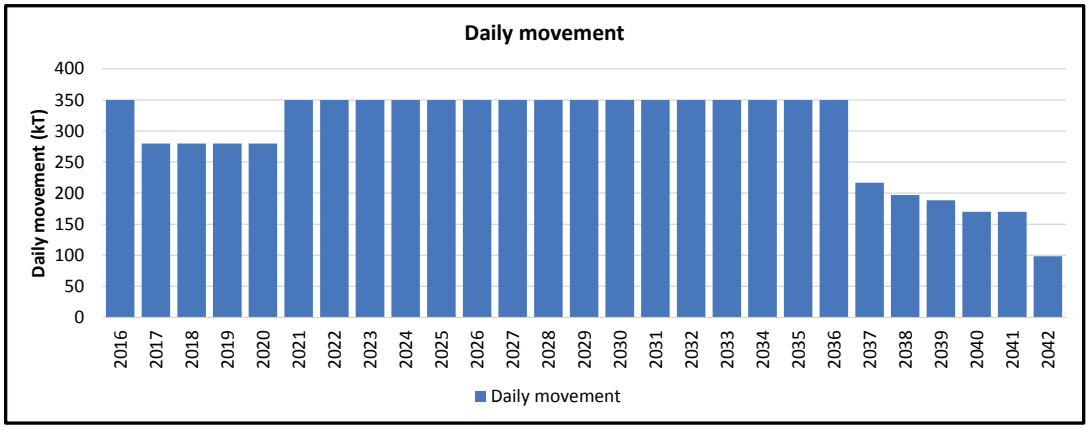
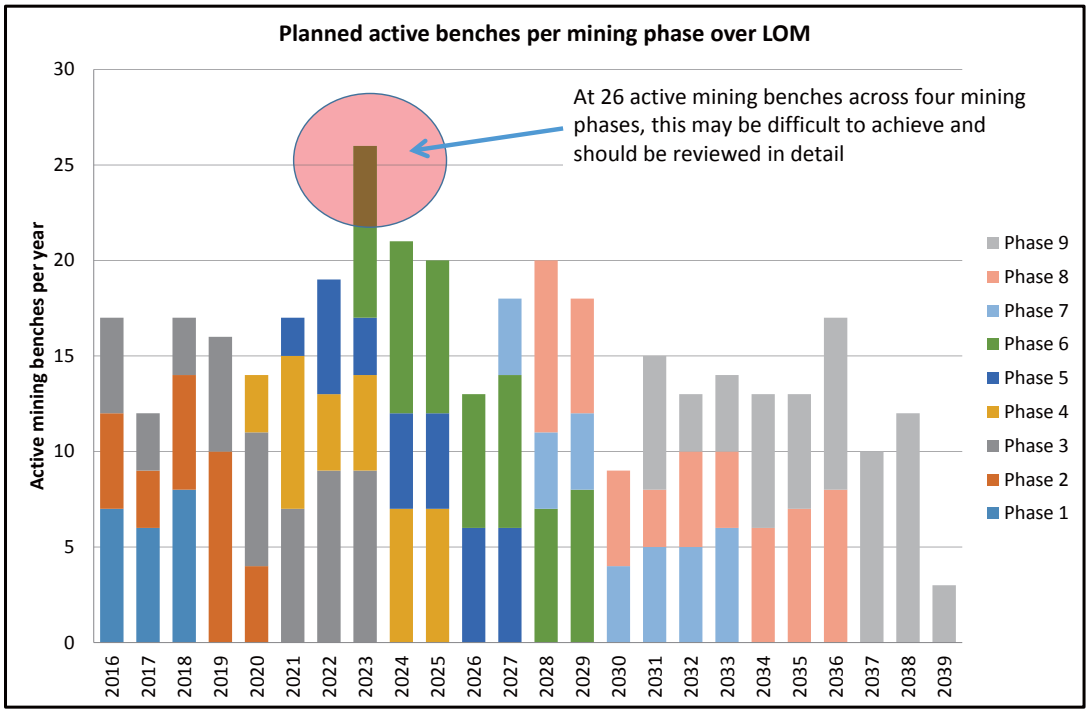


Figure 53: Planned daily material movement over LOM for Toromocho project

Golder believes the planned movement per year is achievable but has some reservations about the ability to meet the blend requirements in order to reduce the level of talc in the mill feed over a shorter (daily) period. It is possible that additional loading capacity may be required at a lower utilisation to ensure that the ore blend ratios are optimised for maximum process plant throughput and metallurgical recovery.

The bench sink rate appears achievable at a maximum of 10 benches per year per mining phase; however, there is a period within the schedule (2023) when four active phases are being targeted in the same year. Golder believes that this may be ambitious and would recommend that the practicality of achieving this plan be assessed in detail to confirm that the equipment resourcing is adequate (Figure 54).



Source: Tetra Tech 2016

Figure 54: Planned bench sink rate per year per mining phase

4.5 Mining operations

The Toromocho Mine is a conventional large scale open pit mine. The ore and waste rock is drilled and blasted prior to excavation by electric rope shovel excavators. The ore is loaded into ultra-class diesel powered off-highway rigid dump trucks (Cat' 797) and hauled to either stockpile, or dumped directly into the primary crusher. The waste rock is hauled to the western waste dump. The mining fleet is owned and operated by Toromocho Mine. The general layout of the mining operations can be seen in Figure 55 below.

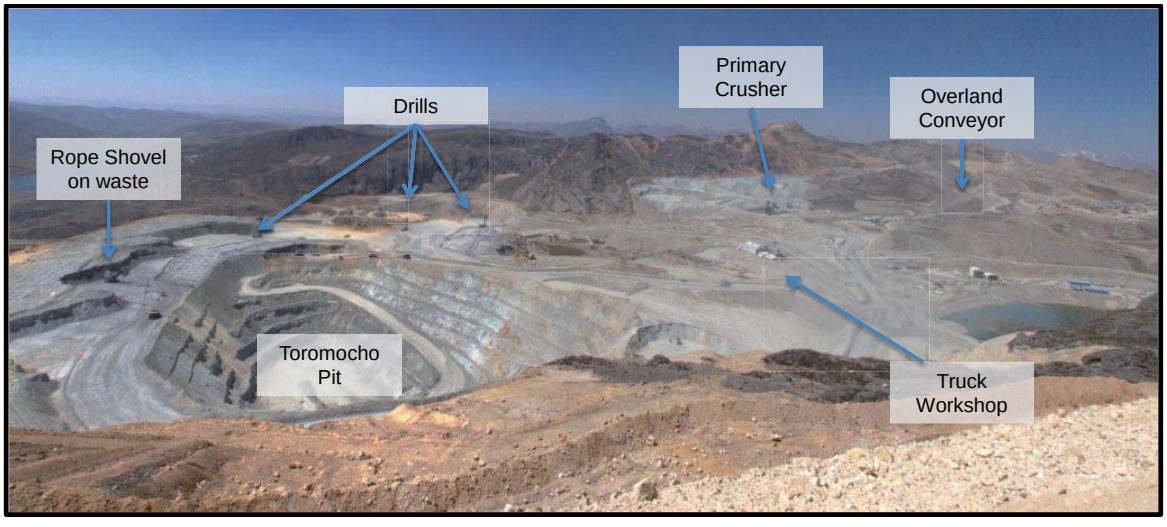


Figure 55: Toromocho mining operations – July 2016

4.5.1 Grade control and blast design

The grade control at the Toromocho Mine utilises the blast holes chips for sampling and analysis of the ore zone. An 8 kg sample from the collar of the drill cone is collected from a minimum of 10 stab-holes at various points around the drill collar. The sampling procedure for blast hole grade control sampling at Toromocho is shown below in Figure 56.

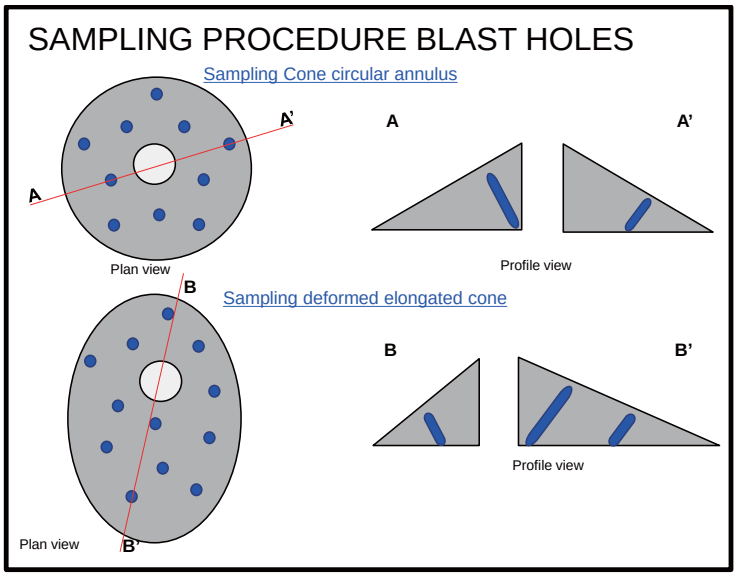


Figure 56: Toromocho grade control sampling procedure – 2016

The blast hole samples are analysed by the SGS laboratory on site with the results being fed into an Mine Sight (MS) Axis database to ensure integrity of results and minimal transcription errors. The MS Axis database is then used to populate the short-term block model used for daily and weekly production forecasting.

Golder believes that with the current practices and systems the mine should be able to reasonably accurately forecast the grade and material characteristics (e.g. Talc and Arsenic content) prior to excavation of the ore. The grade control methodology using blast-holes is viewed as being an accepted industry practice for this type of operation, but is also known to results in significant misclassification of ore to waste.

Golder would recommend giving consideration to dedicated grade control drilling ahead of the blast-hole drilling. Grade control drilling is felt to offer a greater degree of grade certainty and prediction modelling.

4.5.2 Drilling and blasting

Blast hole drilling operations at Toromocho are conducted using three large electric Pit Viper 351 blast hole drilling rigs. The drills are capable of drilling up to a ± 20 m depth as a single-pass at 350 mm diameter with some 56.7 t of bit loading.

All blast holes are loaded with bulk emulsion explosives that are mixed on site by the local explosives contract provider. The blasting contractor supplies all explosives and blasting accessories for each blast. Blasting patterns in the Skarn and Hornfels is on a 6.9 x 8.0 m staggered pattern. The Potassic material is much harder than either the Skarn or Hornfels and achieves optimum fragmentation at a 5 × 6 m staggered pattern. Larger burden and spacing patterns in the Potassic do reportedly result in reduced SAG Mill and Ball Mill throughputs hence increased secondary overall breakage costs.

The pit position as at July 2016 is shown in Figure 57 with the Electric shovels PL01 and PL03 both mining on the 4665 m RL and shovel PL02 mining one bench below on the 4650 m RL.

Critical to achieving maximum recovery of the copper and throughput through the process plant is an optimal blend of Potassic, Skarn and Hornfels that seeks to limit the talc to below 17%. The talc in the Skarn and Hornfels has the effect of preferentially floating and frothing in the concentrate circuit reducing the potential metallurgical recovery. The degree to which talc was present within the Skarn and Hornfels had perhaps not been fully appreciated at the feasibility stage of the project.

The drill and blast activities at the Toromocho Mine appear satisfactory in the Skarn and Hornfels materials.

Golder would however recommend that total liberation cost as opposed to only drilling and blasting costs is considered when adopting blasting patterns in the hard Potassic material. Secondary breakage costs are generally regarded as being an order of magnitude greater than the initial breakage costs incurred with blasting.

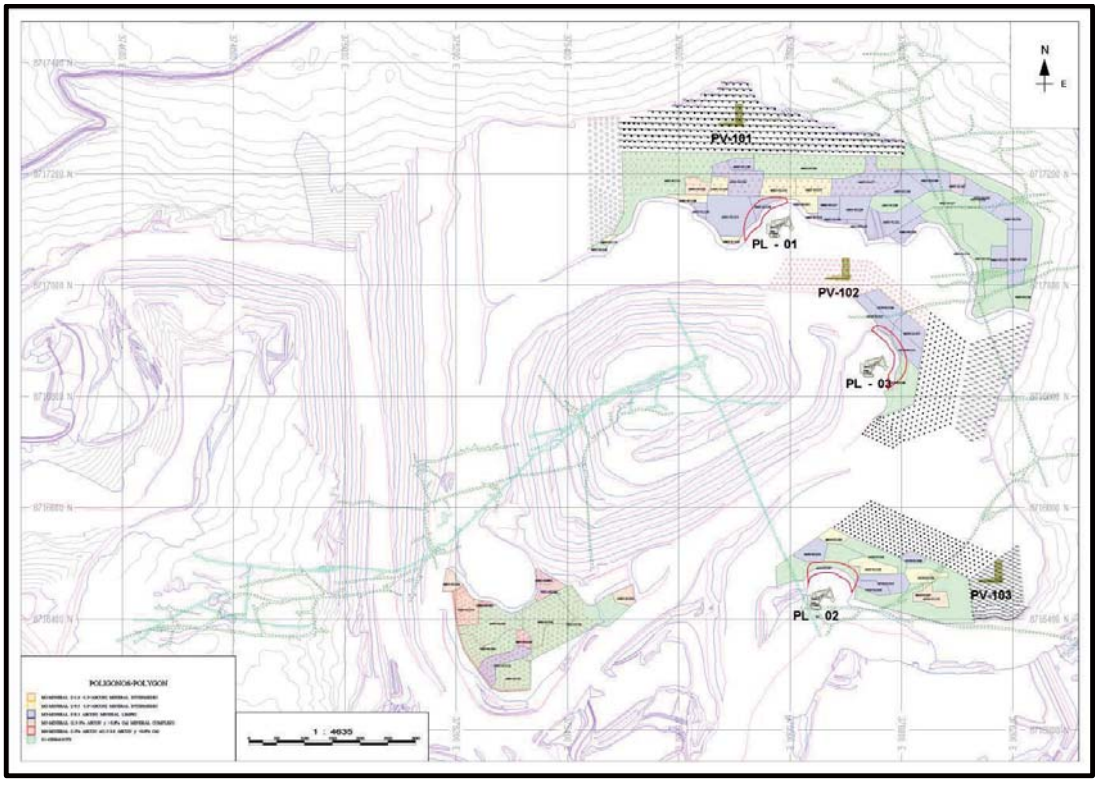


Figure 57: Toromocho Mine position as at July 2016

4.5.3 Loading and hauling

The main loading fleet at the Toromocho Mine are the three 35 cu.mt rope shovels (Cat' 4795) supported by a large Le Tourneau 2350 Front End Loader (FEL). The large FEL provides some degree of blending capability and a fall-back loading capacity.

A view of the general loading operations at Toromocho Mine can be seen in Figure 58 below, with the cable towers used to keep the trailing cable clear of truck traffic clearly visible in the lower right of the photograph.

A summary of the mining production fleet and auxiliary fleet numbers is shown in Figure 59.

The electric rope shovels provide a low unit cost of production and typically have a life expectancy in excess of 20-years. The rope shovels do typically have less flexibility in terms of mobility when compared to a diesel-hydraulic excavator but are ideally suited to large volume long-life operations such as Toromocho.

Figure 58: Loading operations at Toromocho Mine – July 2016

Purchase Order	Description	Real Units	F
	Production Equipment		
M-310	Blasthole Drills (PITVIPER 351)	3	
M-311	Secondary RockDrill (ATLAS COPCO ROCKL8)	1	
M-315	Electric Mining Shovels (CAT 4795)	2	
M-316	Wheel Loader (LT 2350)	1	
M-340	Production HaulTruck&SupportEquipment(CAT 797)	16	
M-340	Production HaulTruck&SupportEquipment(CAT 777)	5	
M-340	Production HaulTruck&SupportEquipment(CAT 992K)	1	
M-340	Production HaulTruck&SupportEquipment(CAT D10T)	6	
M-340	Production HaulTruck&SupportEquipment(CAT 854K)	4	
M-340	Production HaulTruck&SupportEquipment(CAT 24M)	4	
M-340	Production HaulTruck&SupportEquipment(CAT WT777F)	4	
M-340	Production HaulTruck&SupportEquipment(CAT 336D)	1	
M-340	Freight, Duties and Services		
M-340 CO 02	Production HaulTruck&SupportEquipment(CAT 16M)	1	
M-340 CO 03	Production HaulTruck&SupportEquipment(CAT 374DL)	1	
M-340 CO 03	Production HaulTruck&SupportEquipment(CAT 966H)	1	
M-340 CO 03	Production HaulTruck&SupportEquipment(CAT 420)	1	
	Auxiliary and Support Equipment & Others		
M-418	Skid Steer Loader - blasthole stemmer (CAT 246)	2	
M-429	Cat Loader & Truck (CAT 793B)	1	
4500004182	Secondary ATLAS COPCO DM45	1	
4500003514	Compactor Roller (CAT CS76)	1	
M-001	Equipo de mina soporte		
M-221	Skid Steer Loaders	8	
M-341	Loader for tire manipulator	1	
M-341A	Tire Manipulator	1	
M-342	Articulating truck	1	
M-342 & A	Fuel / Lube Truck (3,000 to 5,000 gal fuel tank)	1	
M-343	Training Simulation Machine	1	
M-425	27 Ton Swing Lifts	1	
M-427	Trailer for Skid Steer Loader	1	
M-428	Cat 583T Pipe Layer	1	
PEP: 12-018-7-001-015	015 Tools for Cat 797 HT Atlas PV 351 and auxiliary equipment		
PEP: 13-002-7-001-004	Major Components		
PEP 13-026-7-001-033	777G		

Figure 59: Toromocho summary of forecast major mining equipment – January 2015

4.5.4 Ore crushing and stockpiling

The ore is hauled from the working faces to an ex-pit crushing facility located on the northern side of the pit. Haul trucks dump the high grade ore into one of two rock hoppers which feed the primary crusher (Figure 60). The primary crusher reduces the ore to -150 mm then feeds the broken ore onto a 7 km long overland conveyor belt to the crushed ore stockpile (Figure 61). Ore from the crushed ore stockpile is then fed to the SAG Mill and subsequently to two Ball Mills running in parallel.

Figure 60: Primary crusher with dual access tipping bin – July 2016

Figure 61: Crushed ore stockpile – July 2016

4.5.5 Dispatch and control

All shovel; drill and truck locations within the pit are monitored using the Minestar dispatch monitoring system. The Minestar system enables rapid identification of equipment positions and equipment state. The blast loading areas are electronically uploaded into the Minestar system to enable the shovel operator to track the ore type and waste material positions within the blast for loading. A typical ore and waste blast region can be seen in Figure 62 below. The yellow regions are Low-grade ore (M2), the blue regions are the medium grade ore (M3), with the orange and yellow being higher grade ore (M1) and grey being waste.

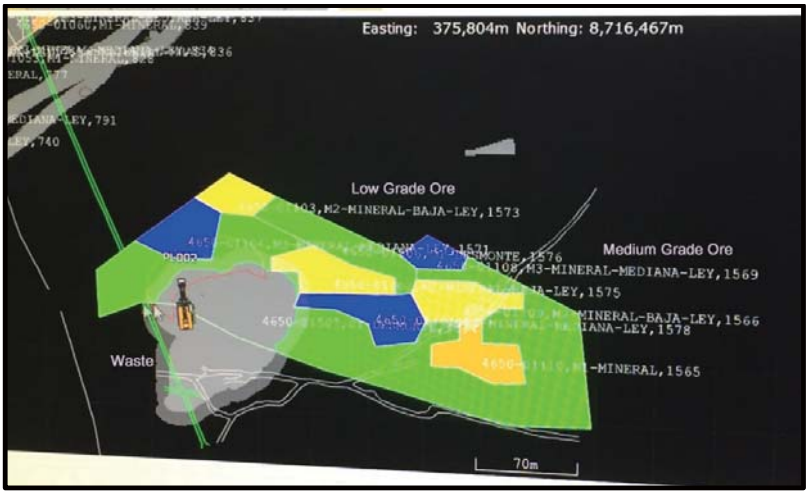


Figure 62: Minestar screen showing ore and waste areas within a blast on the 4650 m RL bench

Also available through the computerised information systems are the current process plant statistics and performance metrics. The primary crusher information is a key tool in enabling the mining department to monitor the crushed ore stockpile levels and ensure sufficient crushed material is available to keep the SAG Mill supplied. The schematic performance metrics for the primary crushing system are shown in Figure 63 below.

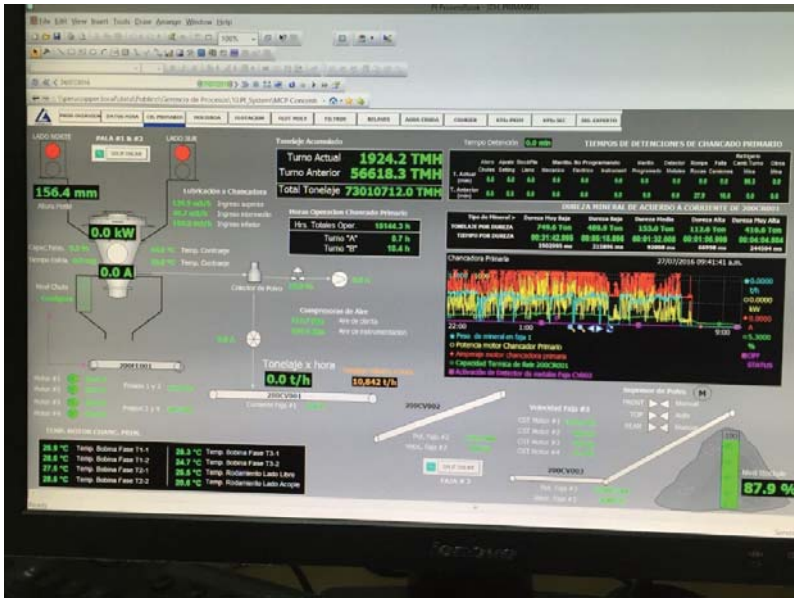


Figure 63: Primary crusher and conveyor system performance measures

The primary crusher has a discharge belt feeder that dumps the ore onto a transfer belt conveyor, which will be equipped with a belt-rip detection system. The conveyor is driven by a 150 kW hydraulic motor and has a removable, permanent magnet installed over the head pulley to collect tramp iron and protect the downstream conveyors.

4.5.6 Maintenance facilities

Toromocho has provided an in pit maintenance facility for the trucks and mobile mining equipment adjacent to the Primary Crusher facilities. The light vehicle workshop and tandem truck bay workshop can be seen in Figure 64. Additional workshop facilities are envisaged as part of the future expansion project for the mine.

Figure 64: Truck workshop and light vehicle workshop facilities – July 2016

4.6 Mine costs and value

The revised planned mining costs for the Toromocho project appear in line with expectations for this type of large volume mining operation. The FS mining costs have been updated in 2016 with the revised mining costs being viewed as more appropriate for the greater degree of blending required than had been anticipated in the FS.

Drilling and blasting costs in the Skarn and Hornfels material appear adequately costed and appropriate. Drilling and blasting within the potassic material will however require a large powder factor and markedly reduced blasting pattern dimensions to ensure the overall lowest cost of total comminution and maximum throughput. It is generally regarded that effective ore breakage at the mining stage by blasting is factor of magnitude less than any subsequent breakage mechanism through the primary crusher or milling circuit. Secondary advantages associated with maximisation of the breakage during the drilling an blasting stage include improved shovel loading rates, reduced stress damage on shovels and trucks, improved mill throughput rates and generally longer equipment life.

In reviewing the Toromocho Project without the expansion option being considered, three scenarios have been considered to provide a range of possible values. The scenarios considered have not factored in the envisaged process plant unit cost savings.

The three scenarios anticipate that the designed metallurgical recovery for copper will be achieved in 2017 but have allowed for reduced metallurgical recovery during 2016. It is possible that further work will be required during 2017 to fully resolve the recovery issues associated with Talc in the ore feed. To this end, Golder is satisfied that the processing department and Toromocho management are fully committed to resolving the remaining issues within the process plant.

Scenario 1 – The project remains particularly sensitive to copper recovery and copper price. Assuming a base LOM long-term copper price of $2.27/Lb, the project, without expansion, does not provide a positive return on investment at the WACC discount rate of 7.31%.

Scenario 2 – Using an assumed seven-year cycle copper pricing option wherein the copper price varies per year over a seven year cycle (Figure 65) appears to produce a modest profit before expansion.

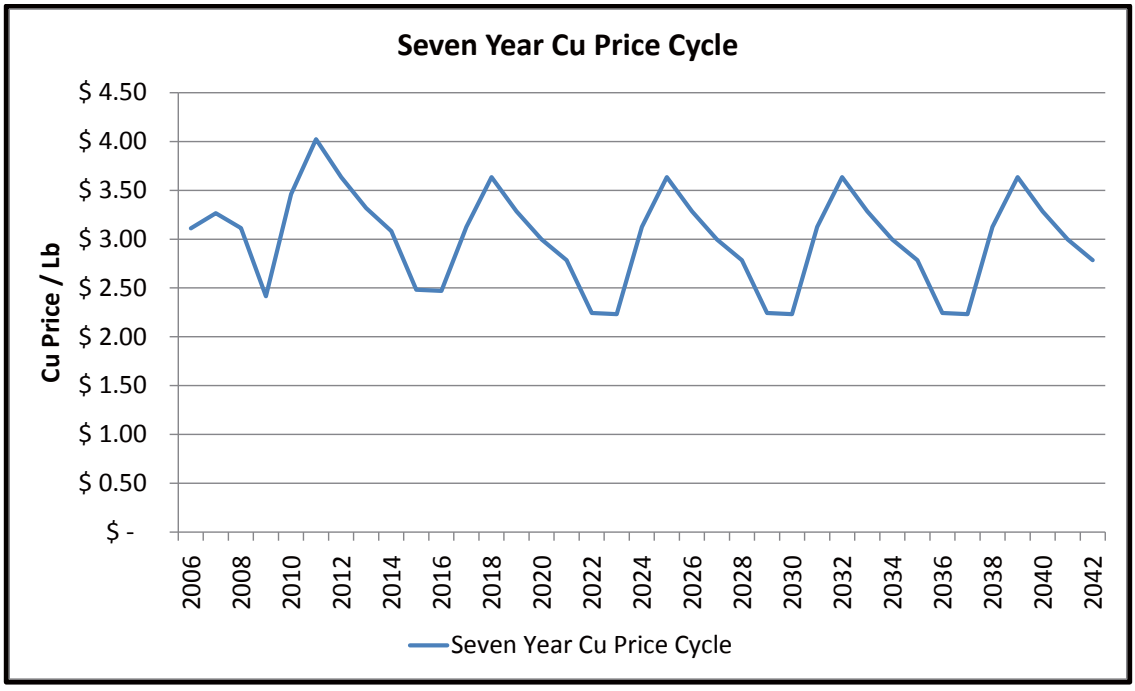


Figure 65: Floating copper price based upon historical price trends

Scenario 3 – Using a strong copper price indicative of an optimistic case, produces a reasonable return on investment; however the likelihood of an early return to a strong copper price would currently appear somewhat remote.

In order to assess the overall project sensitivity to various value drivers the third scenario was used to provide a range of relative values when flexing copper recovery, copper price, mining cost and process cost. The cases considered are summarised in the table below (Table 38).

A summary graph of the results is shown in Figure 66, with the results being largely as expected. The operation is highly sensitive to changes in the Copper Price, followed by Process plant unit cost and less sensitive to changes in Mining unit cost or modest changes in process recovery. It is important to note that the base copper recovery level of 85% has been assumed to be realised from 2017 onwards and that flexing of the copper recovery was relative to this base recovery level.

Table 38: Value drivers sensitivity for Toromocho Project

Scenario	Plant Recovery	Copper Price	Mining Cost/t	Process Cost/t
Pessimistic	-4% recovery	-10% change	+10% change	+10% change
Poor	-2% recovery	-5% change	+5% change	+5% change
Norm	Nil change	Nil change	Nil change	Nil change
Good	+2% recovery	+5% change	-5% change	-5% change
Optimistic	+4% recovery	+10% change	-10% change	-10% change

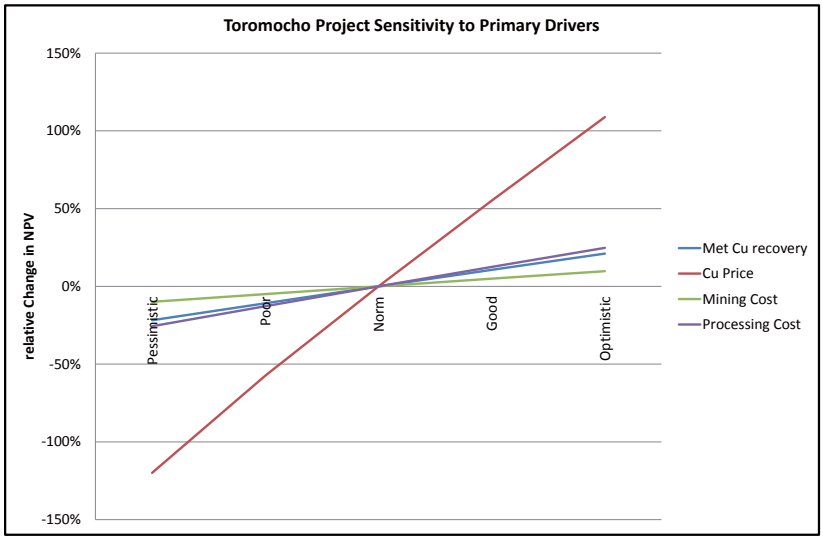


Figure 66: Relative change in value of Toromocho Project – without expansion case

Golder notes that capital cost of establishing the Toromocho project has added a significant financial burden to the overall project value, using the current valuation model and a cyclical copper pricing mechanism do not appear to show a satisfactory level of return without the expansion option.

Golder would recommend that prior to any commitment to an expanded option that the expansion option is again fully costed and that any process or operational modifications identified during the current non-expanded phase are incorporated into the expanded case accordingly.

The Toromocho project appears moderately sensitive to process cost and process recovery and relatively insensitive to mining costs.

Golder has compared both the Mining costs and the Processing costs with similar scale and type of operations know to Golder and considers the LOM cost estimates to be reasonable. Golder does however believe that the mining unit costs may be slightly understated given the likelihood that a greater degree of ore blending will be required than had been assumed to be the case with the FS. As the project is relatively insensitive to mining costs, this would be expected to have minimal effect on the overall value of the project.

Unit process costs are largely driven by the achieved throughput in that a large proportion of the processing costs are relatively fixed in nature, thus achievement of both throughput and recovery levels within the processing section are fundamental drivers of project value.

4.7 General comments on LOM plan

In considering the option of the Toromocho Expansion phase of the project, it may be prudent to defer the expansion stage until the current concentrate process plant has achieved nameplate recovery efficiencies. A complete understanding of the blend requirements and process modifications required to maximise the copper recovery are fundamental value drivers within the Toromocho project.

The estimated value improvement from the Expansion case has been tabulated from the TEP Financial Model (*Morgan Stanley – "TEP Financial Model – Basis 20160607.xls"*). The TEP FinModel indicates that the throughput expansion reduces the on-mine equivalent copper production cost from $1.27/Lb to $1.21/Lb.

The cost of finance and employee profit sharing has been excluded from the above totals in order to provide a direct comparison of on-mine costs. As would be expected with any process expansion option, the unit cost of metal production is the largest potential area of cost reduction. However it is probably the largest area of risk in regards to capital cost and achievement of design parameters. The expansion option does appear to offer a marked benefit to the Toromocho project; however it is believed that the timing for the expansion should be reviewed.

A breakdown of the cost of copper production per cost area for the TP and the TEP case is shown in the Table 39 below and presented as a graph in Figure 67. The process plant area accounts for some 55% of the cost of on-mine production costs. Ensuring that the process plant has achieved full nameplate design could be viewed as being a critical milestone prior to a decision concerning the further expansion opportunity.

Table 39: On Mine cost of copper production per Lb (source TEP FinModel)

Cost Area	TP Case	TEP Case	TEP Vs TP
	Cost/Lb Cu recovered	Cost/Lb Cu recovered	Variance ($/lb)
mine	$0.24	$0.24	-
reclaim from stockpile	$0.01	$0.02	0.01
process plant	$0.70	$0.68	-0.02
Moly Production	$0.05	$0.06	0.01
Kingsmill	$0.01	$0.01	-
On-Site Adm and General Services	$0.13	$0.11	-0.02
Transportation, Freight and Warehouse	$0.00	$0.00	-
Administration Expenses	$0.03	$0.03	-
Legal, Permit and Community	$0.02	$0.01	-0.01
Centromin royalty	$0.04	$0.04	-
Insurance	$0.03	$0.02	-0.01
Total cost/Lb Copper	**$1.27**	**$1.21**	-0.06

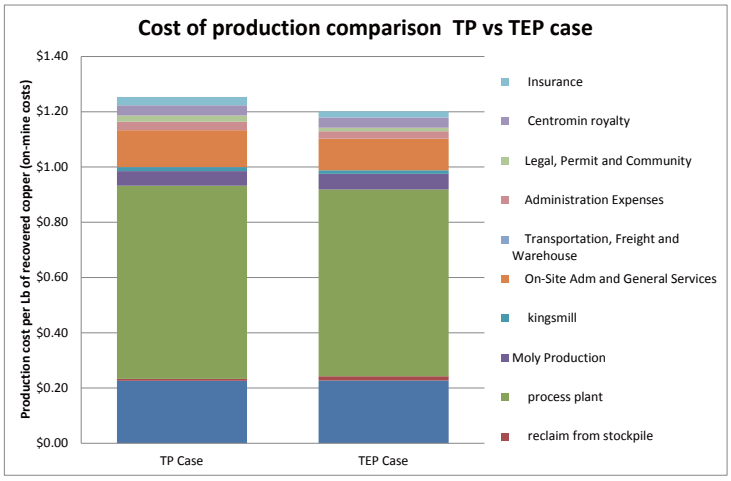


Figure 67: On mine cost of copper production TP option Vs. TEP option

When the cost of finance and the employee profit sharing scheme are considered, the total cost of on-mine production is $1.48/Lb for the TP case and $1.39/Lb for the TEP case. The cost of finance being some 12% of the total on-mine cost of production represents an area where reduction in debt levels could have a marked effect on the total cost of production.

4.8 Process plant modifications to improve recovery

An estimate of possible minor CAPEX costs associated with the process plant modifications is provide below, please note these are purely indicative and only provided as order-of magnitude costs.

For treatment costs within the process plant, it is estimated that the use of NaSH and CMC will add additional reagent costs to the processing but are relatively minor in terms of the expected benefit. The cost of the NaSH is estimated to be some $0.20 per tonne of concentrate, whilst the CMC would be expected to add an additional $0.22 per tonne of concentrate.

In order to allow for the copper recovery improvement programme, it is felt that the allowance of some $0.10/t milled would be appropriate for the duration of the testwork to cover plant surveys around the flotation circuit including assays and simulation work.

Some minor CAPEX items that should be considered are talc-moly storage and a CMC mixing and storage facility, further Arsenic mitigation studies and geometallurgical modelling.

4.8.1 Talc moly storage

This is termed ‘talc sludge’ as described in the Plant Improvement PowerPoint provided from site, the sludge will have to go into a temporary dam as it will contain moly’ which will need to be recovered and treated in the moly’ hydromet plant when operational.

Talc moly’ storage dam – depending on the mass balance and anticipated duration of storage will dictate the size of the dame required. This moly should be captured not sent to tails. Assuming a plastic lined pond to store this for recovery by monitoring and Flyght Pump to the moly’ plant when operational.

An allowance of some $2M for engineering design and construction of a plastic lined pond. It may be possible to use tailings from the tails dam to build the walls and a hypalon liner with recovery system. A subsequent dam could be built based on sizing.

4.8.2 CMC mixing and storage

Capital consideration for the allowance of a CMC Mixing and Storage facility. This is not in the existing flowsheet facilities and would require a mixing and bulk storage tanks with delivery pumps to the flotation

circuit. We have assumed a cost of some $2.5 M for engineering design procurement, fabrication and construction.

4.8.3 Studies arsenic mitigation

The arsenic mitigation studies should allow for benchscale testwork and consider both CAPEX and OPEX, it is anticipated that an allowance of $1.5M should be adequate for this purpose.

4.8.4 Geometallurgical modelling

It would be appropriate to consider the long-term benefit of a combined geometallurgical model to ensure a mine-to-mill approach from ore planning through to concentrate delivery. It is estimated that an allowance of $1M would cover the cost of additional metallurgical testwork with a further $1M being appropriate for the creation of a geo-spatial geometallurgical model for mine planning and process forecasting purposes.

4.9 LOM plan cost forecast

An estimation of the likely effects of blending and process modifications to overcome the Talc in ore and ameliorate the Arsenic in concentrate issues has been undertaken by Golder based upon previous experience. It should be noted however, the complexity of the Toromocho ore will mean that actual results can vary and the degree and time taken to achieve improvements could be less or greater than those indicated by Golder. Golder feels that this modified schedule should provide a basis for the medium term planning as an input to a flexed financial model.

In terms of metallurgical recovery, which is a key driver to recovered value from the process plant, Golder has assumed that for 2017 and 2018 an average metallurgical recovery of copper from the ore will be some 90% of planned recovery (e.g. 90% of 85% = 76.5%) with 2019 reverting to design recovery levels of 85%.

During the period when the process plant is carrying out the necessary modifications and establishing blend limits to maximise the metallurgical recovery it is reasonable to expect that the annual throughput will be impacted negatively. To this extent, it has been assumed that the annualised throughput for 2017 will be some 85% of design capacity increasing to 100% of design capacity from 2020 onwards.

Due to the majority of the process plant costs being largely fixed in nature, it has been assumed that although some cost savings on process plant OPEX will probably be realised in 2016, any savings would be temporary in nature and more likely to be cost deferrals than cost reductions. For this reason, the assumed operating expenditure for 2017 to 2019 inclusive has been assumed to be a function of the pro-rated design throughput achieved. The short-term process plant metrics are summarised in Table 40 below.

Table 40: Process plant assumed short-term metrics while recovery issues are rectified

Metric	2017	2018	2019	2020
Mill Throughput (Mt)	36.30	38.50	40.64	42.78
Process Plant OPEX $/t Milled	7.39	6.98	6.61	6.28
Copper metallurgical recovery (%)	76.5	76.5	85.0	85.0

Using the above metrics, although it does not overly change the life of mine financial results, it does change the forecast cashflow status over the short-term and thus should form an important part of any consideration for the five-year plan that typically forms part of the budgeting cycle of mining operations. The build-up of the total cost per Tonne treated is shown in Figure 68, using the identified factors assumed above, the proportion of the process cost can be seen to reduce over the next few years as the process improvements are effected and both design throughput levels and planned ore recovery levels are achieved.

Should ore blending be shown to be a critical aspect in the maximisation of process recovery and mill throughput, it is possible that additional loading capacity will be required within the mining operation, however it is probable that a large front-end loader would provide the mobility to support the existing electric rope-shovels in this regard. In order to ensure sufficient available ore stocks of different types it is may be necessary to include an additional drill to ensure adequate available faces for blending purposes. However

these considerations will only be known once an effective process plant treatment and ore feed strategy is established after process modifications.

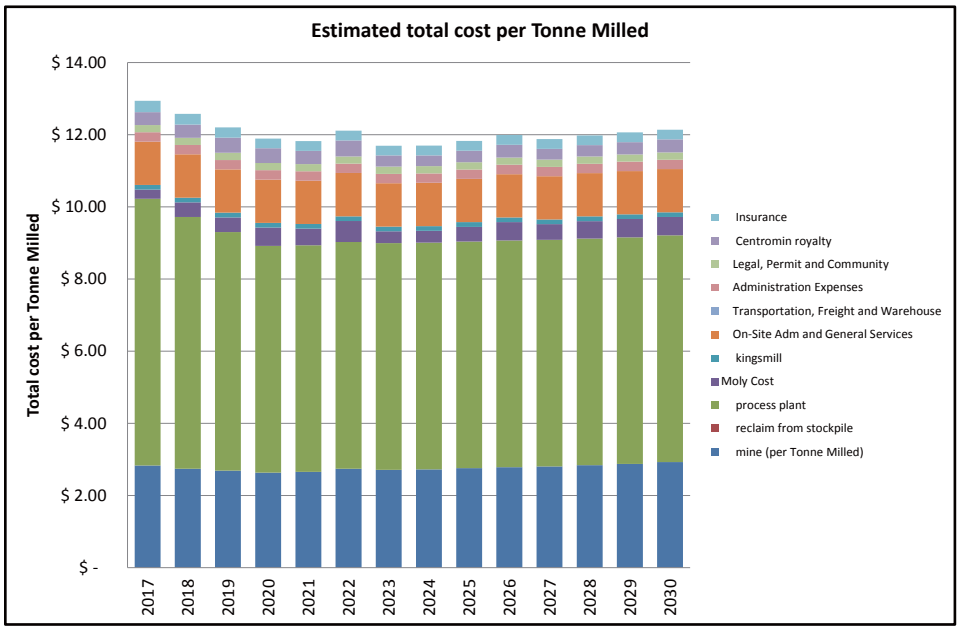


Figure 68: Equivalent cost per mill tonne for Toromocho – without expansion case

The LOM equivalent cost has been considered excluding Finance charges and depreciation, the estimated LOM cost is some $10.98 per tonne milled. If we add to this a further $1.58 per Tonne milled in terms of accounting for Freight and TC/RC costs the operating break-even cost is some $12.56 per tonne milled. This would equate to a break-even cut-of grade of 0.3% Copper equivalent, which as this is notably lower than the planned recovered LOM Copper grade. As such there appears to be no present issues with the planned cut-off grade.

Table 41: LOM equivalent cost per tonne milled

Annual Cost	LOM Average
mine (per Tonne Milled)	$2.08
reclaim from stockpile	$0.06
process plant	$6.07
Moly Cost	$0.45
Kingsmill	$0.13
On-Site Adm and General Services	$1.15
Transportation, Freight and Warehouse	$-
Administration Expenses	$0.26
Legal, Permit and Community	$0.20
Centromin royalty	$0.31
Insurance	$0.26
Total cost/Tonne Milled	$10.98

A summary of the throughput factor and estimated recovery efficiency, driving the cost per tonne processed is shown below in a section of the non-expanded life of mine spreadsheet below in Figure 69.

High-Level Economic analysis of Chinalco Toromocho Copper Project, Peru 15/Aug/2016			Production year +4 2017	Production year +5 2018	Production year +6 2019	Production year +7 2020	Production year +8 2021	Production year +9 2022	Production year +10 2023	Production year +11 2024	Production year +12 2025	Production year +13 2026
			0.85	0.900	0.950	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Production												
Waste (M tonnes)			24.29	27.20	28.80	19.48	28.32	25.61	42.30	52.09	52.30	52.32
Low-grade mill material stockpiled (tonnes)			27.88	24.91	23.48	32.78	24.15	27.18	9.85			-
High arsenic material stockpiled (tonnes)			1,360,000	506,000	606,000	448,000	37,000	1,839,000	480,000	21,000	0	0
High-grade milling ore (tonnes)			36.36	38.50	40.64	42.78	42.78	42.78	42.78	42.78	42.78	42.78
total material moved (tonnes)			**89.89**	**91.11**	**93.53**	**95.48**	**95.28**	**97.41**	**95.41**	**94.89**	**95.07**	**95.09**
High-grade ore to mill (tonnes)			36.36	38.50	40.64	42.78	42.78	42.78	42.78	42.78	42.78	42.78
Low-grade ore to mill (tonnes)			-	-	-	-	-	-	-	-	-	-
total ore to mill (tonnes)	1,529,490,810		**36.36**	**38.50**	**40.64**	**42.78**	**42.78**	**42.78**	**42.78**	**42.78**	**42.78**	**42.78**
copper (%)	0.462%		0.606%	0.608%	0.633%	0.601%	0.535%	0.653%	0.462%	0.452%	0.468%	0.503%
silver (grams per tonne)	6.13		8.054	6.141	6.767	6.211	6.220	5.456	5.294	4.618	5.343	6.009
molybdenum (%)	0.019%		0.010%	0.016%	0.016%	0.020%	0.018%	0.023%	0.013%	0.013%	0.016%	0.020%
contained metal												
copper (tonnes)	7,062,726		220,349	234,081	257,246	257,096	228,862	279,340	197,634	193,357	200,201	215,173
molybdenum (tonnes)	285,248		3,636	6,160	6,502	8,556	7,700	9,839	5,561	5,561	6,844	8,556
silver (grams)	9,375,383,568		292,853,910	236,429,728	275,004,790	265,694,158	266,079,160	233,396,768	226,466,732	197,548,804	228,562,854	257,053,002
metallurgical recovery												
copper (%)	83.8%		76.50%	76.50%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
molybdenum (%)	62.1%		65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%
silver (%)	64.2%		65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%	65.00%
recovered metal												
copper (tonnes)	5,918,945		168,567	179,072	218,659	218,531	194,533	237,439	167,989	164,353	170,171	182,897
copper (M pounds)	13,049,023,755		371.63	394.79	482.06	481.78	428.87	523.46	370.35	362.34	375.16	403.22
molybdenum (tonnes)	177,198		2,363	4,004	4,226	5,561	5,005	6,395	3,615	3,615	4,449	5,561
molybdenum (M pounds)	390,654,615		5.21	8.83	9.32	12.26	11.03	14.10	7.97	7.97	9.81	12.26
silver (kgrams)	6,020,966,993		190.4	153.7	178.8	172.7	173.0	151.7	147.2	128.4	148.6	167.1
silver (troy ounces)	193,578,564		6,120,056	4,940,904	5,747,045	5,552,472	5,560,518	4,877,522	4,732,698	4,128,372	4,776,503	5,371,889
UNIT Cost per Tonne Milled												
annual cost		LOM average										
mine (per Tonne Milled)		$ 2.08	$ 2.83	$ 2.74	$ 2.69	$ 2.64	$ 2.66	$ 2.74	$ 2.71	$ 2.73	$ 2.76	$ 2.79
reclaim from stockpile		$ 0.06	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
process plant		$ 6.07	$ 7.39	$ 6.98	$ 6.61	$ 6.28	$ 6.28	$ 6.28	$ 6.28	$ 6.28	$ 6.28	$ 6.28
Moly Cost		$ 0.45	$ 0.25	$ 0.41	$ 0.41	$ 0.51	$ 0.46	$ 0.58	$ 0.33	$ 0.33	$ 0.41	$ 0.51
kingsmill		$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13	$ 0.13
On-Site Adm and General Services		$ 1.15	$ 1.20	$ 1.20	$ 1.20	$ 1.20	$ 1.20	$ 1.20	$ 1.20	$ 1.20	$ 1.20	$ 1.20
Transportation, Freight and Warehouse		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Administration Expenses		$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26	$ 0.26
Legal, Permit and Community		$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20	$ 0.20
Centromin royalty		$ 0.31	$ 0.36	$ 0.37	$ 0.42	$ 0.41	$ 0.37	$ 0.44	$ 0.31	$ 0.30	$ 0.32	$ 0.35
Insurance		$ 0.26	$ 0.32	$ 0.30	$ 0.28	$ 0.27	$ 0.27	$ 0.27	$ 0.27	$ 0.27	$ 0.27	$ 0.27
Total cost / Tonne Milled		$ 10.98	$ 12.94	$ 12.58	$ 12.20	$ 11.89	$ 11.82	$ 12.11	$ 11.69	$ 11.70	$ 11.83	$ 11.99
total cash cost												
financial cost		$ 1.88	$ 4.49	$ 4.42	$ 4.24	$ 3.81	$ 3.61	$ 3.46	$ 3.22	$ 3.26	$ 3.20	$ 3.17
depreciation		$ 3.76	$ 7.44	$ 7.62	$ 6.66	$ 4.43	$ 4.33	$ 4.33	$ 4.33	$ 4.26	$ 4.24	$ 4.24
employee profit sharing		$ 0.19	$ -	$ -	$ 0.12	$ 0.30	$ 0.14	$ 0.48	$ -	$ -	$ -	$ 0.11
net income before taxes												
Total cost per Tonne Milled equivalent		$ 16.81	$ 24.87	$ 24.62	$ 23.21	$ 20.43	$ 19.90	$ 20.38	$ 19.24	$ 19.21	$ 19.27	$ 19.51

Figure 69: Toromocho non-expanded case with process plant build up over period 2016 to 2020

4.10 Review of Behre Dolbear ITR 2012

In November 2012, Behre Dolbear Asia carried out an update of ITS April 2012 Independent Technical Review ITR). The November 2012 update primarily focussed on social, permitting and environmental issues as the April 2012 ITR had covered in detail technical aspects related to the project.

Items that remain outstanding at July 2016 include the following:-

"4.11.3.6 Town of Morococha Resettlement" the majority of resettlement has occurred with a relatively small number of residents remaining behind in the old town of Morococha. This continues to be an issue that is currently being managed at mine level.

Golder concludes that the overall risk to the project value is still considered to be low; however it is believed that lobbying further support from government would assist in demonstrating government's commitment to investment in the country.

The November 2012 ITR concluded with:-

"*4.11.3.12 Social Summary – three discrete social risk issues are identified by the Behre Dolbear team.*

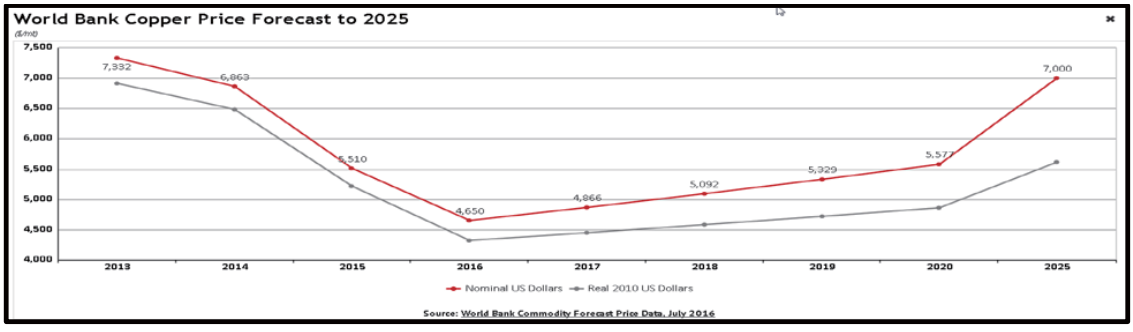
- *Ongoing negotiation processes through the round table process are likely to result in an agreement whereby the Company will provide funding for additional development initiatives. The likely costs will amount to a Low Risk/Likely to occur either within the CAPEX or early operations period.*
- *Resettlement incorporates Low Risks/Likely to result in cost escalation related to contingency plans for resettlement of new arrivals and compensation for new structures.*
- *Transportation safety risks remain a Moderate Risk/Possible to occur while personnel and goods are still transported by road.*"

Golder notes that the transportation risk concern has been addressed through the provision of dedicated coaches that transport the shift workers from site to Lima at the commencement and completion of their shift Roster periods. There is evidence that the roads are being improved (2016) with road repairs occurring in several places between Lima and the Toromocho project site.

Financial risk

The April 2012 ITR had reviewed long-term forecast metal prices for copper, silver and molybdenum. Since some 80% of the project value will be derived from copper sales focus has been given to the historical (2012) forecast prices and the current (2016) forecast prices.

The latest forecast from the World Bank (Figure 70) continues to show the copper price as being above $5500/t but with a slower recovery than previous estimates.

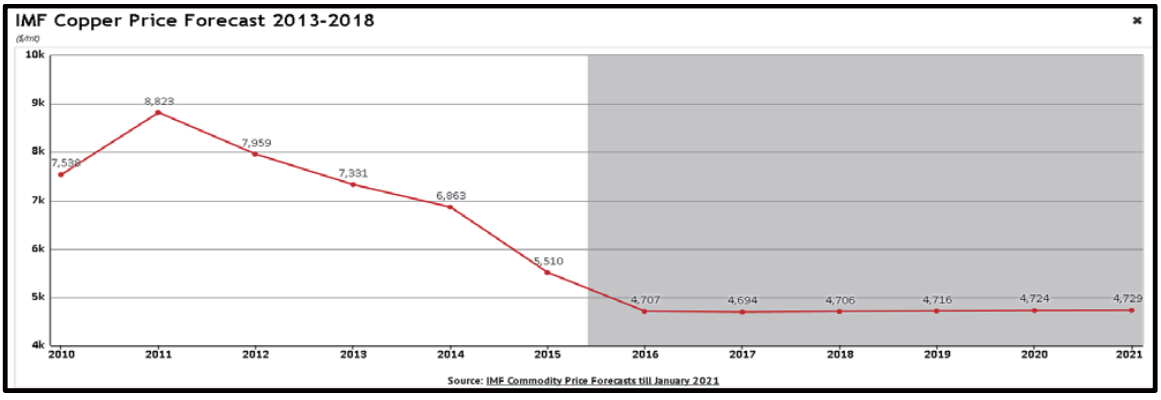


Source: knoema.com

Figure 70: World Bank Copper Forecast 2016

The IMF forecast remains somewhat softer than the World Bank Forecast and shows a LT forecast for Copper as being around the $4700 per Tonne (Figure 71) with only minor growth from 2017. These forecasts differ markedly from the forecasts in 2012 wherein all banks had forecast a LT copper price in $5 500 to $6 500 range.

A continued low copper price, which is some 80% of the Toromocho Project income stream, renders early repayment of project capital as being unlikely.



Source: knoema.com

Figure 71: IMF copper forecast 2016

A similar forecast trend is seen for silver, with both the World Bank and IMF now forecasting silver prices at some 20 to 30% below the 2012 consensus price.

Given the current softer outlook in metal pricing for the period to 2020, it would appear prudent to focus on maximising value related to the current project ahead of any commitment for the expanded option. The two principal drives to value maximisation currently are the metallurgical recovery and financial penalties being imposed as a result of the arsenic levels within the copper concentrate.

The Toromocho Project would appear unlikely to provide a satisfactory level of financial return currently without improvements in both the metallurgical recovery and reduction of arsenic levels in concentrate.

Behre Dolbear in their ITR report "*The Toromocho ITR Update, as of date of September 30, 2012, reconfirms the economic viability of the Toromocho Project as projected in the April 2012 Toromocho Project ITR. However, Behre Dolbear, again, cautions that the mining industry is cyclical and when a new cycle of lower prices will occur is not known.*"

In terms of the cyclical nature of the copper market, the following extract is taken from mining.com dated April 2015 (Christine Meilton, principal consultant on copper supply at commodities researcher CRU Group) – "*Our short term forecast is the price rising through the decade. Prices have typically been above the cost curve in the past although the price this year is biting into the cost curve," says Meilton*

An emerging tightness in 2017, driven by deficits in the raw materials markets, will support a higher price in 2017. Thereafter the price will continue to improve due to the deficit market, moving above $8,000 a tonne ($3.60 a pound) in 2019 says Meilton.

"Copper mining is getting more difficult. The best deposits have been discovered and exploited. As a rule grades are higher at current operations than at projects, which means costs are higher. There is no Escondida out there, at least it hasn't been found yet," says Meilton adding that the long-term incentive price for new projects is now north of $3 a pound and that prices oscillates around the long term marginal cost."

Forecasting copper prices has traditionally been difficult with many analysts focussing on the relatively short- term supply side. Toromocho is a deposit with an expected mine life of almost 40 years and as such can be expected to go through several price cycles in its operating life-span. The main financial concern is the relatively long-lead time to payback at present metal prices, however copper prices are presently considered low with project expansions globally being questioned or deferred.

In terms of immediate priority, focus is quite correctly being applied to maximising the potential metallurgical recovery through the process plant. The maximisation of copper recovery is presently being seen as being a key component to achieving the lowest unit cost of production. The reduction in arsenic levels in concentrate is a secondary issue that will continue to receive on-going focus.

4.11 Tailings

The Behre Dolbear did express reservations about the deposition method being proposed for the tailings in that the Behre Dolbear report stated:

"The chosen tailings deposition system is being designed by Golder & Associates. The system envisions the production of 55% solids tailings at the concentrator for transport to five "new generation" paste thickeners at the tailings impoundment. The installation of units with an unsubstantiated operating record must be regarded as high risk. On a short- term basis, the tailings impoundments can take normal tailings (50% to 60% solids) into the maintenance dump area. Over the long term, deposition of normal tailings would result in running out of tailings deposition room — **Moderate to High Risk/Low to Possible."**

Paste thickened tailings are now an accepted method of deposition, and whilst this may have appeared as new unproven technology at the time, this would no longer apply. The tailings dam being constructed at the mine site was inspected during the site visit and the construction method and civil engineering quality of the dam appears impressive (Figure 72). It is also worth noting that the position of the tailings dam impoundment wall would not appear to preclude a future downstream raise for an additional dam at some point in the future if further mineable resources become available or the final density of the tailings (solids fraction) is not entirely realised.

Figure 72: Tailings dam wall construction – July 2016

5.0 METALLURGY

5.1 Historical Toromocho Project

From 1970 to 1985 Cerro de Pasco and Centromin undertook metallurgical testwork on the Toromocho ore. The ores were mined underground and treated over many years previously.

Various other groups undertook studies and work until Aker Kvaerner undertook a Feasibility Study in 2006. Three ore composites were tested and grind recovery relationships developed. The Feasibility Study testwork does say the talc is a possible concern and will have an impact on copper concentrate grade. This was to be managed by blending. The reality is there is so much talc in the ore body it may not possible to blend it out satisfactorily. There appears to have been greater emphasis on molybdenum recovery than on potential issues related to the talc in ore. No mention of arsenic issues other than blending.

There was a Concentrate Leach Study and a molybdenum Hydrometallurgical Plant Study but these options did not proceed to final flowsheet. The proposed moly plant is currently under construction.

A Scoping Study in 2006 looked at a Heap Leach project. The heap leaching gave very poor copper recovery on the sulphide ore. Heap Leaching was evaluated and tested for the high talc and high arsenic ore but recoveries were also poor.

Whilst at first it sounds like a simple solution this is far from the truth. Firstly heap leaches have a 50% success rate and sometimes the learning curve can be years. Before launching into this they would need to do extensive testwork and a Study at Feasibility level.

The initial testwork gave variable results and focussed on acid and cyanide soluble copper. Chalcopyrite normally passivates in a heap and bacterial activity is critical. Digenite, covellite, bornite tennantite and enargite are more leachable.

More often than not the ore has to be crushed to say 12 mm or finer and agglomeration is required (extra cost) for effective percolation. The talc could cause percolation issues because it is a clay. The column leaches on 25 mm ore samples over an average of 286 days gave 54 to 75% copper recovery. Acid consumption was low.

In addition an SX/EW plant is required, which significantly increases the CAPEX. The cash flow from heap leaching is an issue because it is much slower than a concentrator. If a larger part of the ore was diverted to heap leaching the project economics would change significantly. With a heap leach a flowsheet for handling the arsenic would be required and the long term storage. The significant water requirement for heap leaching also needs to be considered.

The concentrator is established and provides certainty of copper recovery compared to a heap leach, which can be improved further. For this reason Golder believes it is lower risk and better economics to focus on treating the concentrate than to go heap leaching.

The Aka Kvaerner Feasibility Study opted for a simple primary crush SAG/ball grind followed by flotation and sale of a concentrate. This is the current flowsheet utilised and the scale of the project is very large based on processing 117 200 tonnes of ore a day. A Feasibility Study does not guarantee success and the deviations from the Feasibility Study suggest there could be a lot of technical work required to improve the current metallurgical performance

5.2 Current Toromocho Project

The flowsheet for processing the Toromocho ore is very conventional and appropriate for a copper sulphide ore. The orebody is however complex by domain and ore types and it appears that the significance of this was not fully recognised in developing the flowsheet that was adopted. Blending was proposed as a solution to iron out fluctuations and other contaminants in the concentrate. If the arsenic and talc issues had been more readily understood it is probable a different flowsheet would have resulted.

The Feasibility study was exhaustive but failed to identify three serious deficiency issues with the process metallurgy. The geometallurgy appears to have been too superficial for the scale of the project and the consequential loss resulting from deviations from design (Table 42) is now very significant.

The first serious issue not identified in the Feasibility Study is the copper recovery is only 70% compared to a predicted recovery of 80% to 87% in the Feasibility Study. This is being addressed on site using Mr Tom Olsen who was also involved in the Feasibility Study and is now working on the plant improvement initiative project.

The second serious issue overlooked is the presence of significant amounts of talc minerals (insol) in the ore that are naturally floatable. This leads to lower concentrate grades and attempts to remove the talc result in lower recovery. The talc also adsorbs flotation reagents and results in copper flotation losses. Smelters have limits on the amount of talc in concentrate because it produces viscous slags and difficulties for the smelter. It also incurs higher transport costs.

It is understood Toromocho are buying clean copper concentrates to blend with theirs to reduce the insol and arsenic in the concentrate at an increased cost to the project.

The third serious issue not identified in the Feasibility Study is the high arsenic reporting to concentrate. Arsenic is a penalty element for smelters and at levels exceeding 0.3% the smelters may reject the concentrate. Arsenic is environmentally a problem for copper smelters and penalties apply when it is high. The actual levels of arsenic in concentrate appear to be somewhat higher than had been anticipated. The arsenic problem is likely to persist throughout the ore so a solution needs to be developed for the longer term.

Table 42: Basic plant design criteria

Basic Design	
Ore Grade	0.612% copper
Ore Grade	0.019% moly
Copper Recovery	87%
Copper Concentrate Grade	26.5%
Moly Recovery	65.0%

5.3 Mineralogy

The deposit is a porphyry intrusive and skarns. It consists of hornfels, potassic, serpentine magnetite, serpentine talc, actinolite-tremolite and fillic rocks.

The presence of arsenic is not mentioned apart from one document in the PFS. It does mention talc but not of any significance and suggests blending will manage the talc problem. This comment over simplifies the issue because there is insufficient low talc ore to blend. The only commented noted was that insol in the concentrate could attract penalties.

The ore flowsheet was piloted at Lakefield Research and no issues arose or concerns raised. This raises serious questions as to the representivity of the ore sample tested during piloting and the understanding of the orebody.

5.4 Behre Dolbear due diligence

The Behre Dolbear (BD) Report Competent Persons Report did not predict a lower copper recovery or discover the arsenic and talc issue or raise it as a significant risk. They signed off on the metallurgy as described in the Feasibility Study Report.

BD did express concern about the lack of locked cycle tests and this is a valid concern because it does not truly reflect likely plant performance. BD believed the sampling was done at a high level and provided confidence in the predicted results. This has not borne out to date and appears to be an incorrect conclusion when viewed by the current plant performance.

BD appear to have been influenced by the previous small underground operations; good piloting results, and seem to have missed the significance of the arsenic and the talc issue leading to lower copper recovery. BD appear to have been optimistic in their predictions of copper recovery. The arsenic was noted in the Pre-feasibility Study but appears to have been largely overlooked in the Feasibility Study along with the impact of the talc.

It appears that insufficient representative metallurgical testing had been undertaken covering the various types of ore and spatial extent of the ore.

This highlights the increased risks encountered when the project scale increases based on a large scale open pit and the sampling and representivity does not match the scale of the project.

5.5 Talc flotation issues

Talc is naturally hydrophobic and floatable with water and frother. It is a serious and difficult problem to manage mainly with sulphide ore flotation such as nickel and copper. It contains no copper minerals and is a diluent in copper concentrates. The difficulty of solving this problem should not be under estimated given that the Toromocho ore has significant talc throughout most of the ore zones. The levels of talc in some ore zones are high (1-2% would be considered low).

Talc is a clay mineral composed of hydrated magnesium silicate with the chemical formula $Mg_3(SiO_3)_4$. It occurs as foliated to fibrous masses, and in an exceptionally rare crystal form. It has a perfect basal cleavage, and the folia are non-elastic, although slightly flexible. It is the softest known mineral and listed as 1 on the Mohs hardness scale. As such, it forms slimes in the grinding process. It has a specific gravity of 2.5 to 2.8, a clear or dusty lustre, and is translucent to opaque. Talc is not soluble in water, but is slightly soluble in dilute mineral acids.

In flotation circuits talc slimes and adsorbs flotation reagents starving the copper minerals of collector and readily floats to the concentrate reducing the quality of the concentrate.

5.5.1 Acid leaching of talc from concentrate

Talc is very resistant to acid attachment by leaching using hydrochloric, sulphuric or nitric acid. The copper minerals will leach, making this ineffective where a concentrate is required. The talc cannot be leached out so this is not an option.

5.5.2 Spiral treatment

We are aware of one operation that has used spirals on a porphyry copper concentrate to reject clean talc (sg difference copper and talc). No data is available on the effectiveness of this. It is something that could be tested in a commercial laboratory and would be a low operating cost solution.

5.5.3 Talc pre-float

The ore is first ground preferably under substantially non-reducing conditions and then the ground ore is subjected to a talc pre-float wherein the fast floating talc can be recovered in a preliminary stage of flotation without an excessive loss of copper. This is done simply using frother and no collector. This talc concentrate may be further cleaned and discarded to tailings. Where large amounts of talc are present this can often be the best and only effective solution.

The sulphide-containing tailing from the talc pre-float is then subject to split conditioning followed by flotation in the presence of xanthates to selectively float copper minerals.

This would need to be tested in the laboratory and require retrofitting large flotation columns in the plant ahead of the copper flotation.

5.5.4 Talc depression

The common talc depressant is Guar or Carboxy Methyl Cellulose (CMC). Where there is a lot of talc present this can be very costly in reagent use and result in depressing copper minerals if overdosed. Polyacrolates and modified lignin sulphonate are also used depending on the talc mineralogy. From an operating perspective, the use of talc depressants is difficult to manage. Some nickel ores cannot be treated because of high talc levels (South Windarra, WA).

It is best to screen a number of depressants in the laboratory and select the best depressants for plant evaluation. The cost can be high (CMC) so the cost benefit needs to be evaluated and sometimes determines that Guar is preferred because of its lower cost.

The talc levels appear to be too high for this to work effectively however laboratory testwork will confirm this conclusion.

5.5.5 Talc deslime ahead of flotation

This is used at BHP, Nickel West at Mt Keith in Western Australia where the nickel ore contains significant talc levels. They use large banks of 50 mm polyurethane cyclones to deslime the talc from cyclone overflow ahead of the flotation feed. The cyclones cut at 2 µm, resulting in very little nickel being lost. The removal of the talc to tailings results in a higher nickel recovery and lower reagent costs and a higher concentrate grade. Attrition scrubbing ahead of the deslime may also help with talc removal in these situations.

This could be tested in the laboratory to determine the optimum cut size for discard of barren talc.

5.5.6 Talc dispersants

Sodium silicate and phosphate dispersants can improve selectivity and reduce the entrainment of talc in the concentrate. These should be evaluated in the laboratory first. Reduced pulp density will result in more talc floating and can be validated in the laboratory to establish the optimum density.

This could be tested in the laboratory at a range of dose rates.

5.6 Arsenic in concentrate – mitigation options

5.6.1 General

The final copper concentrate contains significant arsenic and is currently incurring smelter penalties. Copper arsenide minerals, such as enargite (Cu_3AsS_4), can be processed by pyrometallurgical techniques, e.g. roasting or by smelting. Such processes, however, may not be sustainable in the long run due to the decreasing market for the resulting arsenic trioxide dust and environmental and occupational health (OH&S) issues associated with arsenic oxides. Hydrometallurgical processes are now the preferred option being proposed to treat arsenical copper sulphide feeds as a solution to the problem of arsenic in concentrates.

The High Temperature Pressure Oxidation Process (POX) or low temperature atmospheric leaching which, in addition to extracting some copper, fixes the arsenic as scorodite (iron arsenate) or ($FeAsO_4.2H_2O$), an arsenic product that is stable, according to regulators and the standard arsenic leachate test.

5.6.2 Continue paying penalties

The do nothing approach, will result in ongoing penalties being charged for the arsenic in the concentrate. There is a significant ongoing cost to the project for this. Arsenic has closed smelters in Europe and the USA and smelters prefer low arsenic concentrates. This situation is likely to get worse over time.

Based on the mine schedule and arsenic assays this needs further investigation to predict future outcomes.

5.6.3 Blending of clean concentrates

This is being undertaken but is a very costly solution for Toromocho. This is not a long term solution.

5.6.4 Separate arsenic concentrate

It would be possible to treat the final concentrate with a chemical oxidant in conditioning tanks and re-float a relatively clean concentrate. The arsenic copper minerals will be tarnished and not float. The effectiveness would be subject to laboratory testing and the conditions would be at a precise REDOX and for a determined time. Golder has undertaken such specific testwork in the past and can assist in developing this at bench-scale. The mass split is not known although we believe >90% of the arsenic can be recovered in a mixed copper concentrate.

The high arsenic concentrate resulting from this process would have to be processed separately on site. Options for this processing are discussed hereafter.

5.6.5 Selective pre-roast

This process could be undertaken on site. It was developed by St Joe Minerals for their El Indio enargite concentrate. During this process, most of the arsenic and the labile sulphur were volatilised and oxidised in the gas chamber to arsenic trioxide and sulphur dioxide. Arsenic trioxide was condensed and sold as pure compound (≥95% As). The partially roasted copper concentrate, assaying +33% Cu or better, with <0.04% As was a more marketable copper concentrate.

The arsenic section of the plant has increased OH&S issues because of the arsenic. Arsenic as a sulphide is benign but as an oxide, it is highly toxic to all mammals, birds, and fish.

5.6.6 Non-oxidising selective leach process

This process uses autoclaves at 180-220°C to remove some iron and arsenic plus other impurities. The iron passes into solution accompanied by other impurities such as cobalt, nickel, zinc, lead, bismuth, thorium and its daughter products, and uranium and its daughter products. The process can be carried out in sulphate or sulphate-chloride media. Very clean premium copper concentrates are produced.

OZ Minerals in Australia is conducting a PFS for this type of facility as part of its Carrapateena project in South Australia with a view to establishing a commercial operation. Successful pilot and demonstration plant campaigns and smelter trial tests have been carried out. Incentives include significant freight savings, long term protection from penalties and competitive market advantage. No existing commercial operating plants exist for this process.

5.6.7 Alkaline selective leach process

This alkaline leach process for the removal of arsenic, antimony and other penalty elements from copper concentrates. This is based on the Sunshine Mining Process, which was historically used commercially over a long period. Sodium carbonate and sodium hypochlorite have also been used for arsenic removal particularly enargite from copper concentrates.

The flowsheet consists of an atmospheric tank caustic leach followed by filtration and washing of the cleaned concentrate. The filtrate is treated in a pressure oxidation autoclave and any gold and antimony is precipitated, after which arsenic is precipitated from the solution in a stable disposable form. The final solution is concentrated by evaporation and recycled to leach. The chemistry follows.

$$2\ Cu_3AsS_4 + 3\ Na_2S \rightarrow 2\ Na_3AsS_4 + 3Cu_2S$$

5.6.8 Atmospheric oxidation process

Acidic oxidation of enargite occurs in an acidic environment based on the following chemical equations. This can be carried out under atmospheric conditions at elevated temperatures.

There are no patents and this has been used commercially. The trick is not to oxidise too much copper. Residence times can be between 10 to 24 hrs depending on grind size and mineralogy. The chemistry follows.

$$4\ Cu_3AsS_4 + 3O_2 \rightarrow 12\ CuS + 2\ As_2O_3 + 4S$$

$$CuS + 2O_2 \rightarrow CuSO_4,\ \text{plus}\ S + O_2 \rightarrow SO_2$$

5.6.9 Bacterial process

These have been mostly unsuccessful and not worth considering for arsenic removal.

5.6.10 Ferric sulphate leach process

The Rapid Oxidative Leach (ROL) Process is being developed by FLSmidth in USA. It utilises a series of stirred media reactors (SMRt) in tandem with conventional agitated leach tanks with ferric sulphate lixiviant and oxygen sparging at 80°C. Copper recovery of 97-99% is achieved in about six hours for chalcopyrite concentrates and 12 hours for enargite. It was announced in February 2016 that a pilot plant facility is being built onsite at FLSmidth's Minerals division headquarters located in Salt Lake City. Also, they have signed a joint R&D agreement with BASF to expedite commercialisation. BASF will focus on innovative SX extractants with high degradation resistance and increased copper selectivity.

No commercial operating plants exist for this process.

5.6.11 Glycine leach process

The GlyLeach™ Process, under development at Curtin University, Australia, is an alkaline-based process utilising glycine, a non-toxic, non-corrosive, environmentally benign amino acid for leaching copper, gold, and silver from primary copper sulphide concentrates as well as secondary sulphide, mixed and oxide ores. The flowsheet typically includes ultrafine grinding, pre-oxidation with oxygen, atmospheric tank leaching at <100°C, and solid liquid separation. Copper is recovered from the solution by SX/EW (or sulphide precipitation), followed by pH adjustment and precipitation of silicates/carbonates with lime, then gold recovery in carbon columns before recycling to leach.

No commercial operating plants exist for this process.

5.6.12 Ferric chloride leaching

Enargite (Cu_3AsS_4) can be leached in acidic ferric chloride solution. The ferric chloride can be hydrolysed to precipitate stable arsenic and iron oxide. The regenerated ferric chloride can be recycled. This also requires an oxygen plant. There is reference to past operating plants.

No commercial operating plants currently exist for this process.

5.6.13 On-site copper concentrate processing options

One option is to accept the arsenic levels and high talc levels and process the whole or part of the copper concentrate on site. There are many process options and these are all high CAPEX options but will produce value added copper.

Where a stable iron arsenate is produced this can go to tailings however there are environmental considerations. Where arsenic gasses are involved this can prove environmentally difficult.

Golder has extensive files on all of these processes and technical information far in excess of this report. We have also visited and undertaken laboratory testwork on similar concentrates. We have endeavoured to present the options at a high level for ease of consideration.

5.6.14 Total pressure oxidation (POX)

Total pressure oxidation is the process used for processing of chalcocite at the Mt Gordon mine site. The process utilises low temperature and low pressure autoclaves in order to oxidise sulphides to enable copper extraction. The operating temperature is around 90°C and copper oxidation is as high as 99%. The process is a simple design and uses mild operating conditions. Although this process was designed solely for the Esperanza ore.

For comparative purposes, this process was included for short listing. There are many commercial operating POX plants around the world including specific copper plants at Bagdad Copper in Arizona. The Sherrit Gordon type POX plants are very common on nickel, copper, zinc and pyrite gold concentrates. References can be provided if necessary regarding these operating plants.

5.6.15 Intec

The Intec process is a chloride leach incorporating fine grinding of copper concentrate but to date there are no commercial examples of the Intec process in operation. However, as the technology appears suitable to a Toromocho concentrate, this process was included for short listing for comparative purposes. No operating plants exist but a pilot plant is available for testing concentrates.

5.6.16 Activox

The Activox process is a pressure oxidation process using an autoclave and incorporates fine grinding of the copper concentrate. Mild operating pressures and temperatures can be used due to the greater liberation of copper minerals from fine grinding. However, there are no commercial examples of the Activox process in operation. The one operation in Botswana was a commercial failure. The technology is licensed by Norilsk.

As the technology appears suitable to a Toromocho concentrate, this process was included for short listing for comparative purposes. Licencing conditions are uncertain.

5.6.17 BioCOP

The BioCOP process is a tank bacterial leaching process developed by BHP Billiton at their Escondida operation.

As it is an in-house development, information is very difficult to obtain and therefore little technical and financial information is available on the process.

This option has therefore been eliminated from further consideration.

5.6.18 BacTech

The BacTech process is a tank bacterial leaching process developed by BacTech and its partner Mintek. BacTech/Mintek has run pilot scale campaigns and commercial opportunities are being actively pursued. Furthermore, commissioning of a 0.5 t concentrate/day demonstration plant is currently being completed at Industrias Penoles research facility in Monterrey, Mexico. The relatively straightforward process and the lower capital and operating costs, has made it an appealing process.

Bacterial leaching works well in the laboratory but has a bad name with respect to commercial operating plants. This should not be considered.

5.6.19 Escondida ammonia leach

This process was developed by BHP and employs air combined with a solution of ammonia and ammonium sulphate to leach cuprous salts from chalcocite solutions. Approximately half the copper is leached and the remainder can be recovered by a flotation recycle. Information is limited on the Escondida process; therefore it has been decided not to consider the process any further. In addition, several attempts were made to contact the Escondida mine, as well as BHP's base metal department. No responses were received, hence the lack of information available to consider the process further. Furthermore, the process does appear to be unattractive due to the ammonia used in the leaching process and the unnecessary complexity of the process.

This option is not considered suitable for the Toromocho operation.

5.6.20 Nitrogen species catalysed

This process is based on moderate pressure oxidation at 125-155°C, catalysed with nitrogen species supplied from sodium nitrite. The process has been operated successfully on an industrial scale (Sunshine Mining and Refining in Montana), but closed down due to depleted silver resources. The process is particularly attractive for chalcopyrite ores bearing a high silver content. However, there are no other plants in operation.

It was decided that the process is not suitable for Toromocho concentrate and was not considered for short listing.

5.6.21 Hydrocopper

The HydroCopper process developed by Outokumpu operates in a chloride environment allowing economical copper metal production. Numerous attempts were made to contact Outokumpu with regards to their Hydrocopper technology, but no responses were received. In addition, the process appeared to be designed for chalcopyrite primary ores, which meant the process appeared overly complex for what was required with the Toromocho ore. The high chloride environment would be difficult with respect to materials of construction.

For these reasons, the Hydrocopper process was not short listed for treating a Toromocho concentrate.

5.6.22 CESL

Cominco Engineering Services Ltd. (CESL) has developed the CESL copper process that is capable of treating various sulphide minerals and has been tested successfully on all the well-known minerals already, including chalcopyrite. The process can be developed to handle low and high grade concentrates. The Toromocho concentrate appeared to be a good technical fit for the CESL process, but there are no operating plants worldwide.

However, the process will not be short listed for further consideration.

5.6.23 Roast leach electrowin (RLE)

This is old and established conventional technology.

- Low technical process; fine grinding not required
- Leaching is operated at ambient conditions
- Licence fees required for electrowinning
- Used in some Zambian operations

This process was short-listed for final ranking as it is commercially proven. A sulphuric acid by-product would also be produced. The environmental issues with arsenic would be significant.

5.6.24 Albion process

- Lack of commercial plant which will require additional testwork and engineering due to scale up issues
- Highly dependent on mineralogy

This process was not short-listed for final ranking. There are two operating plants on small projects.

5.6.25 Ausmelt/Isasmelt

- Commercially established in about 20 smelters
- Tsumeb smelter in Namibia is an Ausmelt furnace

- Ausmelt claim that a 4.4 m diameter furnace can process 1 Mtpa copper concentrate. The Tsumeb smelter internal diameter is 4.4 m
- Environmentally friendly >98% sulphur capture
- Rule of thumb economic feasibility of smelter is >150 000 tpa copper, although they do have a high turndown ratio and 40 000 tpa copper probably is economical for say the high arsenic fraction of concentrate. The environmental issues with arsenic would be significant.
- A clean high grade matte could also be produced.

This process was short-listed for final ranking

5.6.26 Outokumpu flash smelting

- Commercially established – 40% of world copper produced by flash smelting
- Different smelting technology to Ausmelt – feed preparation requires drying
- Rule of thumb economic feasibility of smelter is 150 000 tpa copper. These are large tonnage smelters. The environmental issues with arsenic would be significant.
- An acid by-product would be saleable.

This process was not short-listed for final ranking as the CAPEX would be too large.

5.6.27 Copper sulphate production from copper concentrate

If a high arsenic fraction of the concentrate was processed copper sulphate could be produced suitable for the fertiliser market.

- Copper sulphate pentahydrate can be sold at a price/tonne, which is approximately one fifth of the LME copper cathode price. This equates to the 20% copper in the product.
- This is a market driven process and needs this in place prior to any financial commitment.

This process was not short-listed for final ranking.

5.6.28 Concentrate sales for life of project

- Expensive transport costs.
- Issues with transport infrastructure/reliability.
- High arsenic concentrates attract penalties.
- High arsenic concentrates may not be saleable in the future because of environmental issues.

This is the Base Case for comparison.

5.6.29 BRISA

The BRISA process is being developed by a Spanish research institute and currently still at laboratory scale. There is no large-scale test work or industrial application available on this technology. The applicability of BRISA process for treating Toromocho concentrate cannot be verified. Therefore, the process cannot be considered further.

There are no commercial operating plants.

5.6.30 Cymet

The Cymet process involves high temperature process operations, which would increase the complexity of the process probably resulting in elevated capital and operating costs. Therefore, the Cymet process will not be further considered for the treatment of Toromocho concentrate.

5.6.31 Dextec

The Dextec process was a patented process from the late 1970s. The process is a typical chloride leach and thickening operation similar to the Cymet process. There is no large-scale plant or industrial application available for the Dextec process and it has not been seen in the technology market since a legal campaign with a European company. Therefore, due to the discontinued development of the process, the Dextec process will not be considered further for the processing of Toromocho concentrate.

5.6.32 GEOCOAT

GEOCOAT is a heap leach technology whereby copper concentrate is sprayed onto host rock material and subjected to bio-oxidation. The process is simple and not expensive, thus is an important process to be looked at as an approach to oxidise the Toromocho copper concentrate or high arsenic concentrates.

However, as the technology appears suitable to a Toromocho concentrate, this process was included for short listing for comparative purposes. It may be very applicable for the high arsenic concentrate but would require SX/EW facilities as well. Usually bacterial enhancement is also used for the process. Bench-scale testwork could be undertaken at laboratory scale to rule this in or out.

5.7 Plant improvement initiatives

The information in this section is summarised from PROCESS PRESENTATION AUDIT JULY 2016.pptx.

These initiatives currently being undertaken on site will mitigate the impact of the talc and lower recovery. They will not address the arsenic issue and whilst not high CAPEX they are only a relatively partial short-term solutions.

5.7.1 Copper recovery

This has to be the highest priority item. Essentially these technical innovations and improvements will be low CAPEX but provide an immediate improvement in copper recovery and grade.

5.7.2 Blending

This will iron out the extremes but a shovel change or equipment failure can introduce a significant ore change. The arsenic and talc are throughout the orebody so this will have limited effectiveness.

5.7.3 Grinding improvements

Changes to the ore feed coupled with the primary crusher and changes to the SAG mill will be aimed at improving the grind. In addition, the ball size will be reduced to improve grinding efficiency.

5.7.4 Reagent optimisation

The reagent dosing is not on a ratio control and more dosing points will be added to improve collector addition. The cost to implement is small and the return will be high. Circuit modifications will reduce the cost of NaSH and produce a cleaner concentrate with less talc.

5.7.5 CMC evaluation

CMC will be used in the cleaners for talc depression. A dosing system needs to be installed and testing on plant pulps to optimise the dose rate. If too much CMC is used this could depress copper.

5.8 Geometallurgical approach

Geometallurgy relates to the practice of combining geology or geostatistics with metallurgy, or, more specifically, extractive metallurgy, to create a spatially or geologically based predictive model for mineral

processing plants. It is used in the hard rock mining industry for risk management and mitigation during mineral processing plant design and operation.

Applying geometallurgical modelling techniques can directly reduce the risks associated with meeting production targets in terms of Toromocho copper recovery, concentrate grade and arsenic in concentrate. Geometallurgy has the potential to act on both the consequences and likelihood axes to decrease risk.

For the geometallurgical characterisation to have a real impact on the business, it must enable improved mine planning and ore scheduling to the plant. For this there needs to be a map of the physical characteristics identified as impacting the value drivers.

- Concentration of deleterious elements arsenic
- Talc distribution
- Hardness
- Grindability
- Mineral species and 'mineral grade'
- Mineral liberation
- Metallurgical recovery
- Mining recovery
- Drillability
- Fragmentation
- Reagent consumption, and
- Smelter enabling characteristics.

Golder would strongly recommend the developing a geometallurgical model as soon as possible.

5.9 Current and future ore characterisation

5.9.1 Current ores

The metallurgical knowledge is based on the original Feasibility testwork that does not appear to consider the scale and complexity of both the talc in ore and arsenic levels reporting to concentrate. It does not reflect the current ore being treated or how to address the processing issues. The original test work took no account of significant ore variability did not include the talc and arsenic issues as well as lower copper recoveries because of the talc.

For each ore type of hornfels, potassic, serpentine magnetite, serpentine talc, actinolite-tremolite and fillic the metallurgical characteristics needs to be established in the laboratory based on drill core from the open pit. This way a database can be used for ore scheduling, blending and processing. It could be that some ores should not be mixed for optimum processing.

Critical knowledge gaps include"

- What is the loss by assay size fraction in tailings?
- What recovery is being achieved by each ore?
- What are the grind recovery, leach residence characteristics of each ore?
- What is the current hardness of each ore?

- Arsenic recovery by ore type?
- Moly recovery by ore type?
- Talc levels in each ore type?
- Concentrate quality from each ore type?
- Are there differences in lime consumption?
- What is the critical cyanide consumption?

5.9.2 Future ore

A similar programme needs to be developed in detail.

5.10 Continuous improvement programme

There is significant room for improvement in the Toromocho concentrator.

Continuous improvement planning is now common amongst many mining companies and recognises that a total quality management system is necessary to ensure participation from the operators, line management etc.

Once set up and maintained the benefits can be staggering and recognises that the people at the coal face know only too well what are the problems and solutions but need coaching to bring these matters out into the open.

- The culture is fire fighting which is understandable seven months after commissioning.
- There is no documented continuous improvement plan with costs and a schedule for implementation.
- The plant processing staff has been very innovative with the Plant Improvement presentation but this needs to continue on a wider scale.
- A priority project list needs to be developed and personnel assigned. There are good solutions being implemented but it is very limited.

6.0 INFRASTRUCTURE

Most of the planned infrastructure components have been completed or are nearing completion.

6.1 Railroad access

Rail access is functioning as planned with concentrate being transported by rail from the mine. Major consumables (Diesel fuel, grinding media, reagents) are delivered to site by rail.

Transportation of copper concentrate and molybdenum oxide will be from the site to the Port of Callao via the existing rail line between Callao and La Oroya that runs by the mill site. The railroad is operated by a Peruvian company and, per Aker Kvaerner (December 2007) in its current condition, has the capacity for the additional transportation of the Toromocho Project produced commodities.

The railroad is owned by the government but is operated under a 15-year concession agreement with FerroCarril Central Andino S.A. The concessionaire will upgrade the rail line and purchase rolling stock to accommodate the Toromocho traffic and will recoup the costs in the operating fees. A 1 km spur to connect the mill site to the existing rail line, six rail lines in the yard at the mill and a traveling bridge crane for loading unloading, are to be provided by MCP. MCP will complete the 1 km rail spur from the main rail line to the mill site by the end of 2012 (Figure 73).

Figure 73: Toromocho concentrate spur line and main rail line

6.2 Access roads

Road access to mine site and process plant are through security gates with no general public access allowed.

Access to the site has been provided to the site by two roads. The Central Highway (paved), which is to be rerouted, will feed into the north access road to the administration area. A new access road, running parallel to the rail road will provide access to the site for local personnel. The new access road is completed, as with all other internal roadways by MCP.

6.3 Camp facility

Two accommodation camps are available at site each with dormitories, recreation rooms, mess hall, medical facilities and offices for camp administrators. The larger of the two accommodation camps being adjacent to the processing facility (Figure 74).

Camp facilities include a construction camp to be constructed approximately 12 km to the east of the mine site in the vicinity of the Central Highway.

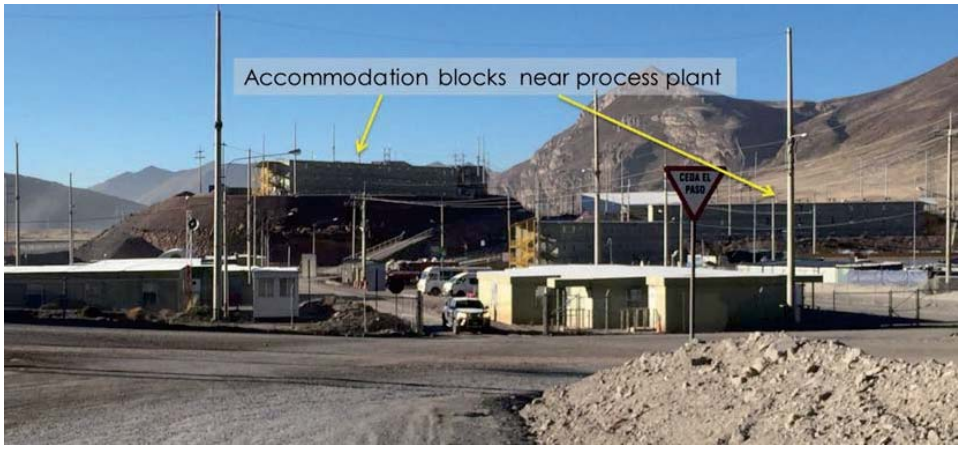


Figure 74: Accommodation blocks and camp adjacent to process plant facility 2016-July-27

6.4 Office and administrative support facilities

Administration buildings are completed at both the mining operations and processing operations.

The non process buildings to house administration, mine truck shop, and maintenance will be constructed to provide office facilities for the administration and maintenance staff. In addition, facilities will be constructed to house analytical and metallurgical laboratories, reagent storage, fuelling stations, explosives storage, and the camp facility.

6.5 Material and supply storage and distribution

A temporary mine truck workshop has been installed enabling the current fleet of trucks and mobile equipment to be serviced under cover. Permanent mine maintenance facilities and supporting warehouse have been deferred.

Warehousing will be located in the maintenance shop building adjacent to the concentrator.

Other supply inventories will be contained in the fuel stations, reagent building, explosives storage, and mine truck shop.

6.6 Town site

The old town of Morococha has been partially demolished with only a handful of residential dwelling remaining, occupied by residents yet to voluntarily relocate to the new town of Morococha.

6.7 Heap leaching project for high arsenic ore

Leaching project for High-Arsenic copper ore is at Concept stage with options being evaluated, currently on hold.

6.8 Lime quarry project

The Lime project was suspended in September 2014 due to community issues and is currently on hold, but estimated to be some 72% complete. The kiln and materials handlings systems have been purchased representing some 65% of the budgeted total cost. Only minor items are remaining for purchase. The project is currently on care and maintenance.

6.9 Water supply

Mine Drainage Phase 2 should be completed during 2016 to allow mine water to drain into the Kingsmill tunnel, with the raise boring planned to commence in August 2016.

Mine Drainage Phase 3 expected to be completed during 2016.

The total water demand by the Toromocho plant for an average year will be 8.65 million m^3. Water will be supplied from the Kingsmill Tunnel. Only 50% of the treated flow from the Kingsmill Tunnel will be required for plant process water. Culinary water will be supplied to the site from a reverse osmosis and chlorination system.

6.10 Electrical power supply

- The electric power supply is described by a report prepared by CESEL Ingenieros, Peru. The electric power will be delivered from a 220-kV substation near the township of Pomacocha.
- A new 11 km, double circuit overhead transmission line will be installed and routed from the Pomacocha Substation to the main substation at Toromocho. The new transmission line can deliver 220 MW on either circuit.
- A third 220-kV incoming power source will be provided by using the existing Mantero III transmission line. This line will serve as emergency back-up only.
- The project with a triple redundant system should experience a minimum of unexpected or unscheduled delays due to power outages.
- Emergency standby power will be installed to operate the large paste thickeners, the conventional tailings thickeners, the concentrate thickeners, camp medical facilities, etc.

6.11 Miscellaneous infrastructure

Included in miscellaneous infrastructure are compressed air systems, sewage treatment, fire protection, security, and communications.

7.0 ENVIRONMENTAL AND PERMITTING

The environmental and permitting aspects related to the project appear to have been addressed adequately and Chinalco has demonstrated both good faith and expediency in relation to a spill in March 2014. Golder is not aware of any subsequent complaints raised against Chinalco.

There are no known environmental or permitting issues outstanding that pose notable risk to the project that Golder is aware of.

8.0 RECLAMATION AND CLOSURE

In terms of mine closure, as this project is expected to be a long-life operation (>30 years), the conceptual closure plan provides for progressive and final closure of all major facilities. Those facilities include the pit, waste dumps, process plant area, shops, and other areas with concrete laydown pads, limestone quarry, and access roads.

9.0 ADMINISTRATION, MANPOWER, AND MANAGEMENT

Golder would support the view that the management, administration, and engineering/operating personnel are highly respected in the industry, experienced in their respective roles, and dedicated to the success of the Toromocho Project.

The staffing levels in the various support categories appear to be currently adequate.

10.0 CAPITAL COST ESTIMATE AND IMPLEMENTATION SCHEDULE

The majority of the capital expense for the project has been incurred with some lesser items having been deferred. The Lime quarry, permanent mining workshops, completion of the molybdenum processing circuit are items that are presently outstanding. The construction of the Tailings dam appears to be progressing satisfactorily.

The project is in production and has been exporting concentrate for over 12-months. Continuing work to improve recovery levels and throughput tonnages at the process plant have been covered elsewhere in this report.

11.0 OPERATING

Operating procedures and practices have been covered elsewhere in this report and it is believed that MCP has a thorough understanding of the focus areas for further improvement.

12.0 MARKETING AND SALES

Marketing and sales have been impacted by the high levels of Arsenic in copper concentrate, this is an area that will require ongoing effort by MCP to satisfactorily address as smelters around the world become less willing to accept high levels of Arsenic in concentrate. There exist several options available to MCP to address in part or completely the issue regarding Arsenic in concentrate, these have been addressed elsewhere in this report.

13.0 ECONOMIC ANALYSIS

See Sections 4.6 through 4.10 for financial assessment of the current project.

14.0 RISK

The primary risk remains the current net income from the copper sales, with the reduced income from a low copper price being compounded by large penalty costs associated with the Arsenic levels in concentrate.

Report Signature Page

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Golder Associates

A. VALUATION REPORT FOR THE TOROMOCHO PROJECT

The following is the text of the valuation report from the Competent Evaluator in respect of the Toromocho Project for the purpose of incorporation into this Scheme Document.

23 January 2017

CHINALCO MINING CORPORATION INTERNATIONAL

Valuation Report for Toromocho Copper Project

Submitted to:
Chinalco Mining Corporation International

REPORT

Report **Number** 168511012 R.001_Rev15

Golder Associates

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1.0 INTRODUCTION

This report is prepared solely for the use of the directors and management of the Company. The Company is Chinalco Mining Corporation International. In addition, Golder Associates (hereinafter referred to as "Golder") acknowledges that this report may be made available to the Company for public documentation and disclosure purposes.

This report has been prepared in accordance with guidelines set by the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports 2015 Edition (the "VALMIN Code"), although readers should note that the basis for such Ore Reserves and Mineral Resources do not comply with the JORC Guidelines (2012) in relation to the preparation and disclosure of an Ore Reserves and Mineral Resources Statement. Nonetheless, Golder has reviewed and assessed the Mineral Resources and Ore Reserves published in the 2015 Annual Report against the JORC Guidelines (2012), Golder believes such Mineral Resources and Ore Reserves to be a fair representation of the Toromocho Project and that the Ore Reserves are inclusive of all required modifying factors and that the Ore Reserves estimate is appropriate and correct based upon the underlying assumptions for the Toromocho Project. Further, we are of the opinion that there is no need for discounting the value of mineral resources and ore reserves as reported in the 2015 Annual Report. CMC has also confirmed that as at the Latest Practicable Date, there has been no material change in the Mineral Resources and Ore Reserves since 31 December 2015, other than decline due to normal operations.

The valuation was carried out on a Fair Market Value basis. Fair Market Value is defined as ''the amount of money (or the cash equivalent of some other consideration) determined by the Expert in accordance with the provisions of the VALMIN Code for which the Mineral or Petroleum Asset or Security should change hands on the Valuation Date in an open and unrestricted market between a willing buyer and a willing seller in an ''arm's length'' transaction, with each party acting knowledgeably, prudently and without compulsion''

The valuation contains estimations and forecasts based on data provided by Chinalco Mining Corporation International ("CMC" or "Chinalco") as well as those contained in the report entitled ''Competent Persons Report for Toromocho Project'' (the ''CPR''), prepared by Golder Associates (''Golder'').

By agreement with the client the valuation date is 2 December 2016 and this report has been prepared on the basis of project information available up to that date unless as specifically stated in the text. This report has been prepared on the basis of project information available up to the Valuation Date. The opinions expressed herein are given in good faith and we believe that any assumptions or interpretations made by it are reasonable.

Golder has adopted a discounted cash flow (DCF) method under the income approach for the valuation of the Project and has used a market approach comparable transaction analysis for the purpose of comparison.

In this valuation, all monetary values are expressed in the currency of the United States of America.

2.0 OVERVIEW OF TOROMOCHO COPPER PROJECT

The Toromocho Copper Project is located in Peruvian Andes approximately 140km East of Lima. In August 2007 Chinalco acquired all the shares of Peru Copper Inc., owner of Minera Peru Copper, which is now Minera Chinalco Peru S.A, and on May 5th of the following year (2008) signed the transfer of concessions and mining assets contract of the Toromocho Project.

Maps, plans, and other information showing the geotechnical location of the Toromocho Cooper Project is presented in Section 2.0 of our CPR.

The Toromocho Project consists of a total of 67 key mining concessions, with registered superficial land rights covering 6,702.8 hectares. We are of the view that these 67 mining concessions to be the Project's key mining concessions because each of them is either within the designed open pit and essential for the

mining activities or is located near the designed open pit and important for future expansion. 66 of these key mining concessions are wholly-owned by members of our Group. Meanwhile, one of the key mining concessions in the Toromocho Project is owned by an independent party, in which we hold a 50% equity interest.

We have made inquiry into the status of these concessions and understand these is no material change to the concessions since 2012. We are of the view that these concessions are in good standing. Please refer to Appendix 1 for Details of the concession.

The project commenced ore feed to the Crusher in December 2013 with copper concentrate being produced throughout 2014 and 2015. Tonnage build up within the process plant has been rapid with some 84% of design throughput having been achieved in 2015. The annual production metrics for the process plant for 2014 to 2015 are shown below (Table 1).

Table 1: Toromocho Project production statistics 2014-2016

	2014	2015	2016 (Estimate)
High Grade Mill Ore (Mt)	19.7	36.1	38.3
Low Grade Mill Ore (Mt)	1.1	0	2.7
Total Mill Ore (Mt)	20.8	36.1	41.0
Head Grade Cu (%)	0.562	0.538	0.604
Head Grade Ag (g/t)	7.310	6.416	5.416
Copper Recovery (%)	60.00	83.08	79.86
Recovered metal (Cu Tonnes)	70,263	161,518	197,754
Concentrate Dry Tonnes	297,698	676,449	833,977
Arsenic Grade in conc. (%)	unknown	1.047	0.865

Source: Competent Person's Report (CPR) by Golder

Although tonnage build up has been relatively satisfactory, the metallurgical recovery in 2016 has been lower than expected primarily because of issues with talc in the ore feed (Table 2). The high Arsenic in concentrate has resulted in high penalty costs for treatment and refining costs. The molybdenum circuit has not been commissioned to date but is understood to be well advanced.

Table 2: 2016 Actual performance January to May

		Jan	Feb	March	April	May	YTD
Tons milled	DMT (kt)	2,770	2,230	2,401	2,973	3,064	13,439
Head Grade - Cu	%	0.61	0.51	0.58	0.6	0.64	0.59
Cu Recovery in Cu concentrate	%	73.63	77.03	73.08	72.22	70.61	72.96
Head Grade - Ag	g/t	6.14	6.90	5.98	7.22	7.13	6.70
Ag Recovery in Cu concentrate	%	59.71	69.40	64.97	58.96	55.59	61.03
Head Grade - Mo	%	0.01	0.01	0.01	0.01	0.01	0.01
Head Grade - Zn	%	0.09	0.1	0.11	0.09	0.14	0.11
Head Grade - As	%	0.03	0.04	0.03	0.04	0.03	0.03
Copper Concentrate Produced	DMT	55,693	40,232	52,658	68,881	72,382	289,847
Grade - Cu	%	22.26	21.82	19.43	18.55	19.15	20.03
Grade - Zn	%	3.23	4.47	3.65	2.79	3.83	3.53
Grade - As	%	0.82	1.20	0.83	0.92	0.65	0.86

		Jan	Feb	March	April	May	YTD
Copper content	DMT	12,398	8,779	10,231	12,778	13,864	58,049

Source: Competent Person's Report (CPR) by Golder

Copper will account for some 80% of the recoverable value from the project over the life of the mine and thus maximising the metallurgical recovery from the copper is vitally important. Ramp-up and commissioning has also coincided with a decline in copper prices that has resulted in significant financial pressure on the project. Total capital cost to date for the project has amounted to some US$4B including finance charges.

In reviewing the Toromocho Project and preparing the CPR, Golder believes that the overall project remains technically sound, but has reservations about the ability of the project to deliver a satisfactory return on investment without the Expansion Option case. Taking the Toromocho Project as it stands today with a mill design throughput of some 42.8 Mtpa in all but the most optimistic pricing scenarios fails to meet a satisfactory level of financial return. Whilst the expanded case option, targeting some 62.0 Mtpa appears to be more financially attractive, it would seem unwise to commit to any further expansion currently until a full understanding of the talc recovery issues and future mitigation of arsenic levels in concentrate are better understood.

3.0 SCOPE OF WORK/PURPOSE

The purpose of this valuation is to express an independent opinion on the Fair Market Value as at 2 December 2016 (the "Valuation Date") of the Toromocho Project.

Our valuation conclusion is based on the assumptions stated herein and the information provided by the management of the Chinalco Mining Corporation International.

Separate from this valuation study, Golder prepared a Competent Person's Report (CPR) for the Toromocho Copper Project in December 2016.

In preparing this report, we have had discussions with the Management in relation to the development, operations and other relevant information of the project. As part of our analysis, we have reviewed such financial information and other pertinent data concerning the Toromocho Copper Project provided to us by the Management and have considered such information and data as attainable and reasonable.

We have no reason to believe that any material facts have been withheld from us.

4.0 COST

The cost for carrying out the above scope of work is USD 50,000. The fee or the provision of further work to the Practitioner are not dependent on the:

a) Conclusions of the Technical Report; or

b) Success or failure of the reason for which the Valuation Report was commissioned.

We confirm that time and cost constraints did not compromise the fundamental principles of the VALMIN Code.

5.0 BASIS OF VALUATION

Our valuation is conducted on a Fair Market Value basis. Fair Market Value is defined as "the amount of money (or the cash equivalent of some other consideration) determined by the expert in accordance with the provisions of the VALMIN Code for which the mineral or petroleum asset or security should change hands on

the valuation date in an open and unrestricted market between a willing buyer and a willing seller in an "arm'slength" transaction, with each party acting knowledgeably, prudently and without compulsion".

The Fair Market Value is usually comprised of two components, the Technical Value of the Project, and a premium or discount relating to market, strategic or other considerations. The VALMIN Code defines Technical Value as ''an assessment of a mineral asset's future net economic benefit at the valuation date under a set of assumptions deemed most appropriate by a relevant expert or specialist, excluding any premium or discount to account for such factors as market or strategic considerations.''

In keeping with the requirements of the VALMIN Code, a range of values and a preferred value have been calculated for the project.

Our investigation included discussions with members of the Management in relation to the development and prospect of the copper mining industry worldwide, and the development, operations and other relevant information of the Toromocho Copper Project. In addition, we have made relevant inquiries and obtained further information and statistical figures regarding the copper mining industry from external public sources as we considered necessary for the purpose of the valuation.

The valuation of the Mines requires consideration of all pertinent factors, which may or may not affect the operation of the Business Enterprise and its ability to generate future investment returns. The factors considered in our valuation include, but are not necessarily limited to, the following:

- The nature and prospect of the Toromocho Copper Project;
- The financial condition of the Toromocho Copper Project;
- The economy in general and the specific economic environment and market elements affecting the businesses, industries and markets;
- Relevant licences and agreements;
- The business risk of the project such as the ability in maintaining competent technical and professional personnel; and
- Investment returns and market transactions of entities engaged in similar mineral assets.

6.0 STATEMENT OF COMPETENCE

This report is prepared by the Golder team led by James Wang, Principal and Technical Director, and assisted by Ted Minnes, Alva Kuestermeyer, and Greg Griffith. Mr. Wang has over 20 years of experience in mining and due diligence assessment of mining projects and has completed a number of mining project valuations. Mr. Wang is nominated as an ''Specialist", under the terms of the VALMIN Code. Mr. Wang is the author and the competent evaluator of this report and has reviewed all the major assumptions adopted in the valuation model and ensured this valuation report is compliant with VALMIN Code.

Mr. James Wang (Bsc.-1992, Msc.-1994, MBA-2015) is a registered Profession Engineer (PE) in the United States of America, a QP under the Mining and Metallurgical Society of America, a Principal at Golder, and has twenty-two years' experience in the international resources industry (mostly in the Americas), with more than ten years of recent experiences of valuing mineral assets of similar type. Mr. Wang is an expert in due diligence studies as well as mineral project and mine valuations. He has provided valuations and financial analysis of projects for mining companies engaged in mergers and acquisitions of metal mining assets in the Americas, Asia, and Africa. Recent examples are: (1) a gold project in western U.S.A. in 2009; (2) a number of copper-gold projects in eastern Africa in 2014-2015; (3) a number of base metal projects in Southeast Asia in 2011-2013; (4) a gold project in eastern Africa in 2011; and (5) a number of copper and gold projects in central Asia in 2011-2016.

Mr. Ted Minnes, an Associate and Mining Practice Leader at Golder, has 32 years of experience in mining, QP, is also a registered Profession Engineer (PE) in the United States of America and a QP under the

Mining and Metallurgical Society of America. Mr. Alva Kuestermeyer is a principal metallurgical engineer at Golder and with over 30 years of experience in mining and a QP under the Mining and Metallurgical Society of America. Mr. Greg Griffith is a senior mining engineer with extensive experience in mining project valuations in the Americas.

Mr. Minnes and Mr. Wang are responsible for Sections 5, 7 and 8 of this Valuation Report. Mr. Kuestermeyer and Mr. Wang are responsible for Sections 1, 2, and 9 of this Valuation Report. Mr. Griffith and Mr. Wang are responsible for Sections 3, 4, 6, 10, 11, and 12 of this Valuation Report.

7.0 SOURCES OF INFORMATION

In conducting our valuation of the Fair Market Value of the Project, we have reviewed information from several sources, including, but not limited to:

- Information on the Project including, but not limited to, presentations, prepared documentation, exploration data, mine planning, legal, marketing and financial data;
- The CPR;
- A site visit by our CPs;
- Interviews of management and employees of CMC; and
- Prior industry knowledge and continuing industry research.

As part of our analysis, we have reviewed such financial information and other pertinent data concerning the Toromocho Copper Project provided to us by the Management and have considered such information and data as attainable and reasonable. We have also consulted other sources of technical, financial and business information. We relied upon the information provided by and the parameters advised by Golder's Competent Person (CP) who has conducted site visits. We have discussed with our CP concerning the information of the project and the work done in the Competent Person's Report. Based on our experience and professional judgment, we considered that the opinions expressed by the CP and the information contained in the Competent Person's Report are appropriate for the purposes of this valuation.

8.0 VALUATION AND ASSUMPTIONS

There are two accepted approaches to obtain the fair market values of the project, namely the Market-Based Approach, and the Income-Based Approach (or the Business Case Approach/Discounted Cash Flow Approach) applicable to assets like the Toromocho Copper Project. Each of these two approaches is appropriate in one or more circumstances, and sometimes, two or more approaches may be used together. Whether to adopt a particular approach will be determined by the most commonly adopted practice in valuing mineral assets that are similar in nature.

8.1 Market-Based Approach

The market approach looked at comparable sales to provide an estimate of what other operating copper producers recently sold for and provide a high-level basis for the estimate of what a buyer may pay for Toromocho.

For the purposes of conducting the comparable transactional approach, Golder conducted research to identify transactions of similar-type assets sold in the market as a proxy to indicate the price that a buyer might pay for the property. In 2015, average copper price fell to US$2.50/lb from US$3.14 in 2014, the fourth consecutive decline from a high of US$4.00 in 2011 (see Figure 1 below). In 2015 and 1H 2016 there were 5 relatively large deals of operating copper mines considered with an aggregate enterprise value of US$3.505 billion for 14.2 billion lbs of contained copper in reserves (see Table 3 below). As summarized in Table 3, the average enterprise price paid in 2015 and 1H 2016 for copper in reserves in the 5 significant copper transactions was US$0.23/lb. Further, the median and reserve-weighted average enterprise price paid in

these 5 significant copper transactions were US$0.22/lb and US$0.25/lb, respectively. We believe that the US$0.23/lb price for producing assets (based on reserves) is applicable to the Toromocho reserves.

Table 3: Selected Copper Producer Acquisitions (Since 2015)

Date	Acquiror	Target	Equity Value (US$MM)	Enterprise Value (US$MM)	Cu-Eq. (Bnlbs) 2P Reserves	Enterprise Value / Cu-Eq. 2P Reserves
06-07-2015	Southern Copper	El Pilar	$100	$100	1.7	$0.06
30-07-2015	Antofagasta	Zaldivar (50%)	$1,005	$1,005	2.8	$0.36
24-08-2015	Audley	Anglo Norte	$300	$300	1.8	$0.17
15-02-2016	Sumitomo Metal Mining	Morenci (13%)	$1,000	$1,000	2.9	$0.34
05-07-2016	Centerra Gold	Thompson Creek	$137	$1,100	5.0	$0.22
Simple Average						**$0.23**
Median						**$0.22**
Reserve-Weighted Average				**$3.505 (total)**	**14.2 (total)**	**$0.25**

Source: SNL Metals and Mining, and Golder's internal database

Figure 1: Historic Copper Prices

Factors Affecting Valuation

The US$0.23/lb average price paid in 2015 and 2016 will be influenced by numerous factors including:

- Project risk
- The change in copper price from 2015 to present

- Processing and refining penalties
- Incremental silver and molybdenum value

Peru is a relatively stable country for mining with country risk rating of 3 by OECD. The Competent Person's Report did not identify any fatal flaws but did point out the challenges faced by arsenic penalties, talc contamination, and harder ores.

It is clear that the purchase price is fundamentally related to current commodity prices as shown in Figure *2* below. However, purchasers may place some value on the potential for rising prices and the market consensus forecast shows a trend of prices increasing to about US$3.00 by 2020 and holding for the remainder of the mine life.

The Toromocho property has historically suffered from high penalties, predominantly associated with arsenic contamination. The mine plan provided by the Company shows de-creasing levels of arsenic from historic levels of around 0.9% to an average of 0.31% greatly reducing the arsenic penalty.

The value of the silver and molybdenum as a percentage represent 20% of the value of the metal in the ground. This percentage of added value from accompanying metals was typical for copper valuations of the operating companies sold in 2015 and 2016.

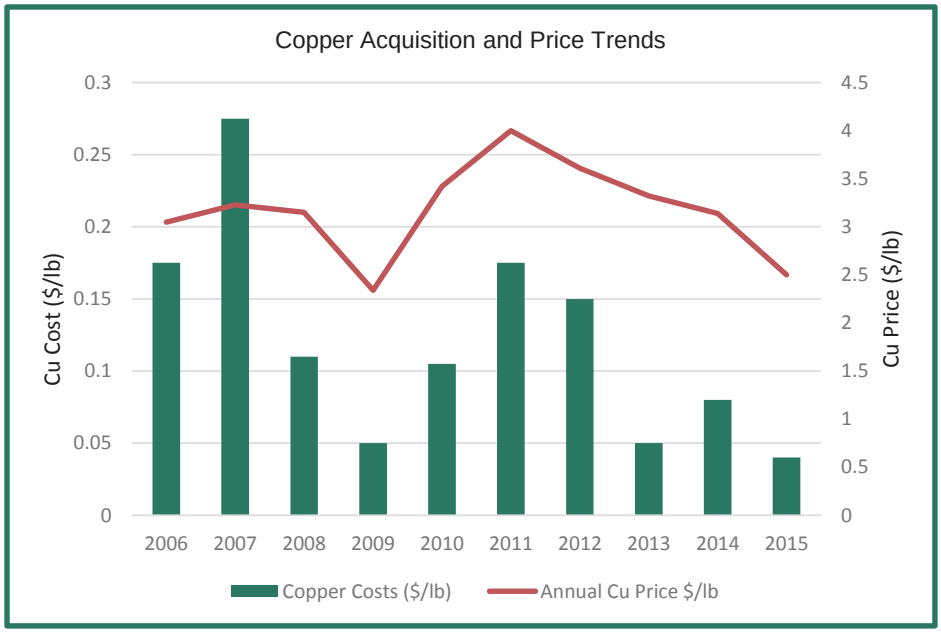


Figure 2: Copper Acquisition and Price Trends (SNL Metals)

Toromocho Mine Value Using Market Based Approach

The Toromocho mine is a producing property located in Peru. Based on the Competent Person's Report and data provided by the Company, reserves at Toromocho include approximately 6.93 million (per 2015 Company annual report) tonnes of copper or 9.45 million equivalent tonnes of copper after converting molybdenum and silver to copper based on the current commodity prices (see Table 4 below). As noted above, a review of 2015 and 2016 transactions shows that investors were paying an average of US$0.23/lb of copper for currently producing assets. However the price paid for any individual property can vary greatly and, without detailed analysis, this would be considered an indicative price.

Table 4: Valuation of Toromocho Project Using Market Based Approach

Toromocho Project 2P Reserves (As reported in 2015 Annual Report)

Category	Contained Metal (t)	Cu-Eq. Metal (t)	Cu-Eq. Metal (mmlb)	Convert Price (US$/t)	Convert Price (US$/oz or lb, as applicable)
Cu	6,930,000	6,930,000	15,278	4,409	2.00
Mo	279,000	1,046,250	2,307	16,535	7.50
Ag	10,100	1,473,096	3,248	643,087	20.00
	Cu- Eq. Total	9,449,346	20,832		
	Average Enterprise Value / 2P (US$/lb)		0.23		
	Implied Valuation for Toromocho Project (US$billion)		**4.79**		

Valuation Results and Sensitivity Analysis

Golder believes that the price decrease from 2015 and arsenic penalty are offset by the potential for increased prices and relatively stable environment to apply the US$0.23/lb price realized in 2015 and 2016. With reserves of 6.53 million tonnes of equivalent copper this would equate to an estimated equity value of US$4.79 billion for the case presented (see Table 4 above).

The following Figure 3 presents the result of our sensitivity analysis to the use of various realized price averages namely the simple average, the mean, and the reserve-weighted average of the major 2015 and 2016 copper transactions.

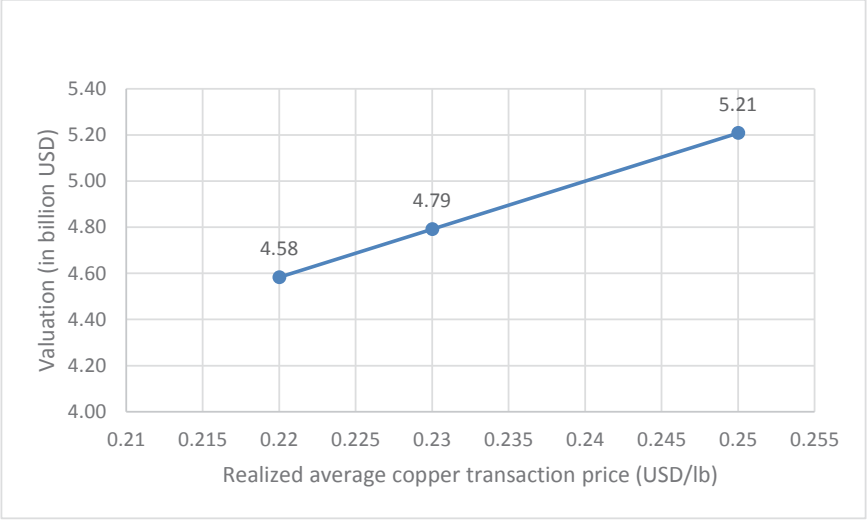


Figure 3: Sensitivity Analysis for Realized average copper transaction price

Note: Simple average of 2015-2016 transaction prices: US$0.23/lb
Mean of 2015-2016 transaction prices: US$0.22/lb
Reserve-weighted average of 2015-2016 transaction prices: US$0.25/lb

8.2 Income-Based Approach (Business Case Approach or BVA)

The Income-Based Approach focuses on the economic benefits due to the income producing capability of the mineral asset. The underlying theory of this approach is that the value of the mineral asset can be measured by the present worth of the economic benefits to be received over the useful life of the mineral

asset. Based on this valuation principle, the Income-Based Approach estimates the future economic benefits and discounts them to their present values using a discount rate appropriate for the risks associated with realizing those benefits.

Under the Income-Based Approach, we have adopted the discounted cash flow ("DCF") method, which is based on a simple reversal calculation to restate all future cash flows in present terms. The expected free cash flow for each year was determined as follows:

Expected Free Cash Flow = Net Profit + Depreciation + After - Tax Interest Expense - Change in Working Capital - Capital Expenditure

The present value of the expected free cash flows was calculated as follows:

$PVCF = CF_1/(1+r)_1 + CF_2/(1+r)_2 + ... + CF_n/(1+r)_n$

In which

PVCF = Present value of the expected free cash flows;

CF = Expected free cash flow;

r = Discount rate; and

n = Number of years.

The Business Case Analysis is an income based approach that focuses on the economic benefits due to the income/cash flow producing capability of the mineral assets. The underlying theory of this approach is that the value of the mineral asset can be measured by the present worth of the economic benefits to be received over the useful life of the mineral asset. Based on this principle, the Business Case Analysis estimates the future cash flows of the mineral assets with appropriate projection methods and discounts such cash flows to present values using a discount factor appropriate for the risks associated with the operation of the underlying asset and the funding cost of the financial resources that support such operation.

Given the indicative nature of value derived under the Market Approach, the Business Valuation Approach is considered more applicable for the valuation of Toromocho. Toromocho is a current producer and as such good historical information was available to be used as part of the evaluation. Golder estimated cash flows based on the business case and projected prices provided by Company and referenced to the Competent Person's Report.

The business cases prepared by the Company also contain an expansion case. The expansion is also discussed in detail in the Competent Person's Report. However as pointed out in the Competent Person's Report, there are a few more pressing issues the Company needs to manage in order to achieve the projections in the current business plan, and therefore it presents uncertainties around when the expansion project can be delivered. As such, Golder has not considered the value of the expansion case in the Business Case Analysis. However a high level estimation of the valuation of such expansion will be discussed at the end of this section.

The valuation date of this report is 2 December 2016.

Business Projection-Reserves and Resources

Based on the Competent Person's Report and data provided by the Company, as of December 31st 2015, reserves at to Toromocho include approximately 6.53 million in situ metric tonnes of contained copper. We disclose that Golder didn't make a Mineral Resource and Ore Reserve Statement in the accompanying CPR. Golder is of the view that report of Mineral Resources and Ore Reserves conforms to the JORC code, the Mineral Resource and Ore Reserve have been estimated in a reasonable manner and the estimates appear to be reasonably reliable. Our opinion is that no discount shall be applied to the Ore Reserves estimate in the valuation exercise.

As stated in the accompanying CPR, Golder assessed the Toromocho Project against the JORC 2012 guidelines and Golder is of the opinion that the Mineral Resources and Ore Reserves quoted by Chinalco in the 2015. Annual Report is a fair representation of the Toromocho Project. The Mineral Resources were authored by Independent Mining Consultants (IMC) for Aker Kvaerner (Nov' 2007) as part of the Feasibility Study and have been reviewed by Dr Sia Khosrowshahi and are considered a valid representation of the mineral resource estimate for the project. The Ore Reserves were authored by Independent Mining Consultants for Aker Kvaerner (Nov' 2007) as part of the Feasibility Study and reviewed by Glenn Turnbull and considers the Ore Reserves to be inclusive of all required modifying factors and that the Ore Reserves estimate is appropriate and correct based upon the underlying assumptions for the Toromocho Project. We are of the opinion that there is no need for discounting the value of mineral resources and ore reserves as reported in the 2015 Annual Report. The Mineral Resource estimate for the Toromocho Project as of 31 December 2015 is shown in Section 3.16 of the Golder CPR as Table 35. The Ore Reserves estimated for the Toromocho Project as of 31 December 2015 is shown in Section 4.4 of the Golder CPR as Table 37.Further, as stated in the Golder CPR, the Mineral Resource and Ore Reserve estimates used in the CPR are information as of 31 December 2015, and Chinalco has not advised Golder of any material change, or event likely to cause material change, to the Mineral Resource and Ore Reserve estimates.

For the purpose of the Business Case Analysis, only Proved and Probable Reserves are included in the valuation, with no resources conversion included. The applied Reserves in the valuation has been adjusted to reflect the Production in the first half of 2016. Dilution and mining losses are considered as appropriate to the mine.

Below table reflects the ore reserve estimates that have been applied in the valuation.

Table 5: Toromocho Project Ore Reserves as at 31st December 2015

JORC Ore Reserve Category	Tonnes	Grade			Metal Content		
	(Millions)	Copper (%)	Molybdenum (ppm)	Silver (gpt)	Copper (Mt)	Molybdenum (tonnes)	Silver (tonnes)
Proved	690	0.51	200	6.4	3.53	138,000	4,400
Probable	784	0.43	180	7.3	3.40	141,000	5,700
Total	**1,474**	**0.47**	**190**	**6.9**	**6.93**	**279,000**	**10,100**

Based on our review of relevant documents and discussion with our CP, we agree to the conclusion that the key concern of such historical underground workings is in relation to the protection of mining equipment and personnel as indicated in the CPR. We are of the opinion that the historical underground working issues would not impair our confidence of the Project's access to mineral resources.

As indicated in our CPR section 3 and 4, we are satisfied with the quality and reasonableness of the mineral resource and ore reserve estimates. We are of the opinion that they have been reported in accordance with the JORC 2012 Code.

Business Projection- Production Schedule

The mining and milling schedule used by Golder in the Business Case Analysis is prepared by the Company and reviewed in the Competent Person's Report. Generally speaking, the plan is to mine and process high grade ores in the beginning stages of the project while putting low grade ores and ores with high arsenic content into stockpile. After year 2035, the mining output of high grade ores gradually declines till complete depletion, the stockpiled ores will be reclaimed for processing. This plan is in line with standard practice of the industry with a goal to maximize the present value of Toromocho Project.

Since the Business Case Analysis does not consider the expansion of the project, the milling output will gradually reach 100% nameplate capacity by 42.8 Mt by 2020. As is discussed in the Competent Person's Report, a gradual improvement of recovery rate is factored in.

Other assumption regarding the production schedule considered in the Business Case Analysis, including the head grade of ores into the processing plant, the start time of the molybdenum production and moisture content in the concentrate, are all provided by the Company and reviewed in the Competent Person's Report.

Regarding arsenic content in the ore, the case prepared by the Company believes that the arsenic content level in the ore would gradually go down to 0.3% level after year 2019 as the mine goes deeper into the pit. However, high arsenic content would imply larger than industry standard penalty to the saleable concentrate from the mine, and Golder believes that the economic impact of such penalty is not immaterial in the meantime, the historical arsenic content level of the mine is approximately 0.9%. As a result Golder believes it is more prudent to use 0.6% as assumptions for arsenic content across the mine life of Toromocho Project.

In reviewing and preparing the production schedule and relevant assumptions, we have also compared the projection with historical realised production (which is provided in Table 1 and 2 of this report). We are of the opinion that the projection of production schedule is in line with the production track record in the commission phase and thus is reasonable.

Please refer to Figure 4 above for details of the projection assumptions.

	units /	2H 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Avg. '26 - '50
Ore												
Low-grade mill Stockpiled	kt	15,084	27,880	24,910	23,480	32,780	24,150	27,180	9,850	0	0	0
High Arsenic Stockpiled	kt	736	1,360	506	606	448	37	1,839	480	21	0	47
High Grade Milled	kt	19,672	36,360	38,500	40,640	42,780	42,780	42,778	42,778	42,778	42,778	34,652
Total Mined	kt	49,009	89,890	91,116	93,526	95,488	95,287	97,407	95,408	94,889	95,078	64,546
Waste	kt	13,142	24,290	27,200	28,800	19,480	28,320	25,610	42,300	52,090	52,300	29,848
Total Ores Processed		19,672	36,360	38,500	40,640	42,780	42,780	42,778	42,778	42,778	42,778	42,742
Copper	percent	0.61%	0.61%	0.61%	0.63%	0.60%	0.54%	0.65%	0.46%	0.45%	0.47%	0.42%
Molybdenum	percent	0.01%	0.01%	0.02%	0.02%	0.02%	0.02%	0.02%	0.01%	0.01%	0.02%	0.02%
Silver	grams/t	3.13	8.05	6.14	6.77	6.21	6.22	5.46	5.29	4.62	5.34	6.18
Metallurgical Recoveries												
Copper	percent	76.5%	76.5%	76.5%	80.0%	82.0%	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
Molybdenum	percent	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%
Silver	percent	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%
Recovered Metal												
Copper	M pounds	201.1	371.6	394.8	453.7	464.8	428.9	523.5	370.3	362.3	375.2	334.4
Molybdenum	M pounds	-	5.2	8.8	9.3	12.3	11.0	14.1	8.0	8.0	9.8	12.4
Silver	M Ounces	1.3	6.1	4.9	5.7	5.6	5.6	4.9	4.7	4.1	4.8	5.5
Concentrate Produced												
Copper	kt-dry	467	803	814	895	878	811	989	700	685	709	632
	kt-wet	513	882	894	983	965	891	1,087	769	753	779	695
Molybdenum	kt-dry	-	2.36	4.00	4.23	5.56	5.01	6.40	3.61	3.61	4.45	5.63
	kt-wet	-	2.36	4.00	4.23	5.56	5.01	6.40	3.61	3.61	4.45	5.63
Arsenic Grade in Conc	percent	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%

Figure 4: Production Schedule Projection Assumptions

Metallurgical Recovery Input

The original Company estimates for metallurgical recovery would be constant at 85% for copper and 65% for silver and molybdenum. With recent copper recovery of about 72% Golder believed that an 85% recovery beginning in 2017 was overly optimistic. However Golder is satisfied that sufficient effort was being applied at the Toromocho Project to better understand the blend requirements for the ore and to improve the metallurgical recovery up to the design specification through a variety of feed and process plant minor modifications. Golder assumed the copper recovery would be ramped up to meet the 85% target in 2021. This ramp-up was used for the valuation.

Concentrate Produced

The moisture is assumed to be 9% for conversion from dry ton of concentrate to wet ton of concentrate, as provided by the Company and reviewed by Golder. Concentrate grade was originally set to 24% but was ramped-up from current levels to 21% in 2017 and 24% in 2021.

Business Projection-Realization Cost

The realization cost mainly includes two part of cost items: 1) the costs charged by the smelters that purchase the concentrate; such costs include the treatment charge, refining charge and impurity penalties; and 2) the logistics costs that Company bears to ship the production from the mine to depot designated by the buyer.

As the specification of concentrate product produced by Toromocho Project deviates from the industry standard, the realization cost also differs to some extent from industry norm. As such, the assumptions Golder used in the Business Case Analysis is prepared by the Company with reference to the historical sales contract executed by Toromocho Project.

Also given the grade of copper concentrate produced by Toromocho is expected to be equal to or below 24%, it is typical that such products would be subject to a lower payability factor. Golder uses 95.8% payability factor as suggested by the Company.

Please refer to Figure *5* for details of realization cost assumptions.

	units /	2H 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Avg. '26 - '50
Copper TC	USD/ton of dry concentrate	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0
Copper RC	USD/ton of dry concentrate	43.9	47.2	49.5	51.9	54.3	54.3	54.3	54.3	54.3	54.3	54.3
Arsenic Penatly	USD/ton of dry concentrate	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Silver Refining Charge	USD/ton of dry concentrate	1.1	3.2	2.4	2.6	2.5	2.8	1.8	2.7	2.4	2.7	3.7
Zinc Penalty	USD/ton of dry concentrate	5.1	5.1	3.8	4.4	5.3	1.4	4.3	1.4	1.4	0.5	3.7
Molybdenum Marketing Charge	USD/ton of dry concentrate	n.a.	661.4	661.4	661.4	661.4	661.4	661.4	661.4	661.4	661.4	661.4
Freight Cost	USD/ton of dry concentrate	92.7	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.7

Figure 5: Realization Cost Assumptions

Business Projection-Operational Cost

The operational costs used in the Business Case Analysis is prepared by the Company and reviewed in the Competent Person's Report. For valuation purposes, Golder thoroughly examined cost and / or expense items such as mining, stockpile reclaiming, processing, molybdenum-related cost, kingsmill, onsite admin and general services, transportation, freight and warehouse, legal, permit and community, centromin royalty and insurance. Furthermore, Golder applied a 1% per annum cost escalation to mining costs so as to factor in potential cost increase driven by deepening of mining and increasing height of waste dump. Golder is of the view that other operational cost will remain flat throughout the life of mine on a real term basis. Golder is of the view that the current cost assumptions represent reasonable assumptions of the future operation of Toromocho

Please refer to figure 6 for details of operational cost assumptions

Operational Cost	Unit	Life of Mine Average

Operational Cost	Unit	Life of Mine Average
Mining	USD/ton of total materials mined	1.32
Reclaim Stockpile	USD/ton of stockpile reclaimed	0.72
Process Plant	USD/ton of total ore processed	6.20
Moly Cost	USD/ton of high grade ore processed	0.47
Kingsmill	USD/ton of high grade ore processed	0.13
On-site Admin	USD/ton of high grade ore processed	1.20
Admin	USD/ton of high grade ore processed	0.26
Legal, Permit and Community	USD/ton of high grade ore processed	0.20
Insurance	USD/ton of high grade ore processed	0.27

Figure 6: Operational Cost Assumptions

The above assumed operational costs do not take into considerations of the credits from the sales of by-products including silver and molybdenum, which are directly included as part the top line revenue of the Toromocho Project.

Business Projection-Capital Expenditure and Working Capital

The capital expenditure schedule is provided by the Company. Golder has not included into the Business Case Analysis any capital expenditure items that are related to the expansion of the Toromocho project. Golder has compared the sustaining capital expenditure per annum provided in the schedule with those of similar mines and concluded that the level sustaining capital spending is reasonable for a project of this scale.

In the schedule provided by the Company, Golder notes that no re-habitation was provided. For an open pit operation of the scale of Toromocho project, Golder believes it is typical to factor in a required capital expenditure to complete the mine closure. As such a US$200MM spending is applied at the end of the mine life as a re-habitation cost.

Please refer to Figure 7 for details of capital expenditure assumptions.

	units /	2H 2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Avg. '26 - '50
Capital Expenditure	USD000s	-111,546	-148,876	-99,033	-45,888	-45,888	-45,888	-45,888	-153,738	-34,888	-34,888	-21,321

Figure 7: Capital Expenditure Assumptions

We have studied the working capital level of Toromocho Project by using the numbers in the 2016 First Half Result Announcement of the Company, and compared that with the working capital level of similar copper mine operations and copper mining companies. We believe as of Jun 30th 2016, the working capital level of Toromocho Project is at its long term sustainable level and there is no further need to put additional cash to fund the working capital in the long run.

Business Projection-Others

Other items considered by Golder in the Business Case Analysis include:

1. Employee Profit Sharing: According to the agreement between the Company and the Toromocho local community, the Company shares 8% of profit before tax to support local community. Such cash outflow is factored into the Business Case Analysis.

2. Depreciation and Amortization Schedule: The schedule used in the Business Case Analysis is provided by the Company. According to the Company, such schedule is consistent with its current accounting policies.

3. Corporate Income Tax: We understand that prior to 2014, the Company has signed a 15-year Stability Agreement with the Peruvian government that called for a 32% income tax rate for the Toromocho project up to Year 2028. In 2014 Peruvian Congress has approved a change of Corporate Income tax from the previous 30% to 26% in 2019. Golder's valuation analysis was based on an income tax rate staying at 32% until 2028 and then dropped to 26% for the remaining life of the Toromocho Mine.

Golder applied an 1.71% royalty on net revenue pursuant to the Toromocho option agreement entered into in 2003 with Empresa Minera del Centro del Peru S.A., a Peruvian state-owned mining company, also known as “Centromin”, which is also consistent with the royalty applied in the competent person report attached to the prospectus of the initial public offering of the Company.

4. Inflation: neither price inflation nor cost inflation was considered in our analysis

Metal Price Forecast and Revenue Projection

Golder has access to 22 research reports from major brokers and investment banks that studies metal price. These major brokers and investment banks cited are: CIBC, Deutsche Bank, Cormark, Raymond James, Canaccord, BAML, RBC, Macquarie, Barclays, BMO, Dundee, Haywood, Scotia, HSBC, NBF, GMP, UBS, Credit Suisse, Citi, JP Morgan, TD, and Societe General. Each report would give its own forecast of the metal price for the next few years and a long term price. The reports reflect the latest thinking of the future outlook of copper, silver and molybdenum. The metal price used in the Business Case Analysis is the average number of these reports. This the best available approach for select a future copper price estimate as these 22 major brokers and investment banks essentially represent all credible sources for future copper price projection. This approach has been routinely taken by other valuation consultants on similar work.

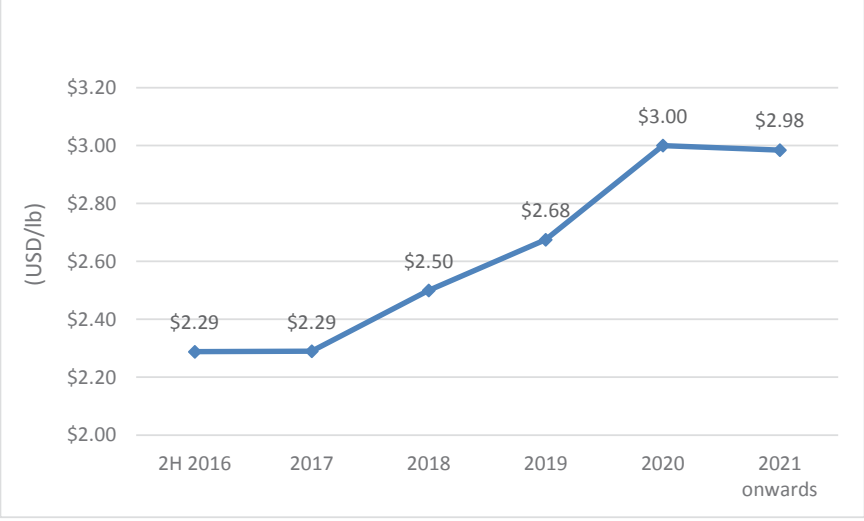


Figure 8: Copper Price Forecast (USD/lb)

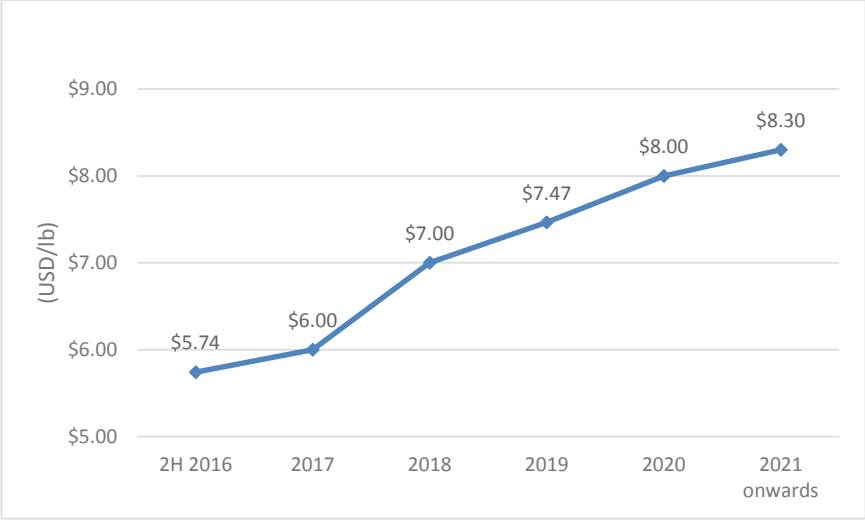


Figure 9: Molybdenum Price Forecast (USD/lb)

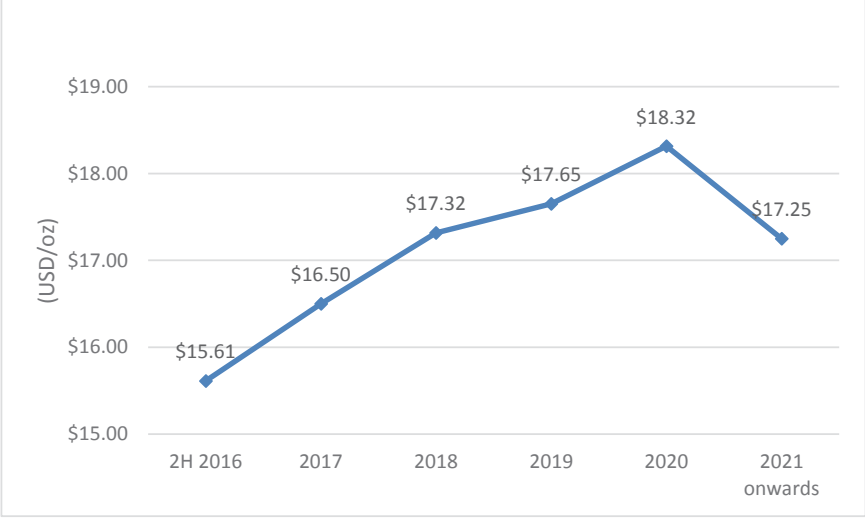


Figure 10: Silver Price Forecast (USD/oz)

Golder thoroughly reviewed historical sales records, offtake agreements and sales agreements of the Company, we have also examined product quality in the context of historical production and current resources and reserves. With that, Golder is of the view that the products the of the Company are marketable. Golder believes the gross revenue forecast below is reasonable based on the projected volumes and forecasted metal prices.

Gross Revenue	Unit	2H 2016	2,017	2,018	2,019	2,020	2,021	2,022	2,023	2,024	2,025	Avg. '26 - '50
Payable Copper	USD000s	438,208	810,464	942,090	1,160,903	1,336,278	1,226,856	1,497,382	1,059,404	1,036,473	1,073,162	957,172
Payable Molybdenum	USD000s	0	31,262	61,791	69,558	98,085	91,587	117,023	66,143	66,143	81,407	103,183
Payable Silver	USD000s	16,718	83,954	67,434	81,136	81,017	77,950	62,197	66,119	56,029	66,673	81,030
Total Revenue	USD000s	454,926	925,681	1,071,314	1,311,597	1,515,380	1,396,393	1,676,602	1,191,665	1,158,645	1,221,242	1,141,385

Figure 11: Silver Price Forecast (USD/oz)

Discount Factor

We have applied a discount rate of 7% based on the Company's projection of their Weighted Average Cost of Capital (WACC). In selecting the appropriate discount factor to be applied in the valuation, we have taken into account the traditional Capital Asset Pricing Model (CAPM) and several other factors including certain risks related to the operations of the project, our knowledge of discount rates commonly applied in valuing mining projects under the DCF method. We use the 10 year US treasury yield as the risk free rate, which we believe is the market normal practice. We studied the betas of comparable copper producers and believe a beta of 1.0-1.1 is a reasonable assumption and for a project like Toromocho. Other adopted assumptions on market risk premium, targeted capital structure, potential debt financing cost, and the tax rate are all based on market normal practice. We also considered the Peruvian country risk premium which is derived from Peru's country credit rating. We have also compared the result with other producing copper projects with similar risk profile and capital structure and concluded that 7% is a reasonable assumption for discount rate.

Implied Valuation under Income Approach

Implied Valuation of the Toromocho Project under the Income Approach is estimated to be US$4.47 billion based on the abovementioned assumptions. This reflects entire value of the Toromocho Project without considering the debt and cash it has loaded on the current balance sheet of the project or the Company. It is a prudent exercise to determine a range of Implied Value under the Income Approach based on an analysis of sensitivity to the most importance sources of uncertainty in the valuation inputs: the long term copper price, and the Discount Factor.

Our sensitivity analysis has established a range of Implied Value under the Income Approach of 3.84 to 5.14 billion US Dollars.

The following table presents the results of our sensitivity analysis for metal prices, discount rate, and metallurgical recovery, with those parameters moving up/down by 20%, two percentage points, and five percentage points, respectively. For valuation sensitivity on copper price and discount rate, the ranges that are not highlighted represent those scenarios of relatively low likelihood.

Valuation Sensitivity on Copper Price									
Long-term Copper Price (US$/lb)	2.38	2.53	2.68	2.83	2.98	3.13	3.28	3.43	3.58
Valuation (US$Bn)	3.23	3.54	3.84	4.12	4.47	4.80	5.14	5.40	5.71
Valuation Sensitivity on Moly Price									
Long-term Moly Price (US$/lb)	6.64	7.06	7.47	7.89	8.30	8.72	9.13	9.55	9.96
Valuation (US$Bn)	4.33	4.37	4.40	4.44	4.47	4.51	4.54	4.58	4.61
Valuation Sensitivity on Silver Price									
Long-term Silver Price (US$/oz)	13.80	14.66	15.53	16.39	17.25	18.11	18.98	19.84	20.70
Valuation (US$Bn)	4.35	4.38	4.41	4.44	4.47	4.50	4.54	4.57	4.60
Valuation Sensitivity on Discount Rate									
Discount Rate (%)	5.0%	5.5%	6.0%	6.5%	7.00%	7.5%	8.0%	8.5%	9.0%
Valuation (US$Bn)	5.65	5.31	5.01	4.73	4.47	4.24	4.02	3.82	3.64
Valuation Sensitivity on Copper Recovery Rate									
Copper Recovery Rate (%)	80.0%	81.0%	82.0%	83.0%	84.0%	85.0%	86.0%	87.0%	88.0%	89.0%	90.0%
Valuation (US$Bn)	4.05	4.13	4.22	4.30	4.39	4.47	4.56	4.64	4.72	4.81	4.89
Valuation Sensitivity on Moly Recovery Rate									

Moly Recovery Rate (%)	60.0%	61.0%	62.0%	63.0%	64.0%	65.0%	66.0%	67.0%	68.0%	69.0%	70.0%
Valuation (US$Bn)	4.42	4.43	4.44	4.45	4.46	4.47	4.48	4.49	4.50	4.51	4.52
Valuation Sensitivity on Silver Recovery Rate											
Silver Recovery Rate (%)	60.0%	61.0%	62.0%	63.0%	64.0%	65.0%	66.0%	67.0%	68.0%	69.0%	70.0%
Valuation (US$Bn)	4.42	4.43	4.44	4.45	4.46	4.47	4.48	4.50	4.51	4.52	4.53

Figure 12: Sensitivity Analysis

We estimate that a 10% reduction in ore reserves would result in an approximately USD 150 million decrease in the valuation. This estimate is based on subtracting the volume of ore mined that equals to 10% of ore reserves at the end of mine life.

Discussion Regarding the Expansion

As discussed above, Golder has not considered the Phase 2 expansion of Toromocho Project in the Business Case Analysis. As pointed out in the Competent Person's Report, Golder still believes the expansion would deliver positive economic value. However, given the Company has other more critical short term targets to accomplish, such as improving recoveries and complete the molybdenum processing plants, Golder is of the view that there are still uncertainties regarding the timing of such expansion could be delivered. Based on the information provided by the Company, approximately an additional US$900MM of capital expenditure would be required to complete the expansion. Assuming the expansion could be delivered on or before 2021, a preliminary estimate of the value of the Toromocho Project would increase from US$4.62 billion to US$5.71 billion. The estimation is of indicative nature and should be used for reference only.

9.0 RISK FACTORS

The CPR report has provided extensive discussions in relates to the factors that potentially have impact on the operation and performance of the Toromocho Project. In preparing the valuation, we have reviewed and discussed all these factors. We are of the view that such risk factors have been properly taken into consideration into the valuation. We would include here a summary of such risk factors and provided with our subjective assessment of the consequences of the risk on the overall project operation and the likelihood of such risks occurring.

The risk assessment grid we apply is listed below:

	Likelihood		
Consequence	Likely	Possible	Unlikely
Major	High Risk	High Risk	Medium Risk
Moderate	High Risk	Medium Risk	Low Risk
Minor	Medium Risk	Low Risk	Low Risk

The likelihood of risks occurring is subjectively and estimated as:

- **Likely**: >50% probability that the risk will occur
- **Possible**: 20-50% probability that the risk will occur
- **Unlikely**: <20% probability that the risk will occur

The Consequence of risks is subjectively and estimated as:

- **Major**: >20% impact of mine cash flow, and potentially lead to mine closure if not corrected properly
- **Moderate**: 5-20% impact of mine cash flow but would not likely lead to a mine closure
- **Minor**: <5% impact of mine cash flow

Below is the summary of risks associated with Toromocho Project and our assessment:

- Risk related to mineral resources and reserves estimates – as discussed in section 8, we are comfortable with the mineral resources and reserves estimates. We believe there are limited risks that would impair Toromocho Project's ability to access the mineral resources in its concessions. In addition, given the mine of life for Toromocho Project is over 20 years, even there could be any factors (such as historical underground work) unexpected leads to certain amount of mineral resources available for extraction, due to the discounting factor, the value impact of such event is minimal, in our opinion. – ***LOW RISK***
- Risk related to mineral extraction and recovery – The Toromocho Project applies mining and processing method that is commonly used in similar mining operations. In our view, there is no significant risk associated with such process. As discussed in section 8 of this report as well as section 5 in the CPR report, there is more work to be done to improve the metallurgical recovery rate. If the final recovery could not achieve or get close to the level we applied in the business case, there will be a moderate consequence, but in our view such a risk is unlikely. – ***LOW RISK***
- Risk related to equipment and infrastructure of the operation – based on our review of the infrastructure, track record of production and management and maintenance policies, we believe there is limited risk associated with equipment and infrastructure – ***LOW RISK***
- Risk related to sales of the product – if the arsenic content level remains high in copper concentrate product produced from the Toromocho Project, which we believe is a possible event, this will have a moderate consequence, especially if this is compounded by a relatively depressed copper price environment. – ***MEDIUM RISK***
- Environmental and social-political risk – based on our own study and the review of the track record of the Toromocho Project, we are of the view that there is no significant environmental risk. Also the Company has a great relationship with local community and there has been no major social-political issue since the construction of the project. – ***LOW RISK***
- Country risk – Peru is one of the best performing economics in the Latin America, according to World Bank. The country has a sovereign credit rating of Standard & Poor's BBB+ with a positive outlook and A3 from Moody's. In our opinion, we don't see significant country risk – ***LOW RISK***
- Foreign Exchange Risk – we have studied the exchange rate between Peruvian Sol and U.S. dollar in the past ten years. The rate has been relatively stable and is moving within a range between 2.6 to 3.5 Sols to a U.S. dollar. We believe the volatility presented in the past 10 years indicates a relatively low risk profile in terms of exchange rates – ***LOW RISK***
- Global macroeconomic risk – it is possible that copper price would remain relatively low for a prolonged period of time. In particular, considering the fact that the Toromocho Project would run for another 20+ years into the future, it is likely that the copper price may deviate from the level we are applying in the valuation analysis. What worth mentioning is that, there is an equal likelihood that the future copper price may produce a positive surprise – ***MEDIUM RISK***

In Sum, we consider the overall risk profile for the Toromocho Project to be low, compared with other projects / operations of similar type or in nearby regions. In our view, the primary risk remains the current net

income from the copper sales, with the reduced income from a low copper price being compounded by large penalty costs associated with the Arsenic levels in concentrate.

10.0 LIMITING CONDITIONS

The valuation reflects facts and conditions existing at the Date of Valuation being December 2, 2016.

We would particularly point out that our valuation was based on the information such as the projections made by the Management.

To the best of our knowledge, all data set forth in this report are reasonable and accurately determined. The data, opinions, or estimates identified as being furnished by others that have been used in formulating this analysis are gathered from reliable sources; yet, no guarantee is made nor liability assumed for their accuracy.

We have relied to a considerable extent on the historical and/or prospective information provided by the Management and other third parties in arriving at our opinion of values. The information has not been audited or compiled by us. We are not in the position to verify the accuracy of all information provided to us. However, we have had no reason to doubt the truth and accuracy of the information provided to us and to doubt that any material facts have been omitted from the information provided. No responsibilities for the operation and financial information that have not been provided to us are accepted.

Our conclusion of the fair market values was derived from generally accepted valuation procedures and practices that rely substantially on the use of various assumptions and the consideration of many uncertainties, not all of which can be easily quantified or ascertained. The conclusion and various estimates may not be separated into parts, and/or used out of the context presented herein, and/or used together with any other valuation or study.

We assume no responsibility whatsoever to any person other than the directors and management of the Company in respect of, or arising out of, the content of this report. If others choose to rely in any way on the contents of this report, they do so entirely on their own risk.

This report may not be reproduced, in whole or in part, and utilized by any third parties for any purpose, without the written consent and approval of Golder.

11.0 VALUATION CONCLUSION

Based on the investigation and analysis stated above, the valuation methods employed, and the sensitivity analyses performed, the implied valuation of the Toromocho Project as at the Date of Valuation, in our opinion, were reasonably stated as follows:

Aggregate Implied Project Value of the Toromocho Copper Project as of December 2, 2016

Valuation Method	Range US$	Preferred Value US$
Market-Based Approach	4.58 to 5.21 billion	4.79 billion
Income -Based Approach	3.84 to 5.14 billion	4.47 billion

We are of the view that the range of the value indicated above reflects the uncertainties of assumptions and risk factors discussed in section 8.2 and section 9.0 of this report.

We believe the income-based approach is a fair and reasonable assessment of the project's value. Income-based approach focuses on the economic benefits due to the income/cash flow producing capability of the mineral assets. This approach reflects the quality as well as quantity of the mineral asset. Admittedly, income-based approach does require quite a number of assumptions to be made. Market-based approach, on the other hand, applies a value multiple to the quantity of the mineral resources and ore reserves. Though

requiring less assumption, it takes less into account the quality aspects of the asset. Our view is that the market-based approach typically severs as a reality check of whether the assumptions applied in the income-based approach is reasonable. Given the valuation from market approach is differs less than 10% to the income-based approach, we are of the view that the assumptions used in the income-based approach is generally in line with market expectation. As such, we conclude the preferred value represents the most likely scenario of projection.

When converting technical value to market value, investors typically look at price to net-asset-value ratio. This ratio represents a market transaction or trading value divided by its technical value assessed by independent evaluators. The average price to net asset ratios of the precedent transactions in table 3 of Section 8.1 is approximately 1.0x, with the range of 0.5x-1.2x. We think the average number of these cases represents the most reasonable ratio to be applied to Toromocho Project

As such, we are of the view that the project's Fair Market Value is US$4.47 billion.

We confirm that the inputs, assumptions, Valuation Approaches, Valuation Methods and Technical Assessment or Valuation meet the Reasonable Grounds Requirement as identified in the VALMIN Code.

We confirm that we meet the requirements of an "independent valuer" as defined in Appendix 1.1 of The HKIS Valuation Standards on Properties published by The Hong Kong Institute of Surveyors and, in addition, has no material connection with other parties to the proposed privatisation of the Company by Aluminum Corporation of China Overseas Holdings Limited by way of a scheme of arrangement (under section 86 of the Companies Law of the Cayman Islands).

12.0 APPENDIX I:

NO.	NAME	TYPE	CODE	DATE OF ACQUISITION
I.	**METALLIC MINING CONCESSIONS OWNED BY CHINALCO PERU**			
1	DANUBIO S.R.	Metallic Mining Concession	08021948X01	July 12, 2010
2	ISABEL S.R	Metallic Mining Concession	08021977X01	July 12, 2010
3	POLONIA S.R.	Metallic Mining Concession	08021978X01	July 12, 2010
4	VIENA S.R.	Metallic Mining Concession	08021976X01	July 12, 2010
5	MILAGROSA	Metallic Mining Concession	08001342Y01	November 19, 2004
6	ALIANZA	Metallic Mining Concession	08001063Y01	May 2, 2008
7	CHISPA	Metallic Mining Concession	08001496Y01	May 2, 2008
8	EL AZUL DEL DANUBIO	Metallic Mining Concession	08001349Y01	May 2, 2008
9	EL MARTILLO	Metallic Mining Concession	08001394X01	May 2, 2008
10	FORTALEZA	Metallic Mining Concession	08001143Y01	May 2, 2008
11	INDEPENDENCIA	Metallic Mining Concession	08005477X01	May 2, 2008
12	LA COMISIÓN	Metallic Mining Concession	08001807Y01	May 2, 2008
13	LA DEFENSA	Metallic Mining Concession	08001757Y01	May 2, 2008
14	LA PERLITA	Metallic Mining Concession	08001391X01	May 2, 2008
15	MADAM GRIMANEZA	Metallic Mining Concession	08001869Y01	May 2, 2008
16	SAN ROMÁN	Metallic Mining Concession	08000740Y01	May 2, 2008
17	SUERTE	Metallic Mining Concession	08001495Y01	May 2, 2008
18	VECINA	Metallic Mining Concession	08001479Y01	May 2, 2008
19	VECINA 2da	Metallic Mining Concession	08001996Y01	May 2, 2008

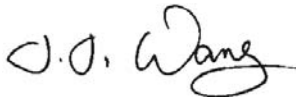
NO.	NAME	TYPE	CODE	DATE OF ACQUISITION
20	YANKEE	Metallic Mining Concession	08001824Y01	May 2, 2008
21	JUNIN	Metallic Mining Concession	08001124Y01	May 2, 2008
22	MONTAÑA-87	Metallic Mining Concession	08016662X01	May 2, 2008
23	MOROCOCHA 3-C	Metallic Mining Concession	0804354LY01	May 2, 2008
24	MOROCOCHA 3-D	Metallic Mining Concession	0804354MY01	May 2, 2008
25	MOROCOCHA 4-K	Metallic Mining Concession	0804355SY01	May 2, 2008
26	MOROCOCHA 4-L	Metallic Mining Concession	0804355TY01	May 2, 2008
27	MOROCOCHA 4-M	Metallic Mining Concession	0804355UY01	May 2, 2008
28	MOROCOCHA 4-N	Metallic Mining Concession	0804355VY01	May 2, 2008
29	MOROCOCHA 4-Ñ	Metallic Mining Concession	0804355WY01	May 2, 2008
30	MOROCOCHA 4-O	Metallic Mining Concession	0804355XY01	May 2, 2008
31	MOROCOCHA 6-C	Metallic Mining Concession	0804357IY01	May 2, 2008
32	MOROCOCHA 6-D	Metallic Mining Concession	0804357JY01	May 2, 2008
33	MOROCOCHA 6-F	Metallic Mining Concession	0804357LY01	May 2, 2008
34	MOROCOCHA 6-G	Metallic Mining Concession	0804357MY01	May 2, 2008
35	MOROCOCHA 7-A	Metallic Mining Concession	0804358CY01	May 2, 2008
36	MOROCOCHA-8	Metallic Mining Concession	10212693	May 2, 2008
37	MUCHCAPATA 4	Metallic Mining Concession	0804358AY01	May 2, 2008
38	MUCHCAPATA 5	Metallic Mining Concession	0804358BY01	May 2, 2008
39	TOROMOCHO CUATRO	Metallic Mining Concession	0804358EY01	May 2, 2008
40	TOROMOCHO DOS	Metallic Mining Concession	0804355ZY01	May 2, 2008
41	TOROMOCHO TRES	Metallic Mining Concession	0804357NY01	May 2, 2008
42	TOROMOCHO UNO	Metallic Mining Concession	0804354PY01	May 2, 2008
43	LA MADAMA	Metallic Mining Concession	08020930X01	July 12, 2010
44	CLAUDIA	Metallic Mining Concession	08021810X01	July 12, 2010
45	CONSTANCIA	Metallic Mining Concession	08001206Y01	January 9, 2006
46	EL SALCHICHÓN	Metallic Mining Concession	08002394Y01	November 19, 2004
47	SALVADOR	Metallic Mining Concession	08001027Y01	May 2, 2008
48	SYLVANA UNO	Metallic Mining Concession	10102105	March 10, 2006
49	TOROMOCHO UNO - 2011	Metallic Mining Concession	0804354SY01	May 2, 2008
II.	**METALLIC MINING CONCESSIONS OWNED BY PESARES**			
50	AFLICCIÓN	Metallic Mining Concession	08001997Y01	Acquisition of first interest in Sociedad Minera Pesares S.A. by Chinalco Peru on August 17, 2004
51	DOLORSITO	Metallic Mining Concession	08001999Y01	Acquisition of first interest in Sociedad Minera Pesares S.A. by Chinalco Peru on August 17, 2004
52	PESARES	Metallic Mining Concession	08001381Y01	Acquisition of first interest in Sociedad Minera Pesares S.A.

NO.	NAME	TYPE	CODE	DATE OF ACQUISITION
				by Chinalco Peru on August 17, 2004
III.	**METALLIC MINING CONCESSIONS OWNED BY CENTENARIO**			
53	ANCÓN	Metallic Mining Concession	08001837Y01	October 13, 2006
54	ASIA	Metallic Mining Concession	08001132Y01	October 13, 2006
55	CALLAO	Metallic Mining Concession	08001734Y01	October 13, 2006
56	EL JAPÓN	Metallic Mining Concession	08001811Y01	October 13, 2006
57	ELENITA	Metallic Mining Concession	08001858Y01	October 13, 2006
58	LA CHINA	Metallic Mining Concession	08001883Y01	October 13, 2006
59	LA MAR	Metallic Mining Concession	08001850Y01	October 13, 2006
60	LA SOLEDAD	Metallic Mining Concession	08000848Y01	October 13, 2006
61	TRANQUITA	Metallic Mining Concession	08001859Y01	October 13, 2006
62	VICTORIA	Metallic Mining Concession	08001944Y01	October 13, 2006
63	CHABELA	Metallic Mining Concession	08023100X01	October 13, 2006
64	CLARISA	Metallic Mining Concession	08023104X01	October 13, 2006
65	RAQUEL ELVIRA	Metallic Mining Concession	08022776X01	October 13, 2006
66	REBECA 90	Metallic Mining Concession	08023099X01	October 13, 2006
IV.	**METALLIC MINING CONCESSIONS OWNED BY JUANITA**			
67	JUANITA (Juanita de Hyo)	Metallic Mining Concession	08001163Y01	November 10, 2006

Figure 13: Mining Concessions

Report Signature Page

GOLDER ASSOCIATES CONSULTING LTD.



James Wang, P.E., M.B.A.
Principal, Technical Director

JJW/mz

Note: *Mr. James Wang is the author of the valuation report. He takes overall responsibility at the capacity of the Competent Evaluator. He has reviewed all the major assumptions adopted in the valuation model and ensured this valuation report is compliant with the VALMIN Code.* Mr. Wang has over 20 years of experience in mining and due diligence assessment of mining projects and has completed a number of mining project valuations. Mr. Wang is nominated as an ‘‘Specialist”, under the terms of the VALMIN Code. Mr. Wang is the author and the competent evaluator of this report and has reviewed all the major assumptions adopted in the valuation model and ensured this valuation report is compliant with VALMIN Code. *Mr. James Wang is a registered Professional Engineer (PE) in the United States of America.*

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Golder Associates

B. REPORT FROM THE CMC INDEPENDENT FINANCIAL ADVISER ON DISCOUNTED FUTURE CASH FLOWS

The following is the text of the report from the CMC Independent Financial Adviser in respect of the valuation report from the Competent Evaluator for the purpose of incorporation into this Scheme Document.

PLATINUM Securities Company Limited

21/F LHT Tower
31 Queen's Road Central
Hong Kong

Telephone (852) 2841 7000
Facsimile (852) 2522 2700
Website www.platinum-asia.com

3 February 2017

The Board of Directors
Chinalco Mining Corporation International
36/F, Tower Two, Times Square
1 Matheson Street
Causeway Bay
Hong Kong

Dear Sirs,

Reference is made to the scheme document dated 3 February 2017 (the "**Scheme Document**") jointly issued by Aluminum Corporation of China Overseas Holdings Limited (the "**Offeror**") and Chinalco Mining Corporation International (the "**Company**" or "**CMC**") in relation to, among other things, the proposed privatisation of CMC by the Offeror by way of a scheme of arrangement (under section 86 of the Companies Law of the Cayman Islands) (the "**Proposal**"). Unless otherwise defined or if the context otherwise requires, all terms defined in the Scheme Document shall have the same meaning when used in this letter.

As disclosed in the Scheme Document, appraisal has been made on the Toromocho Project by Golder Associates Consulting Ltd (the "**Independent Evaluator**"), and such appraisal is contained in the competent persons report for the Toromocho Project and the valuation report for the Toromocho Project (individually and collectively, the "**Valuation Report(s)**") prepared by the Independent Evaluator dated on 23 January 2017 for the purpose of the Proposal which are set out in Appendix II and Appendix III to the Scheme Document, respectively. To our knowledge, the Valuation Reports have been provided to you in your capacity as the directors of the Company ("**Directors**"). The discounted cash flows underlying the valuation of the Toromocho Project in the Valuation Reports ("**Underlying Forecast**") constitutes a profit forecast under Rule 11.1(a) of the Code on Takeovers and Mergers of Hong Kong (the "**Takeovers Code**").

It is our responsibility to report in accordance with Rule 10.3 of the Takeovers Code. Furthermore, our report on the qualifications and experience of the Independent Evaluator to prepare the Valuation Reports is required under Rule 11.1(b) of the Takeovers Code and this letter also constitutes such report from us.

We, from the perspective of independent financial adviser to the Company, have reviewed the Underlying Forecast of the Toromocho Project as contained in the Valuation Reports, and we have had discussions on the Underlying Forecast of the Toromocho Project with the Independent Evaluator and the management of the Company including, in particular, the basis and assumptions adopted in the valuation of the Toromocho Project which contained in the Underlying Forecast (the "**Assumptions**") and the past performances of the Toromocho Project, and we have made other consultations which the Independent Evaluator considered pertinent to the Underlying Forecast.

In arriving our views on the Assumptions, we have considered, and relied upon, the Valuation Reports, the experience and the expertise of the Independent Evaluator, the view and the opinion expressed by, and the representations of, the management of the Company and the Independent Evaluator, which we have assumed to be true, complete, accurate and not misleading at the time they were made and continue to be so in all material respects as of the date hereof, and nothing has come to our attention that causes us to believe that the Underlying Forecast, so far as the arithmetical accuracy of the calculations of the Underlying Forecast is concerned, has not been properly complied on the basis of the Assumptions, and nothing has come to our attention that the Assumptions are not made with due care and consideration.

It is the responsibility solely of the Directors to prepare the Underlying Forecast. The completeness, reasonableness and validity of which the Assumptions had been used in the Underlying Forecast are the sole responsibility of the Directors.

Based on our reasonable checks to assess the relevant qualification, experience and expertise of the Independent Evaluator, including reviewing the supporting documents on the qualifications and discussions with the Independent Evaluator and the relevant staff members in respect of their relevant track records and experience, we are satisfied that the Independent Evaluator is suitably qualified and experienced to compile the Valuation Reports.

We understand that regarding the valuation relates to the Underlying Forecast, no accounting policies of the Company have been adopted in its preparation. The Assumptions include hypothetical assumptions about future events and management actions which cannot be confirmed and verified in the same way as past results and these may or may not occur. Even if the events and actions anticipated do occur, actual results are still likely to be different from the valuation and the variation may be material. We also noted from Ernst & Young, the reporting accountant of the Company that the numbers used in the future cashflow for the purpose of preparation of the Valuation Report are estimated by the Directors of the Company based on certain assumptions and factors other than accounting policies adopted in the preparation of financial statements in accordance with International Financial Reporting Standards. Those assumptions and factors include but not limited to business projection on mine reserves and resources, production schedule, etc.

Nevertheless, the Underlying Forecast, so far as the arithmetical accuracy of the calculations has been properly complied in accordance with the Assumptions made by the Directors of the Company.

In light of the above, given that (i) the Independent Evaluator has adequate expertise on valuing such mining asset; (ii) the relevant staff members of the Independent Evaluator have sufficient track records and experiences on valuing such mining asset; (iii) the Underlying Forecast so far as the arithmetical accuracy of the calculations has been properly compiled in accordance with the Assumptions made by the Directors of the Company, and (iv) we have discussed with the management of the Company and the Independent Evaluator in relation to the basis and rationale on determining relevant Assumptions, especially after taking into account including but not limit to the project expansion plan, business projection on mine reserves and resources, global business environment, global commodity price, relevant country and political issues, market competition and interpretation of geosciences and engineering data and etc, which we think such considerations that incline to make the Assumptions is in line with the market practice and is fair and reasonable, we are of the opinion that the Assumptions set out in the Valuation Reports in respect of the Underlying Forecast, which are prepared by the Independent Evaluator and duly reviewed and accepted by the Directors, have been made with due care and consideration as a whole for the purpose of determining the Underlying Forecast.

However, we are not an expert on mining development or investment. This letter does not represent any opinion by us on any future production and sale levels, the future level of development and production cost and profitability of the Toromocho Project. Accordingly, the Valuation Reports shall not be deemed as a guarantee or prediction of results, and no warranty is implied or expressed that the actual outcome will conform to the outcomes presented in the Valuation Reports. Attention should be drawn to the risks and limitations as explained in the Valuation Reports.

This letter is supplied for the sole use of the Company. For the avoidance of doubt, all duties and liabilities (including without limitation those arising from negligence) to third parties are specifically disclaimed, except those of our responsibilities under the Takeovers Code, the Listing Rules or other applicable laws and regulations that cannot be disclaimed.

Yours faithfully,
For and on behalf of
Platinum Securities Company Limited

Li Lan
Director and Co-Head of Corporate Finance

C. REPORT FROM THE REPORTING ACCOUNTANTS ON DISCOUNTED FUTURE CASH FLOWS

The following is the text of the report from Ernst & Young in respect of the valuation report from the Competent Evaluator for the purpose of incorporation into this Scheme Document.

22/F, CITIC Tower
1 Tim Mei Avenue
Central, Hong Kong

3 February 2017

The Directors
Chinalco Mining Corporation International

No. 62 North Xizhimen Street,
Haidian District, Beijing,
The People's Republic of China

Dear Sirs,

We have performed the work described below, in respect of the arithmetical accuracy of the calculations of the discounted cash flow forecast (hereinafter referred to as the "Underlying Forecast") underlying the valuation report dated 23 January 2017 prepared by Golder Associates Consulting Ltd. ("Competent Evaluator") in respect of valuation of the Toromocho Copper Project as at 23 January 2017 (the "Valuation"). The Underlying Forecast is regarded by The Stock Exchange of Hong Kong Limited and the Securities and Futures Commission as a profit forecast under paragraph 14.61 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") and Rule 11.1(a) of the Code on Takeovers and Mergers of Hong Kong (the "Takeovers Code").

RESPECTIVE RESPONSIBILITIES OF DIRECTORS OF THE COMPANY AND REPORTING ACCOUNTANTS

It is the responsibility solely of the directors (the "Directors") of Chinalco Mining Corporation International (the "Company") to prepare the Underlying Forecast. The Underlying Forecast has been prepared using a set of assumptions (the "Assumptions"), the completeness, reasonableness and validity of which are the sole responsibility of the Directors. The numbers used in the future cashflow for the purpose of preparation of the valuation report are estimated by the directors based on certain assumptions and factors other than accounting policies adopted in the

preparation of financial statements in accordance with International Financial Reporting Standards. Those assumptions and factors includes but not limited to business projection on mine reserves and resources, production schedule, etc.

It is our responsibility to draw a conclusion, based on our work on the arithmetical accuracy of the calculations of the Underlying Forecast and to present our conclusion solely to you, as a body, for the purpose of reporting under paragraph 14.62(2) of the Listing Rules and Rule 10.3(b) of the Takeovers Code and for no other purpose. We are not reporting on the appropriateness and validity of the bases and Assumptions on which the Underlying Forecast are based and our work does not constitute any valuation of the Toromocho Copper Project. The Underlying Forecast does not involve the adoption of accounting policies. The Assumptions used in the preparation of the Underlying Forecast include hypothetical assumptions about future events and management actions that may or may not occur. Even if the events and actions anticipated do occur, actual results are still likely to be different from the Underlying Forecast and the variation may be material. We have not reviewed, considered or conducted any work on the completeness, reasonableness and the validity of the Assumptions and thus express no opinion whatsoever thereon. Our work is more limited than that for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. We also accept no responsibility to any other person in respect of, arising out of, or in connection with our work.

OUR INDEPENDENCE AND QUALITY CONTROL

We have complied with the independence and other ethical requirements of *the Code of Ethics for Professional Accountants* issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies Hong Kong Standard on *Quality Control 1 Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements*, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

BASIS OF CONCLUSION

We conducted our work in accordance with Hong Kong Standards on Assurance Engagements 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" issued by the Hong Kong Institute of Certified Public Accountants. Our work consisted primarily of checking the arithmetical accuracy of the calculations of the Underlying Forecast prepared based on the Assumptions made by the Directors of the Company. Our work has been undertaken solely to assist the Directors in evaluating whether the Underlying Forecast, so far as the arithmetical accuracy of the calculations is concerned, has been properly compiled in accordance with the Assumptions made by the Directors of the Company. Our work does not constitute any valuation of the Toromocho Copper Project.

CONCLUSION

Based on the foregoing, in our opinion, so far as the arithmetical accuracy of the calculations of the Forecast is concerned, the Forecast has been properly compiled in all material respects in accordance with the Assumptions adopted by the Directors.

Yours faithfully

Ernst & Young
Certified Public Accountants
Hong Kong

1 RESPONSIBILITY STATEMENTS

The information contained in this Scheme Document relating to the CMC Group has been supplied by CMC. The issue of this Scheme Document has been approved by the directors of CMC, who jointly and severally accept full responsibility for the accuracy of the information contained in this Scheme Document (other than that relating to the Offeror and the Offeror Concert Parties) and confirm, having made all reasonable enquiries, that to the best of their knowledge, opinions expressed in this Scheme Document (other than those expressed by the Offeror and the Offeror Concert Parties) have been arrived at after due and careful consideration and there are no other facts not contained in this Scheme Document, the omission of which would make any statement in this Scheme Document misleading.

The information contained in this Scheme Document relating to the Offeror has been supplied by the Offeror. The issue of this Scheme Document has been approved by the directors of the Offeror, who jointly and severally accept full responsibility for the accuracy of the information contained in this Scheme Document (other than that relating to the CMC Group) and confirm, having made all reasonable enquiries, that to the best of their knowledge, opinions expressed in this Scheme Document (other than those expressed by the CMC Group) have been arrived at after due and careful consideration and there are no other facts not contained in this Scheme Document, the omission of which would make any statement in this Scheme Document misleading.

2 SHARE CAPITAL

As at the Latest Practicable Date:

(a) the authorised share capital of CMC is US$1,000,000,000 divided into 25,000,000,000 CMC Shares of US$0.04 each;

(b) the issued share capital of CMC was US$472,711,297.12 divided into 11,817,782,428 CMC Shares of US$0.04 each;

(c) no CMC Shares had been issued since 31 December 2015, the end of the last financial year of CMC;

(d) all of the CMC Shares rank *pari passu* in all respects as regards rights to capital, dividends and voting; and

(e) there were no outstanding warrants, derivatives or other relevant securities (as defined in Note 4 to Rule 22 of the Takeovers Code) issued by CMC that carry a right to subscribe for or which are convertible into CMC Shares.

3 MARKET PRICE

The table below sets out the closing price of the CMC Shares on the Stock Exchange on (i) the last trading day of each of the calendar months during the period commencing six months preceding the Announcement Date and ending on the Latest Practicable Date; (ii) the Last Trading Day; and (iii) the Latest Practicable Date:

	Closing price for each CMC Share *(HK$)*
31 March 2016	0.85
29 April 2016	0.83
31 May 2016	0.81
30 June 2016	0.96
29 July 2016	1.02
31 August 2016	1.04
14 September 2016 (Last Trading Day)	1.05
30 September 2016	1.32
31 October 2016	1.33
30 November 2016	1.32
30 December 2016	1.29
27 January 2017 (Latest Practicable Date)	1.36

The lowest and highest closing prices of CMC Shares as quoted on the Stock Exchange during the period commencing six months preceding the Announcement Date and ending on the Latest Practicable Date were HK$0.70 per CMC Share on 16 May 2016 and HK$1.36 per CMC Share on 27 January 2017, respectively.

The Cancellation Price of HK$1.39 per Scheme Share represents a premium of approximately 32.4% over the closing price of HK$1.05 per CMC Share as quoted on the Stock Exchange on 14 September 2016 (being the Last Trading Day).

4 DISCLOSURE OF INTERESTS

For the purpose of this paragraph, "interested" and "interests" have the same meanings as given to them in the appropriate part of the SFO.

(a) Interests and Dealings in CMC Shares

(i) As at the Latest Practicable Date, the Offeror and Offeror Concert Parties had the following interests in CMC Shares:

	As at the Latest Practicable Date	
CMC Shareholders	**Number of CMC Shares**	**%** *(Note 5)*
Offeror *(Note 1)*	10,001,171,428	84.63
Offeror Concert Parties		
Rio Tinto International *(Note 2)*	132,910,000	1.12
Total number of CMC Shares held by the Offeror and the Offeror Concert Parties	10,134,081,428	85.75
Independent CMC Shareholders		
Offtake Shareholders		
Urion Holdings *(Note 3)*	445,714,000	3.77
Hongfan International *(Note 3)*	100,000,000	0.85
Tongling Nonferrous *(Note 3)*	221,516,000	1.87
Louis Dreyfus *(Note 3)*	66,768,000	0.56
Guangxi Non-ferrous *(Note 3)*	132,900,000	1.12
Nice Ascent *(Note 4)*	111,594,000	0.94
Others	605,209,000	5.12
Total number of CMC Shares held by the Independent CMC Shareholders	1,683,701,000	14.25
Total number of CMC Shares	11,817,782,428	100.00

Notes:

(1) CMC Shares in which the Offeror is interested will not form part of the Scheme Shares and will not be cancelled. The number 10,001,171,428 excludes a 0.58 fractional CMC Share held by the Offeror which is non-tradable and which will also not form part of the Scheme Shares and will not be cancelled.

(2) Rio Tinto Group (including Rio Tinto International) owns or controls more than 20% of the voting rights in joint ventures with Chinalco. Therefore, Rio Tinto International is presumed to be acting in concert with the Offeror in relation to CMC in accordance with class 1 of the definition of "acting in concert" under the Takeovers Code. All of the CMC Shares held by the Offeror Concert Parties will form part of the Scheme Shares and will be cancelled upon the Scheme becoming effective.

(3) Each of Urion Holdings, Hongfan International, Tongling Nonferrous, Louis Dreyfus and Guangxi Non-ferrous has undertaken to, amongst other things, exercise (or procure the exercise) of all voting rights attached to the CMC Shares held or owned by it at the Court Meeting and the EGM in connection with the Proposal in favour of all the resolutions to approve the Proposal and any matters in connection with the Proposal.

(4) Nice Ascent has undertaken to, amongst other things, exercise (or procure the exercise) of all voting rights attached to the CMC Shares held or owned by it at the Court Meeting and the EGM in favour of all the resolutions to be proposed at such meetings (including, but not limited to, the resolutions to approve the Proposal, any special deal arrangements, and any matters in connection with the Proposal).

(5) All percentages in the above table are approximations. Any discrepancies between totals and sums of percentages are due to rounding.

(ii) Save as disclosed in paragraph 4(a)(i) of this section, none of the Offeror, the Offeror Concert Parties, the directors of the Offeror and the directors of CMC owned or controlled any CMC Shares or convertible securities, warrants, options or derivatives in respect of the CMC Shares as at the Latest Practicable Date. During the Disclosure Period, none of the Offeror, the Offeror Concert Parties, the directors of the Offeror and the directors of CMC had dealt for value in any CMC Shares or any convertible securities, warrants, options or derivatives in respect of the CMC Shares.

(iii) During the Disclosure Period, no dealing in CMC Shares for value has been conducted by Morgan Stanley group (other than exempt principal traders) for its own account or on a discretionary basis.

(iv) None of the Offtake Shareholders or Nice Ascent, who prior to the posting of this Scheme Document has irrevocably committed itself to vote in favour of the Scheme at the Court Meeting and the EGM, had dealt for value in any CMC Shares or any convertible securities, warrants, options or derivatives in respect of the CMC Shares during the Disclosure Period.

(v) As at the Latest Practicable Date, no subsidiary of CMC, pension fund of CMC or of any subsidiary of CMC or adviser of CMC as specified in class (2) of the definition of associate under the Takeovers Code (other than exempt principal traders) owned or controlled any CMC Shares or any convertible securities, warrants, options or derivatives in respect of any CMC Shares. During the period commencing on the Announcement Date and up to the Latest Practicable Date, no such person had dealt for value in any CMC Shares or any convertible securities, warrants, options or derivatives in respect of the CMC Shares.

(vi) As at the Latest Practicable Date, save as disclosed in "5. Irrevocable Undertakings", "14. Spot Sales Arrangements" and "15. Proposed Equity Transfer Regarding the Simandou Project" in the Explanatory Memorandum, no person had any arrangements of the kind referred to in Note 8 to Rule 22 of the Takeovers

Code in relation to the CMC Shares with the Offeror (or with the Offeror Concert Parties) and save as disclosed in paragraph 4(a)(i) of this section, no such person owned or controlled any CMC Shares or any convertible securities, warrants, options or derivatives in respect of the CMC Shares or had dealt for value in any CMC Shares or any convertible securities, warrants, options or derivatives in respect of the CMC Shares during the Disclosure Period.

(vii) As at the Latest Practicable Date, save as disclosed in "5. Irrevocable Undertakings", "14. Spot Sales Arrangements" and "15. Proposed Equity Transfer Regarding the Simandou Project" in the Explanatory Memorandum, no person had any arrangements of the kind referred to in Note 8 to Rule 22 of the Takeovers Code in relation to the CMC Shares with CMC (or with any person who is an associate of CMC by virtue of class (1) to (4) of the definition of "associate" under the Takeovers Code). During the period commencing on the Announcement Date and up to the Latest Practicable Date, save as disclosed in paragraph 4(a)(i) of this section, no such person owned or controlled any CMC Shares or any convertible securities, warrants, options or derivatives in respect of the CMC Shares or had dealt for value in any CMC Shares or any convertible securities, warrants, options or derivatives in respect of the CMC Shares.

(viii) As at the Latest Practicable Date, none of the Offeror, the Offeror Concert Parties, CMC or the directors of CMC had borrowed or lent any CMC Shares.

(ix) As at the Latest Practicable Date, no fund managers (other than exempt fund managers) connected with CMC who managed funds on a discretionary basis had owned or controlled any CMC Shares or any convertible securities, warrants, options or derivatives in respect of the CMC Shares. During the period commencing on the Announcement Date and up to the Latest Practicable Date, no fund managers (other than exempt fund managers) connected with CMC who managed funds on a discretionary basis had dealt for value in any CMC Shares or any convertible securities, warrants, options or derivatives in respect of the CMC Shares.

(b) Interests and Dealings in the Offeror's shares

The Offeror is an investment holding company and a wholly owned subsidiary of Chinalco, which is a state-owned enterprise administered by the SASAC. None of CMC and the directors of CMC had interest in the Offeror's shares or convertible securities, warranties, options or derivatives in respect of the Offeror's shares as at the Latest Practicable Date. During the Disclosure Period, neither of CMC nor the directors of CMC had dealt for value in any such shares or any convertible securities, warranties, options or derivatives in respect of the Offeror's shares.

(c) Arrangements with the Offeror and Offeror Concert Parties in respect of the Proposal

As at the Latest Practicable Date:

(i) save as disclosed in "5. Irrevocable Undertakings", "14. Spot Sales Arrangements" and "15. Proposed Equity Transfer Regarding the Simandou Project" in the Explanatory Memorandum, there were no arrangements of the kind referred to in Note 8 to Rule 22 of the Takeovers Code exist between the Offeror or the Offeror Concert Parties and any other person;

(ii) there was no agreement or arrangement to which the Offeror is a party which relates to the circumstances in which it may or may not invoke or seek to invoke a condition to the Scheme; and

(iii) there was no agreement, arrangement or understanding between the Offeror and any other person in relation to the transfer, charge or pledge of the CMC Shares acquired pursuant to the Scheme and the Proposal upon completion of the Scheme and the Offeror has no intention to transfer, charge or pledge any CMC Shares acquired pursuant to the Scheme and the Proposal to any other person.

(d) Other Interests

As at the Latest Practicable Date:

(i) no benefit is or will be paid/given to any director of CMC as compensation for loss of office or otherwise in connection with the Scheme;

(ii) there was no agreement, arrangement or understanding (including any compensation arrangement) between the Offeror or Offeror Concert Parties and any of the directors of CMC, recent directors of CMC, CMC Shareholders or recent shareholders of CMC having any connection with or dependence upon the Scheme;

(iii) there was no agreement or arrangement between any director of CMC and any other person which is conditional on or dependent upon the outcome of the offer or otherwise connected with the Scheme;

(iv) no material contract has been entered into by the Offeror in which any director of CMC has a material personal interest; and

(v) none of the directors of CMC has a service contract with any member of the CMC Group or associated companies of CMC in force which (i) (including both continuous and fixed term contracts) has been entered into or amended within six months before the Announcement Date; or (ii) is a continuous contract with a notice period of 12 months or more; or (iii) is a fixed term contract that has more than 12 months to run irrespective of the notice period.

5 MATERIAL LITIGATION

As at the Latest Practicable Date, there was no material litigation or claim of material importance known to the directors of CMC to be pending or threatened against any member of the CMC Group.

6 MATERIAL CONTRACTS

There were no material contracts (not being contracts entered into in the ordinary course of business carried on or intended to be carried or by CMC or any of its subsidiaries) entered into by CMC or any of its subsidiaries after the date two years before the Announcement Date up to and including the Latest Practicable Date.

7 EXPERTS

The following are the qualifications of each of the experts who has given opinions or advice which are contained in this Scheme Document:

Name	Qualifications
Morgan Stanley	a licensed corporation under the SFO, licensed to carry out Type 1 (dealing in securities), Type 4 (advising on securities), Type 5 (advising on futures contracts), Type 6 (advising on corporate finance) and Type 9 (asset management) regulated activities
Platinum Securities Company Limited	a licensed corporation under the SFO, licensed to carry out Type 1 (dealing in securities) and Type 6 (advising on corporate finance) regulated activities under the SFO
Golder Associates Consulting Ltd.	independent technical consultant/competent evaluator qualified to audit, review and opine on mining assets according to current international reporting standards (such as NI 43-101, JORC Code) and to perform valuation work according to current international standards including CIMVAL, the SAMVAL Code and the VALMIN Code
Ernest & Young	certified public accountants

8 CONSENTS

Each of the experts mentioned above has given and has not withdrawn its written consent to the issue of this Scheme Document with the inclusion therein of the opinions and/or letters and/or the references to its name and/or opinions and/or letters in the form and context in which they respectively appear.

9 MISCELLANEOUS

(a) The directors of CMC are:

Executive directors:
Mr. Liu Yuewei
Mr. Gao Lidong

Non-executive directors:
Mr. Liu Jianping *(Chairman)*
Mr. Luan Shuwei
Dr. Liu Hongjun
Dr. Wang Dongbo

Independent non-executive directors:
Mr. Scott McKee Hand
Mr. Ronald Ashley Hall
Mr. Lai Yat Kwong Fred
Mr. Francisco Augusto Baertl Montori

(b) As at the Latest Practicable Date, the company secretary of CMC is Mr. Du Qiang.

(c) The registered office of CMC is situated at PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands.

(d) The principal place of business of CMC in Hong Kong is at 36/F, Tower Two, Times Square, 1 Matheson Street, Causeway Bay, Hong Kong.

(e) The head office of CMC is situated at No. 62, Xi Zhi Men Bei Da Jie, Haidian District, Beijing, PRC.

(f) The principal share registrar of CMC is Maples Fund Services (Cayman) Limited, PO Box 1093, Boundary Hall, Cricket Square, Grand Cayman, KY1-1102, Cayman Islands.

(g) The Hong Kong share registrar and transfer office of CMC is Computershare Hong Kong Investor Services Limited at Shops 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong.

(h) The directors of the Offeror are:

Mr. Ge Honglin
Mr. Liu Caiming
Ms. Yu Hongwei
Mr. Cai Chun
Mr. Wang Jun

(i) The registered office of the Offeror is situated at Room 4501, 45/F., Far East Finance Centre, No. 16 Harcourt Road, Admiralty, Hong Kong.

(j) The directors of Chinalco are:

Mr. Ge Honglin
Mr. Yu Dehui
Mr. Zhang Fusheng
Mr. Sun Youqi
Ms. Zhang Xiaolu
Mr. Zhao Xiaogang
Mr. Yuan Li

(k) The registered office of Chinalco is situated at North Section, 10/F., 11/F. & 19/F., 62 Xizhimen Bei Dajie, Haidian District, Beijing, PRC.

(l) The registered office of Rio Tinto International is situated at 6 St James's Square, London SW1Y 4AD, United Kingdom.

(m) The principal place of business of Morgan Stanley in Hong Kong is at 46F, International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong.

10 DOCUMENTS AVAILABLE FOR INSPECTION

Copies of the following documents will be available for inspection at the principal place of business of CMC in Hong Kong at 36/F, Tower Two, Times Square, 1 Matheson Street, Causeway Bay, Hong Kong from 9:30 a.m. to 5:30 p.m., on any business day (other than Saturdays, Sundays and public holidays) and on the website of CMC at www.chinalco-cmc.com and the website of the Securities and Futures Commission at www.sfc.hk from the despatch of this Scheme Document until the Effective Date or the date on which the Scheme lapses or is withdrawn, whichever is earlier:

(a) the memorandum and articles of association of the Offeror;

(b) the memorandum and articles of association of CMC;

(c) the annual report of CMC for the three financial years ended 31 December 2013, 31 December 2014 and 31 December 2015;

(d) the interim report of CMC for the six months ended 30 June 2016;

(e) the letter from the CMC Board, the text of which is set out in Part IV of this Scheme Document;

(f) the letter from the CMC Independent Board Committee, the text of which is set out in Part V of this Scheme Document;

(g) the letter from the CMC Independent Financial Adviser, the text of which is set out in Part VI of this Scheme Document;

(h) the competent persons report for the Toromocho Project, the text of which is set out in Appendix II to this Scheme Document;

(i) the valuation report for the Toromocho Project, the text of which is set out in section A of Appendix III to this Scheme Document;

(j) the report from the CMC Independent Financial Adviser relating to the valuation report for the Toromocho Project in section B of Appendix III of this Scheme Document;

(k) the report from Ernst & Young relating to the valuation report for the Toromocho Project set out in section C of Appendix III of this Scheme Document;

(l) written consents from each of the experts referred to in the section headed "8. Consents" in "Appendix IV — General Information on CMC and the Offeror" to this Scheme Document;

(m) the Irrevocable Undertakings referred to in the section headed "5. Irrevocable Undertakings" in the Explanatory Memorandum;

(n) the Heads of Agreement referred to in the section headed "15. Proposed Equity Transfer Regarding the Simandou Project" in the Explanatory Memorandum; and

(o) this Scheme Document.

IN THE GRAND COURT OF THE CAYMAN ISLANDS
CAUSE NO: FSD 223 OF 2016 (ASCJ)

IN THE MATTER OF
Chinalco Mining Corporation International (中鋁礦業國際)
AND IN THE MATTER OF
SECTION 86 OF THE COMPANIES LAW, CAP. 22 (LAW 3 OF 1961)
AS CONSOLIDATED AND REVISED OF THE CAYMAN ISLANDS

SCHEME OF ARRANGEMENT

between

Chinalco Mining Corporation International (中鋁礦業國際)

and

THE SCHEME SHAREHOLDERS
(as hereinafter defined)

PRELIMINARY

(A) In this Scheme, unless inconsistent with the subject or context, the following expressions shall have the meanings respectively set out opposite them:

"Announcement Date"	the announcement dated 23 September 2016 jointly issued by the Company and the Offeror in relation to, among other things, the Proposal
"Business Day"	as defined under the Takeovers Code
"Cancellation Price"	the cancellation price of HK$1.39 per Scheme Share payable in cash by the Offeror to the Scheme Shareholders pursuant to the Scheme
"Companies Law"	the Companies Law, Cap. 22 (Law 3 of 1961), as consolidated and revised, of the Cayman Islands

"Company"	Chinalco Mining Corporation International (中鋁礦業國際), an exempted company incorporated in the Cayman Islands with limited liability, the shares of which are currently listed on the Main Board of the Stock Exchange (stock code: 3668)
"Conditions"	the conditions to the implementation of the Scheme and the Proposal as set out under the heading "Conditions of the Scheme and the Proposal" in the Scheme Document
"Effective Date"	the date on which the Scheme, if approved and sanctioned by the Grand Court, becomes effective in accordance with its terms and the Companies Law, being the date on which a copy of the court order of the Grand Court sanctioning the Scheme is delivered to the Registrar of Companies in the Cayman Islands for registration pursuant to Section 86(3) of the Companies Law, and which is expected to be 13 March 2017 (Cayman Islands time)
"Executive"	the Executive Director of the Corporate Finance Division of the Securities and Futures Commission or any delegate thereof
"Grand Court"	the Grand Court of the Cayman Islands
"HK$"	Hong Kong dollar(s), the lawful currency of Hong Kong
"Latest Practicable Date"	27 January 2017, being the latest practicable date prior to the printing of this Scheme Document for ascertaining certain information contained herein
"Long Stop Date"	22 March 2017, being the date which is 180 days after the Announcement Date
"Morgan Stanley"	Morgan Stanley Asia Limited, a registered institution under the SFO licensed to carry on business in Type 1 (dealing in securities), Type 4 (advising on securities), Type 5 (advising on futures contracts), Type 6 (advising on corporate finance) and Type 9 (asset management) regulated activities under the SFO, which is the financial adviser to the Offeror in connection with the Proposal
"Offeror"	Aluminum Corporation of China Overseas Holdings Limited (中鋁海外控股有限公司)

"Offeror Concert Parties"	parties acting in concert with the Offeror in relation to the Company including Morgan Stanley (except members of the Morgan Stanley group which are exempt principal traders or exempt fund managers, in each case recognised by the Executive as such for the purposes of the Takeovers Code) and Rio Tinto International Holdings Limited which is presumed to be acting in concert with the Offeror in relation to Company
"PRC"	the People's Republic of China, but for the purpose of this Scheme Document, excluding Hong Kong, Macau Special Administrative Region and Taiwan
"Proposal"	the proposal for the privatisation of the Company by the Offeror by way of the Scheme
"Register"	the register of members of the Company
"Scheme"	a scheme of arrangement under Section 86 of the Companies Law involving the cancellation of all the Scheme Shares and the restoration of the share capital of the Company to the amount immediately before the cancellation of the Scheme Shares
"Scheme Document"	this composite document, including each of the letters, statements, appendices and notices in it, as may be amended or supplemented from time to time
"Scheme Record Date"	Monday, 13 March 2017, or such other date as shall have been announced by the Company, being the record date for the purpose of determining the entitlements of Scheme Shareholders to the Cancellation Price under the Scheme
"Scheme Share(s)"	Share(s) in the Company other than those held by the Offeror
"Scheme Shareholder(s)"	holder(s) of Scheme Shares as at the Scheme Record Date
"Share(s)"	ordinary share(s) of US$0.04 each in the share capital of the Company
"Stock Exchange"	The Stock Exchange of Hong Kong Limited
"Takeovers Code"	Code on Takeovers and Mergers of Hong Kong

(B) The Company was incorporated in the Cayman Islands on 24 April 2003 under the provisions of the Companies Law as an exempted company with limited liability.

(C) As at the Latest Practicable Date, the authorised share capital of the Company was US$1,000,000,000 divided into 25,000,000,000 ordinary shares of a single class with a par value of US$0.04 each. As at the Latest Practicable Date, the issued share capital of the Company is US$472,711,297.12 divided into 11,817,782,428 Shares, with the remainder being unissued. Since 31 January 2013, the issued shares of the Company have been listed and traded on the Main Board of the Stock Exchange.

(D) The Offeror has proposed the privatisation of the Company by way of the Scheme.

(E) The primary purpose of the Scheme is to privatise the Company by cancelling and extinguishing all of the Scheme Shares in consideration for the Cancellation Price so that thereafter, the Offeror will own 100% of the Company. Simultaneously with the cancellation of the Scheme Shares, the issued share capital of the Company will be restored to its former amount by the issue to the Offeror at par credited as fully paid such number of Shares as is equal to the number of Scheme Shares cancelled and extinguished.

(F) As at the Latest Practicable Date, 10,001,171,428 Shares were legally owned or controlled by the Offeror and registered as follows:

Name	Registered holder of Shares	Number of Shares
Offeror	Offeror	10,001,171,428

(G) On the Latest Practicable Date, an aggregate of 132,910,000 Shares were legally and/or beneficially owned by the Offeror Concert Parties and registered as follows:

Offeror Concert Party	Registered holder of Shares	Number of Shares
Rio Tinto International Holdings Limited	Rio Tinto International Holdings Limited	132,910,000

(H) Each of the Offeror Concert Parties, being presumed to be acting in concert with the Offeror under the Takeovers Code will procure that any Shares in respect of which they are legally or beneficially interested will not be represented or voted at the meeting convened at the direction of the Grand Court for the purpose of considering and, if thought fit, approving the Scheme.

(I) The Offeror has undertaken to the Grand Court to be bound by the Scheme, and will execute and do and procure to be executed and done all such documents, acts and things as may be necessary or desirable to be executed or done by each of them for the purpose of giving effect to this Scheme.

THE SCHEME

PART I

Cancellation of the Scheme Shares

1. On the Effective Date:

   (a) the issued share capital of the Company shall be reduced by cancelling and extinguishing the Scheme Shares and the Scheme Shareholders shall cease to have any rights with respect to the Scheme Shares except the right to receive the Cancellation Price;

   (b) subject to and forthwith upon such reduction of capital taking effect, the issued share capital of the Company will be increased to its former amount by issuing to the Offeror the same number of Shares as is equal to the number of Scheme Shares cancelled and extinguished; and

   (c) the Company shall apply the credit arising in its books of account as a result of the capital reduction referred to in paragraph 1(a) above in paying up in full at par such number of Shares as is equal to the number of Scheme Shares cancelled, which shall be allotted and issued to the Offeror, credited as fully paid as mentioned in paragraph (b) above.

PART II

Consideration for the cancellation and extinguishment of the Scheme Shares

2. In consideration of the cancellation and extinguishment of the Scheme Shares, the Offeror shall pay or cause to be paid to each Scheme Shareholder the Cancellation Price.

PART III

General

3. (a) As soon as possible and not later than seven (7) Business Days (as defined under the Takeovers Code) after the Effective Date, the Offeror shall send or cause to be sent to Scheme Shareholders cheques in respect of the Cancellation Price payable to such Scheme Shareholders pursuant to Clause 2 of this Scheme.

   (b) Unless otherwise indicated in writing to the Hong Kong share registrar of the Company, being Computershare Hong Kong Investor Services Limited, at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, all such cheques shall be sent by ordinary post in pre-paid envelopes addressed to such Scheme Shareholders at their respective addresses as appearing on the Register at the Scheme Record Date or, in the

case of joint holders, at the address as appearing on the Register at the Scheme Record Date of the joint holder whose name then stands first in the Register in respect of the relevant joint holding.

(c) Cheques shall be posted at the risk of the addressee and none of the Offeror, the Company or Morgan Stanley shall be responsible for any loss or delay in the despatch of the same.

(d) Each cheque shall be payable to the order of the person to whom, in accordance with the provisions of paragraph (b) of this Clause 3, the envelope containing the same is addressed and the encashment of any such cheque shall be a good discharge to the Offeror for the monies represented thereby.

(e) On or after the day being six calendar months after the posting of the cheques pursuant to paragraphs (b) of this Clause 3, the Offeror shall have the right to cause the cancellation of any cheque which has not been encashed or that has been returned uncashed and shall place all monies represented thereby in a deposit or custodian account in the Offeror's name with a licensed bank in Hong Kong selected by the Company. The Offeror shall hold such monies on trust for those entitled to it under the terms of this Scheme until the expiration of six years from the Effective Date and shall, prior to such date, make payments thereout of the sums payable pursuant to Clause 2 of this Scheme to persons who satisfy the Offeror that they are respectively entitled thereto and the cheques referred to in paragraphs (b) of this Clause 3 of which they are payees have not been cashed. Any payments made by the Offeror shall not include any interest accrued on the sums to which the respective persons are entitled pursuant to this Scheme. The Offeror shall exercise its absolute discretion in determining whether or not it is satisfied that any person is so entitled and a certificate of the Offeror to the effect that any particular person is so entitled or not so entitled, as the case may be, shall be conclusive and binding upon all persons claiming an interest in the relevant monies.

(f) On the expiration of six years from the Effective Date, the Offeror shall be released from any further obligation to make any payments under this Scheme and the Offeror shall be absolutely entitled to the balance (if any) of the sums then standing to the credit of the deposit or custodian account in its name, including accrued interest subject to any deduction required by law and expenses incurred.

(g) Paragraph (f) of this Clause 3 shall take effect subject to any prohibition or condition imposed by law.

(h) Upon cancellation of the Scheme Shares, the Register shall be updated to reflect such cancellation.

4. Each instrument of transfer and certificate existing at the Scheme Record Date in respect of a holding of any number of Scheme Shares shall on the Effective Date cease to be valid for any purpose as an instrument of transfer or a certificate for such Scheme Shares and every holder of such certificate shall be bound at the request of the Offeror to deliver up the same to the Offeror for the cancellation thereof.

5. All mandates or relevant instructions to the Company in force at the Scheme Record Date relating to any of the Scheme Shares shall cease to be valid as effective mandates or instructions on the Effective Date.

6. Subject to the Conditions having been satisfied in full or waived by the Offeror in the manner set out under the heading "Conditions of the Scheme and the Proposal" in the Scheme Document, this Scheme shall become effective as soon as a copy of the order of the Grand Court sanctioning this Scheme under Section 86 of the Companies Law has been registered by the Registrar of Companies in the Cayman Islands pursuant to section 86(3) of the Companies Law.

7. Unless this Scheme shall have become effective on or before the Long Stop Date (or such later date, if any, as the Company and the Offeror may agree, or to the extent applicable as the Grand Court, on application of the Company and/or the Offeror may direct, and in all cases, as permitted by the Executive) this Scheme shall lapse.

8. The Company and the Offeror may consent jointly for and on behalf of all concerned to any modification of or addition to this Scheme or to any condition which the Grand Court may think fit to approve or impose.

9. All costs, charges and expenses of the advisers and counsels appointed by the Company will be borne by the Company whereas all costs, charges and expenses of the advisers and counsels appointed by Offeror will be borne by the Offeror, and other costs, charges and expenses of the Scheme of Arrangement will be shared between the Offeror and the Company equally.

3 February 2017

IN THE GRAND COURT OF THE CAYMAN ISLANDS
FINANCIAL SERVICES DIVISION **Cause No. FSD 223 of 2016 (ASCJ)**

IN THE MATTER of section 86 of the Companies Law (2016 Revision)

AND IN THE MATTER of **Chinalco Mining Corporation International (中鋁礦業國際)**

NOTICE OF COURT MEETING

NOTICE IS HEREBY GIVEN that, by an order dated 27 January 2017 (the "**Order**") made in the above matter, the Grand Court of the Cayman Islands (the "**Court**") has directed a meeting (the "**Court Meeting**") to be convened of holders of ordinary shares of US$0.04 each in the capital of Chinalco Mining Corporation International (中鋁礦業國際) (the "**Company**") other than Aluminum Corporation of China Overseas Holdings Limited (中鋁海外控股有限公司) (the "**Holders**") for the purpose of considering and, if thought fit, approving, with or without modifications, a scheme of arrangement (the "**Scheme**") proposed to be made between the Company and the Scheme Shareholders (as defined in the Scheme) and that the Court Meeting will be held at Bowen Room, Level 7, Conrad Hong Kong, Pacific Place, 88 Queensway, Hong Kong on 3 March 2017 at 10:00 a.m. (Hong Kong time) at which place and time all such Holders are requested to attend. A copy of the Scheme and a copy of an explanatory memorandum explaining the effect of the Scheme are incorporated in the composite scheme document of which this Notice forms part.

A copy of the composite scheme document can also be obtained from the Hong Kong share registrar of the Company.

Such Holders (other than those required to abstain from voting as detailed in the Scheme) may vote in person at the Court Meeting or they may appoint another person (who must be an individual), whether a member of the Company or not, to attend and vote in their stead. A pink form of proxy for use at the Court Meeting is enclosed with the composite scheme document dated 3 February 2017 dispatched to members of the Company on 3 February 2017.

In the case of joint holders of a share, any one of such persons may vote at the Court Meeting, either personally or by proxy, in respect of such share as if he were solely entitled thereto. However, if more than one of such joint holders be present at the Court Meeting personally or by proxy, that one of the said persons so present being the most or, as the case may be, the more senior shall alone be entitled to vote in respect of the relevant joint holding. For this purpose, seniority shall be determined by reference to the order in which the names of the joint holders stand on the register of members of the Company in respect of such joint holding, the first named shareholder being the senior.

It is requested that forms appointing proxies be deposited at the Hong Kong share registrar of the Company at Computershare Hong Kong Investor Services Limited, at 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, not later than 10:00 a.m (Hong Kong time) on 1 March 2017. By the Order, the Court has appointed Mr. Liu Jianping, an executive director of the Company, or failing him, Mr. Luan Shuwei, also an executive director of the Company, or failing him, any independent non-executive director of the Company as at the date of the Order, to act as the chairman of the Court Meeting and has directed the chairman of the Court Meeting to report the results of the Court Meeting to the Court.

The Scheme will be subject to a subsequent application seeking the sanction of the Court.

By Order of the Court
Chinalco Mining Corporation International
(中鋁礦業國際)

Dated 3 February 2017

Registered Office
P.O. Box 309
Ugland House
Grand Cayman
KY1-1104
Cayman Islands

Principal Place of Business in Hong Kong
36/F
Tower Two
Times Square
1 Matheson Street
Causeway Bay
Hong Kong

Chinalco Mining Corporation International
中鋁礦業國際

(Incorporated under the laws of the Cayman Islands with limited liability)

(Stock Code: 3668)

NOTICE OF EXTRAORDINARY GENERAL MEETING

NOTICE IS HEREBY GIVEN that an extraordinary general meeting of Chinalco Mining Corporation International (中鋁礦業國際) (the "**Company**") will be held at Bowen Room, Level 7, Conrad Hong Kong, Pacific Place, 88 Queensway, Hong Kong on 3 March 2017 at 10:30 a.m. (Hong Kong time) (or immediately after the conclusion or adjournment of the meeting of holders of ordinary shares of US$0.04 each in the capital of the Company other than Aluminum Corporation of China Overseas Holdings Limited (中鋁海外控股有限公司) convened at the direction of the Grand Court of the Cayman Islands for the same day and place), for the purpose of considering and, if thought fit, passing (with or without modifications) the following as a special resolution and ordinary resolutions, respectively:

SPECIAL RESOLUTION

"THAT AS A SPECIAL RESOLUTION:

(A) the scheme of arrangement dated 3 February 2017 (the "**Scheme**") between the Company and the holders of Scheme Shares (as defined in the Scheme) in the form of the print thereof which has been produced to this meeting and, for the purpose of identification, signed by the chairman of this meeting, subject to any modifications, additions or conditions as may be approved or imposed by the Grand Court of the Cayman Islands, be and is hereby approved; and

(B) for the purpose of giving effect to the Scheme, on the Effective Date (as defined in the Scheme), the issued share capital of the Company shall be reduced by cancelling and extinguishing the Scheme Shares."

ORDINARY RESOLUTION 1

"THAT AS AN ORDINARY RESOLUTION:

(C) subject to and forthwith upon such reduction of capital taking effect, the issued share capital of the Company will be increased to its former amount by issuing to Aluminum Corporation of China Overseas Holdings Limited the same number of shares as the number of Scheme Shares cancelled and extinguished;

(D) the Company shall apply the credit arising in its books of account as a result of the capital reduction referred to in paragraph (B) above in paying up in full at par the new shares issued, credited as fully paid, to Aluminum Corporation of China Overseas Holdings Limited and the directors of the Company be and are hereby authorised to allot and issue the same accordingly;

(E) any one of the directors of the Company be and is hereby authorised to do all acts and things considered by him/her to be necessary or desirable in connection with the implementation of the Scheme, including (without limitation) the giving of consent to any modification of, or addition to, the Scheme, which the Grand Court of the Cayman Islands may see fit to impose; and

(F) any one of the directors of the Company be and is hereby authorised to apply to The Stock Exchange of Hong Kong Limited for the withdrawal of the listing of the shares of the Company.''

ORDINARY RESOLUTION 2

''THAT AS AN ORDINARY RESOLUTION:

(G) the Spot Sales Mechanism (as defined in the composite scheme document of the Company dated 3 February 2017 (the ''**Scheme Document**'') in the form of the print thereof which has been produced to this meeting and, for the purpose of identification, signed by the chairman of this meeting) in the manner set out under the sub-section headed ''Spot Sales Mechanism'' under the section headed ''14. Spot Sales Arrangements'' in Part VII ''Explanatory Memorandum'' in the Scheme Document and any spot sales contract containing terms within the Spot Sales Mechanism to be entered into between the Company and the Offtake Shareholders (as defined in the Scheme Document) and/or their respective affiliates from 23 September 2016 until six months after the Effective Date (as defined in the Scheme Document) be and are hereby approved.''

ORDINARY RESOLUTION 3

"THAT AS AN ORDINARY RESOLUTION:

(H) the proposed Equity Transfer (as defined in the Scheme Document) contemplated under the non-binding heads of agreement dated 28 October 2016 which was entered into between Rio Tinto Simfer UK Limited and Chalco Iron Ore Holdings Limited in relation to the Simandou Project be and is hereby approved."

By Order of the Court
Chinalco Mining Corporation International
(中鋁礦業國際)

Dated 3 February 2017

Registered Office
P.O. Box 309
Ugland House
Grand Cayman
KY1-1104
Cayman Islands

Principal Place of Business in Hong Kong
36/F
Tower Two
Times Square
1 Matheson Street
Causeway Bay
Hong Kong

Notes:

(a) The above mentioned ordinary resolution 2(G) shall be approved by the shareholders of the Company who are not involved in or interested in the Future Spot Sales Contracts (as defined in the Scheme Document) as required by the Code on Takeovers and Mergers in Hong Kong. Aluminum Corporation of China Overseas Holdings Limited and all of the Offtake Shareholders (as defined in the Scheme Document) will abstain from voting in relation to such ordinary resolution at the Extraordinary General Meeting.

(b) Any member entitled to attend and vote at the Extraordinary General Meeting (or any adjournment thereof) is entitled to appoint one or more proxies (who must be individuals) to attend and, on a poll, vote instead of him. A proxy need not be a member of the Company.

(c) In the case of joint registered holders of any share of the Company, any one of such joint holders may vote at the Extraordinary General Meeting, either personally or by proxy, in respect of such share(s) as if he were solely entitled thereto. But if more than one of such joint holders are present at the Extraordinary General Meeting personally or by proxy, the most senior shall alone be entitled to vote in respect of the relevant joint holding and, for this purpose, seniority will be determined by reference to the order in which the names of the joint holders stand on the register of members of the Company in respect of the relevant joint holding.

(d) In order to be valid, the proxy form together with any power of attorney or other authority (if any) under which it is signed or a notarially certified copy of such power or authority, must be completed and deposited with the Hong Kong share registrar of the Company at Computershare Hong Kong Investor Services Limited of 17M Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, not less than 48 hours before the time appointed for holding the Extraordinary General Meeting or any adjournment thereof. Completion and return of the proxy form will not preclude any member from attending and voting in person at the Extraordinary General Meeting. In the event that a member of the Company attends the meeting after having lodged his form of proxy, the form of proxy will be deemed to have been revoked

(e) A form of proxy for use at the meeting is enclosed.

(f) The special resolution and ordinary resolutions as set out above will be determined by way of a poll.

(g) The transfer books and register of members of the Company will be closed from Tuesday, 28 February 2017 to Friday, 3 March 2017, both days inclusive, to determine the entitlement of shareholders to attend and vote at the Extraordinary General Meeting, during which period no transfers of shares will be registered. All transfers accompanied by the relevant share certificates must be lodged with the Hong Kong share registrar of the Company, Computershare Hong Kong Investor Services Limited, at Shops 1712–1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong not later than 4:30 p.m. on Monday, 27 February 2017.

(h) At the date of this notice, the executive directors of the Company are Mr. Liu Yuewei and Mr. Gao Lidong, the non-executive directors of the Company are Mr. Liu Jianping (Chairman), Mr. Luan Shuwei, Dr. Liu Hongjun and Dr. Wang Dongbo, and the independent non-executive directors of the Company are Mr. Scott McKee Hand, Mr. Ronald Ashley Hall, Mr. Lai Yat Kwong Fred and Mr. Francisco Augusto Baertl Montori.