Independent Technical Review Board Report No. 1, Rev. 1

10 November 2016, Revised 8 March 2017
David Blowes, PhD
David A. Carr, RG
Richard Davidson, PE
Norbert Morgenstern, PhD, PEng

Introduction

Resolution Copper (RC) has established the Independent Technical Review Board (ITRB) in accord with the Rio Tinto D5 Standard. This action comports with current international best practices for siting and design of large and complex tailings storage facilities. The ITRB is composed of Professor David Blowes, Dave Carr, Richard Davidson and Emeritus Professor Norbert Morgenstern. The terms of reference for the ITRB are provided in Attachment A.

The Board first convened for a teleconference meeting on September 29, 2016, for a briefing on the project status, but no report was issued.

This first formal meeting was conducted in Superior, Arizona, November 8-10 and included technical briefings from RC, Duke Hydrochem, Wickham Geogroup, Hatch, and Klohn Crippen Berger (KCB) who is the designer for the Tailings Storage Facility (TSF); a site visit on the afternoon of 8 November, including inspection of rock core; presentation of the hydrogeology, geochemistry and geotechnical design issues on 9 November; discussions with the project team throughout; preparation of this report; and conduct of a management briefing on 10 November at the Magma Club. The Agenda for the meeting is included in Attachment B. The meeting attendees are listed in Attachment C.

The structure of this ITRB Report No. 1 has been established around a set of five questions that have grouped together the various technical issues discussed during the briefings and site visit.

Technical Commentary

Question 1. The Board understands that the alternatives analysis by the USFS for the Resolution Copper EIS is scheduled for completion in the middle of 2017. Determination of alternatives is required prior to the preparation and publication of a DEIS. The tailings design and alternatives analysis will utilize the results of the current Site Investigation, scheduled for completion in February 2017. Is the current documentation available appropriate for the objective?

The ITRB recognizes that RC has conducted comprehensive studies, screening potential sites and potential technologies. This involved consultation with agencies, local communities and other stakeholders. The submittal of a preliminary selection of site and technology in the proposed general

mining plan of operations also involved a substantial period of public consultation and input before the plan was submitted to the USFS.

In addition, preliminary findings from the site investigation currently underway now indicate more complex hydrogeologic conditions controlling water management that need to be identified and considered in the alternatives analysis. It is likely that the upstream design that was proposed, as well as other alternatives, will be further evaluated during the EIS as public scoping identified a range of dam construction methodologies to be studied, including filtered, downstream and centerline construction. However, the Board recommends that upstream construction be abandoned irrespective of the EIS process.

Notwithstanding the substantial effort devoted by RC to select the optimum site and technology, the Board is of the view that the current documentation on site selection criteria does not meet current requirements needed to reflect the D5 standard reassure the public, and gain regulatory acceptance because it is too fragmented.

To overcome these limitations, the Board recommends that RC integrate its information on site and technology selection by means of a Multiple Accounts Analysis (MAA). In the experience of the Board, this reflects best current industry practice. Details for conducting the MAA analysis are presented in the Environment Canada Guideline found in: https://ec.gc.ca/pollution/default.asp?lang=En&n=125349F7-1&offset=2&toc=show.

The Board recommends that RC complete the MAA in order to reflect the past efforts by RC, as well as corporate values, in the weightings that go into the MAA. The Board is of the view that the MAA should proceed in parallel with the current EIS alternatives analysis and study designs to meet the current schedule requirements.

The Board recommends that we receive a draft version of the MAA report for review prior to the next scheduled meeting of the Board.

Question 2. Detailed site characterization of Proposed Tailings site, based on drilling, sampling, and testing, is currently underway with completion expected in February 2017. No addition drilling and related characterization by sampling and testing is expected prior to the completion of the alternatives analysis. In the view of the Board, is the current SI program adequate to support the alternatives analysis needed for the EIS?

Approval for site characterization are constrained by regulatory and land ownership considerations. It is likely not practical to fill in data gaps by returning to the field in a casual manner. Therefore, it is essential that RC maximize the information that can be obtained from the currently permitted program.

The objectives of the current site investigation program have been well defined, as have the procedures. The Board has in its preliminary teleconference been generally supportive of the program as presented at the time.

The Board has inspected examples of the core obtained to date and has reviewed the relevant borehole logs. The Board finds the management of the core and the descriptive logs to reflect best practice.

The initial findings indicate greater fracturing, weathering and hence higher hydraulic conductivity of all foundation units than assumed in the design for the MPO option. This is consistent with several similar Arizona and New Mexico tailings dams founded on Gila Conglomerate. Hence, the evaluation of seepage from beneath the dam and at greater depth will be more complex than estimated before. The heterogeneity of these formations will need to be recognized going forward.

The Board was pleased to learn that on-going evaluation of site selection for locating packer tests proceeds in real time during the investigation. We recommend that the team maximize the efforts within the available schedule to obtain hydraulic conductivity values with an emphasis on the upper Gila formation and other shallow, weathered bedrock units that will be a controlling feature in the foundation preparation and related seepage management associated with design of the dam. Seepage modelling of the dam will rely substantially on the data gathered at this time.

The Board has also recognized that the site investigation is lacking in water sampling for purposes of characterizing water chemistry. We recommend that the program be adjusted accordingly. More detailed discussion and guidance are presented in response to Questions 3 and 4 below.
After this site investigation is complete, additional gaps with respect to site characterization may be identified, and the Board recommends that these gaps be catalogued because they will need to be considered in the tailings design. Later investigation will address the reduction of important gaps, but some may be beyond the current short-term schedule discussed in the response to Question 1, above.

Question 3. Is the existing geochemical characterization program of the tailings, block cave, waste, and foundation materials adequate to advance a tailings design through the NEPA (EIS) process? What additional work should be completed to meet the schedule? What are the major issues that need to be addressed? Is the proposed analyte list suitable for a future ADEQ APP submission? Are the geochemical studies in parallel (at the same level) as other work underway and being completed?

RC has been undertaking a well-designed, staged program to characterize the tailings and process water that will be discharged to the TSF. In parallel with the data collection program, RC has developed a systematic approach for integrating these data into rigorous predictions of composition of process water discharged to the TSF, and for predicting long-term trends in the chemistry of water discharged from the TSF. This approach builds on the development of predictions of the chemical constituents in the West Plant Site input water and the impacts of mineral processing on water quality. The Board supports this approach, which has provided an extensive database, appropriate for supporting the water quality modelling, and the development of predictions directly linked to experimental observations.

The estimates of process water/tailings discharge chemistry presented at the November ITRB meeting indicate that the water discharged to the tailings impoundment may contain elevated concentrations of dissolved constituents, in particular SO_4, Se, and Cu. Much of this loading is derived from the use of water pumped from the underground in the mineral processing circuit. The RC team identified opportunities to mitigate these impacts including water treatment of the underground water prior to use. The Board recommends that RC evaluate these mitigation strategies including possible water-treatment technologies suitable for the underground water, and the potential long-term benefits of treatment.

The results presented at the ITRB technical review meeting in November 2016 focused strongly on the implications of the tailings characterization program with respect to acid-base accounting and the potential for generation of acidic drainage. The Board supports the RC strategy for predicting trends in the concentrations of dissolved constituents in the tailings pore water. The Board

recommends that RC proceed expeditiously with the evaluation of the long-term trends in concentrations of dissolved metals, metalloids, anions, nutrients and radionuclides, and that these predictions be linked to groundwater flow and solute transport simulations to understand the potential impacts of the TSF on water quality in the groundwater flow system, and the implications for installing a liner beneath portions of the TSF or investigating other mitigation strategies, within the time frame of the alternatives analysis for the NEPA (EIS) process .

The results of the tailings-characterization program indicate that although the sulfide content of the scavenger tailings is expected to be low, 15% of these tailings are expected to be acid generating and the acid generating potential of 45 % of the tailings is uncertain, and 40% of the scavenger tailings are expected to be not acid generating. In consideration of alternatives tailings dam construction methodologies suggested during public scoping, many of which would require cyclone sand dam construction (downstream and centerline), it is anticipated that the sulfide content of the sand fraction of the tailings, used for cyclone sand embankment construction will be greater than that of the bulk scavenger tailings. The potential for acid generation and metal leaching in the TSF embankments has important implications for the long-term management of water quality. The Board recommends that RC evaluate the use of amendments (lime, limestone, organic carbon) to the scavenger tailings to prevent acidification and metal release in the TSF embankments.

The cleaner tailings will contain a high sulfide content and are anticipated to be strongly acid generating. The strategy currently proposed for management of the cleaner tailings is based on maintaining saturated conditions within the cleaner tailings. Recent tailings dam failures have placed increased emphasis on maintaining well-drained conditions within tailings impoundments to maintain structural stability and thus reducing the overall pond size. The dry climate in the RC location provides favorable conditions for dry disposal of tailings. The Board recommends that RC develop estimates of solute loadings from the unsaturated cleaner tailings to guide the selection of appropriate management strategies for these materials.

The studies focused on the evolution of water quality within the TSF will provide a source term for the development of a solute transport model for prediction of impacts on groundwater and surface water. It is unlikely, however, that the full solute transport model will be developed within the timeframe of the alternative analysis for the EIS. The Board recommends that RC develop a TSF source term that can be used, in conjunction with a simplified groundwater flow/solute transport model, to anticipate potential impacts on water quality within the timeframe of the alternatives analysis, and evaluate the need for additional mitigation measures (installation of liners, removal of permeable materials, control of pore water quality by for example pre-treatment of underground water).

The ITRB recognizes the importance of isolating the cleaner tailings from the environment and are aware that RC will likely be required to evaluate installing a liner beneath a portion of the impoundment to limit release of dissolved constituents from the cleaner tailings. This was identified during public scoping for the EIS. Installation of a liner at the base of the TSF will be technically challenging. The ITRB recommends that RC conduct an additional evaluation to assess the need to place a liner beneath the cleaner tailings and the feasibility of installing a liner at the location proposed for disposal of the cleaner tailings.

Question 4. Is the hydrogeologic characterization program appropriate for providing the baseline data necessary to support the tailings design, the EIS, and the APP? Specifically: (1) Are adequate data being collected from the ongoing geotechnical and hydrogeologic drilling and testing programs? (2) Are there opportunities for short-term adjustments to the programs to provide data to fill any identified data gaps? (3) Are the proposed modelling methods appropriate? (4) Are there any immediate

adjustments that need to be made to provide adequate data for the alternatives analysis? (5) Are there other recommendations?

Hydrogeologic Data Collection

The preliminary conceptual model is based on the assumption that the TSF foundation is underlain and surrounded by geologic units with low permeability. However, the preliminary results of the geotechnical field investigation suggest that this assumption may be incorrect, in particular in the shallow bedrock. The geotechnical and hydrogeologic field investigations are underway and are scheduled to be completed in February 2017. The geotechnical boreholes are being advanced to depths ranging from about 200 to 300 feet, and the hydrogeologic boreholes are being advanced to depths ranging up to about 1,000 feet. Some of the geotechnical and hydrogeologic boreholes are being drilled on the same drilling site, which provides an opportunity to collect depth-specific water level, hydraulic conductivity, and groundwater quality data. However, there are opportunities to collect additional depth-specific data from the hydrogeologic drilling and testing program. The nine boreholes completed to date have been periodically airlift-tested as the boreholes have been advanced but have not been packer tested, which would allow for the collection of depth-specific hydraulic conductivity data. The ITRB recommends that RC consider collecting this additional data from the remaining boreholes, if feasible.

The groundwater flow system is poorly defined to the north of the proposed TSF, due to an absence of existing wells. The ITRB recommends that RC explore options for acquiring regional hydrogeologic data north of the TSF before operations begin. The field investigation does not include a provision for evaluating the hydraulic connection between groundwater in bedrock and groundwater in the Queen Creek alluvium. The ITRB recommends that RC drill and complete one or more set of nested test wells, with wells completed in the deep bedrock, the shallow bedrock and in the alluvium adjacent to Queen Creek for this purpose.

The field investigation does not include an assessment of flow connections within the fractured bedrock system. The ITRB recommends that RC expand the investigation to include such an assessment. Potential methods include tracer studies between nearby wells and long-term constant-rate and step-drawdown tests. The ITRB also recommends that RC consider additional methods for acquiring geologic data between the drilling sites, such as detailed geologic mapping and surface geophysical surveys.

The ITRB recommends that RC identify wells for background groundwater quality characterization, and establish a groundwater-monitoring plan. Such data will be needed to support the EIS and the APP.

Groundwater Modeling

Groundwater modeling associated with the tailings design has not yet been initiated, and various approaches are being considered. However, modeling should begin as soon as the field investigation is complete.

In the short term (six months), the following models should be developed to support the tailings alternatives:

- A local numerical groundwater flow model to evaluate potential impacts of the TSF on the groundwater flow system

- Simple groundwater flow/transport model using simple, conservative source terms (e.g. sulfate concentration) to assist in evaluating TSF liner options

In the long term, additional modelling will be needed for the DEIS and the APP. The geochemical characterization program should provide time-dependent source terms for a reactive transport model. Solute transport parameters will also need to be defined.

Question 5. Is the TSF embankment design appropriate for the current state of practice? Specifically, are the design criteria adequately defined? How do new developments in the post Mt Polley / Samarco era impact the design and construction technologies being considered? Are physical properties of the tailings adequately understood? Are the downstream risks comprehensively identified? Can the embankment be economically designed to provide sufficient safety against catastrophic failure? Are the embankment construction alternatives being appropriately evaluated?

The ITRB supports the explicit definition of the embankment design criteria into a Design Basis Memorandum. We understand that a number of governing design criteria and guidelines have been identified and are being utilized. Governing criteria include ADEQ BADCT, Rio Tinto D5 standards, and ADWR Seepage guidelines. Guidance is being utilized from Canadian Dam Association (CDA) Dam Safety Guidelines for tailings dams and the British Columbia Ministry and Energy and Mines (MEM) Code. Additional criteria are available from the USACE and FEMA that have some level of jurisdiction. While some of these criteria are not fully consistent or specific to the Resolution Copper situation, they do represent the regional and national state of practice. However, the intent should be to meet international best practices that reflect the nature of hydraulic deposition, height and desert environment, as well as the Rio Tinto corporate values embraced in the D5 Standard.

Several important design criteria warrant discussion. Firstly, the assumption that all potentially liquefiable materials should be assumed to liquefy regardless of the triggering mechanism. This reflects a key learning from the failure of the upstream method Fundao tailings dam at Samarco in Brazil. The seismic hazard at Samarco was low, as it is for Resolution, yet the impoundment suffered a static liquefaction failure. The design must provide either a dilatant or drained structural shell to provide resiliency against operational upsets that can happen during TSF construction.

Regarding seismic loading, international best practices suggest that the seismic hazard should be assessed on a probabilistic basis, and that an appropriate design criteria would be to sustain the 1 in 10,000 mean hazard event, but considering epistemic uncertainty in the ground motion estimates. The flood capacity is not a particularly controversial criterion, and the design team has adopted the probably maximum flood (PMF) for the TSF. The flood risk should also consider probabilistic flood recurrence. The TSF probably will not require a spillway because of the relatively small catchment area that encompasses the TSF footprint. However, the seepage control dams and diversion structures are another matter and should be designed to handle extreme events without being overtopped.

Seepage management represents a significant design criterion. Since the development of the MPO design, the potential need to evaluate a liner has been identified reflecting the higher hydraulic conductivity of the dam foundation material determined during the on-going site characterization study. An appropriate study to evaluate liner design and related costs has been formulated. However, the criteria that may govern the need for a liner are not clear. The Board recommends that this be addressed in the short term since the tailings design will be sensitive to this issue. The criteria are discussed more detail in Questions 3 and 4.

Geotechnical engineering properties of the tailings will be required to advance and optimize the tailings design. Additional testing is planned and necessary for the various components of the TSF embankment and impoundment to address various design cases including undrained construction, long-term, and post-earthquake conditions. The impact of the height of the impoundment on the state, strength and deformation properties is a first order requirement in the characterization effort.

It is necessary to assess the downstream inundation consequences from a dam breach and this has also been an issue raised during the EIS scoping process. The height of the structure and location of the decant pond are critical considerations in a dambreak assessment.

RC and their design consultant have considered a number of TSF embankment types and construction methods using a Multiple Accounts Analysis in support of the alternatives analysis for the EIS. Using the MAA, a centerline or modified centerline approach built with compacted cyclone underflow or filter cake ranks as a preferable alternative dam construction methodology. There are precedent for very high centerline dams built out of cyclone underflow at Bagdad in Arizona and Cerro Verde in Peru. A dry stack embankment to this height, although technically feasible does not have precedent for this tailings volume throughput or height.

Overall, the ITRB is content that additional alternatives to the MPO tailings construction methodology have been studied and three of those dam sections encompassing centerline sand dam, modified centerline sand dam, and dry stack are technically viable, and the selection process followed is sufficiently robust to make a defensible selection. Of the three additional alternatives studied, it would seem like the modified centerline sand dam is the most reasonable to carry forward as an alternative but introduces a few more issues that must be addressed in design:

- Building out over the beach does introduce the risk of longitudinal cracking. Experience at Kennecott suggests that some track packing of a spigoted beach over which the sand embankment is raised provides less future differential settlement potential.

- Extending drain blanket upstream of the centerline will enhance drainage and consolidation of the beach, reduce pore pressures, and reduce the risk of cracking.

- The seepage regime through the embankment is an essential design issue. Drainage measures to promote a very low phreatic surface and low percentage of full hydrostatic pore pressures are a first order criterion.

The modified centerline provides a more narrow structural section to respect material balance limitations. At greater heights, this may become more of a deformation concern. The design team needs to consider this, as it is more than just limit equilibrium stability. How the embankment is to be built is an important design issue and it would vary between the current upstream and other alternatives suggested during the EIS public scoping. For an alternative such as centerline or modified centerline, we would expect that a cyclone station is to be built at one or two strategic locations that would allow gravity feed of the underflow to the deposition locations. Since there is a long alignment length, hydraulic deposition cells similar to that used at Kennecott would be preferred to a jacking header similar to that used at Bagdad, Morenci, and Cerro Verde. The experience at Kennecott suggests that good compaction and limited saturation can be achieved. The Kennecott experience is appealing in scale, layout, and construction experience. However, seepage management is facilitated at Kennecott by the presence of the clayey Bonneville Formation. Therefore, the studies currently underway should focus on seepage management by some combination of excavation, gravity drainage, and construction of impervious cutoffs, as appropriate.

Future Communication Schedule

The Board recommends the following for consideration:

- Draft Design Basis Memorandum for review, March 2017
- Draft Site Investigation Report for review, in March 2017
- Draft MAA Report for review in March 2017
- A meeting on integration of shallow groundwater modelling and impact on liner requirements, when available (either meeting or Webex) April 18 2017
- Second site meeting of ITRB with prior provision of documentation for review – July 16 – 19, 2017

Acknowledgments

The ITRB appreciates the informative site visit, excellent presentations and open discussions with the RC team, as well as the warm hospitality during our visit.

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Rio Tinto

ATTACHMENT A

RESOLUTION COPPER

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Resolution Copper Independent Tailings Review Board
Given the critical importance of technical decisions by Resolution Copper to successfully manage areas of potential impact from the planned tailings storage facility (TSF), review by an Independent Tailings Review Board (ITRB) is required.

Purpose
The purpose of the ITRB is to review, provide comments and recommendations on the collection of technical data, subsequent analytical results and technical design plans provided by Resolution Copper and its consultants specific to:

- TSF storage designs and alternatives
- Baseline data including foundation and hydrolgeologic parameters including all field and laboratory testing results
- Tailings issues and alternatives identified through the NEPA (EIS) process
- Meeting generally recognized standards of practice

Membership
The ITRB will comprise:

- Two non-Resolution and non-Rio Tinto geotechnical engineers, providing expertise in tailings design, operational performance and stability
- One non-Resolution and non-Rio Tinto hydrogeologist/geochemist providing expertise in tailings seepage quantity, quality, and environmental performance
- One non-Resolution and non-Rio Tinto member with expertise in permitting in the United States for tailings storage facilities

For the meetings ITRB members shall be present either in person or via conference call. Written feedback from the ITRB shall reflect a consensus view of all members, or if consensus is unreachable, the respective viewpoints of different members.

Members of the ITRB will serve for a period of three years or until the receipt of a draft EIS. After three years, if deemed necessary, in order to refresh the ITRB and maintain independence, the Resolution Copper Project Director may recommend the appointment of new board members.

Expectations

- Technical data, analytical results and tailings plans will be communicated to the ITRB by Resolution Copper as requested and as required. The intent is for open and timely communication of tailings geotechnical, geochemical and hydrogeological issues associated with the tailings storage facility design such that the ITRB can provide expert and experienced guidance on informed technical decisions that need to be taken by Resolution Copper and inform the NEPA (EIS) process. To promote open, candid discussions, meetings will not be recorded.
- Meetings of the ITRB will be convened and organized by Resolution Copper's Senior Manager of Permitting and Approvals. The ITRB will meet approximately semi-annually in person in Superior, Arizona, according to a date and time that best fits team member availability. All expenses will be

paid directly by Resolution Copper. ITRB members are requested to make their own travel reservations.

- Additional teleconferences will be arranged in-between the semi-annual meetings as needed, such that critical tailings technical issues can be communicated and guidance provided by the ITRB on proposed actions and issues.
- The ITRB will provide written comment / recommendations to Resolution Copper's Project Director (or delegate) on its observations and on issues raised by Resolution Copper within three weeks of the issues being raised or within three weeks of the semi-annual meetings. Resolution Copper will inform the ITRB before their comments / guidance are made available to the United States Forest Service in support for the NEPA (EIS) process for issues and alternatives.
- Issues raised by the ITRB will be also be communicated to the Resolution Copper permitting and tailings and hydrogeology departments.
- The ITRB members will provide comment to the Resolution Copper Management Committee on the effectiveness of the ITRB process once per year and at significant milestones.

February 1, 2017

Rio Tinto

ATTACHMENT B

AGENDA - Resolution Copper - Tailings - Independent Technical Review Board - Nov 8 - 10, 2016
Superior, Arizona

Tuesday November 8th **Location: Magma Club**

TIME	ITEM	RESPONSIBLE
8:00 AM	RCM Safety Inductions	All
8:15 AM	HSE Share	RCM
8:30 AM	Opening remarks · Introductions · Purpose/Objective of the meeting · Review board terms of reference and RCM expectations · Review of agenda and expectations	RCM
8:45 AM	Opening remarks · Individual purpose/objectives of the meeting	All
9:00 AM	Tailings Planning Overview · Previous alternatives studies · Selection of site - Near West · Near West Setting · MPO tailings facility	KCB/RCM
10:00 AM	**Coffee break**	
10:30 AM	Site investigation overview and update · SI objectives · SI plan · Preliminary SI results · Sampling plan (geochem/geotech) · SI path forward	RCM/KCB Matt/Kate Duke/KCB
12:00 PM	**Lunch**	
12:30 PM	Site visit – Near West Proposed TSF · Site Visit · Core processing facility	RCM
6:00 PM	**Dinner (in Superior)**	

Wednesday November 9th **Location: Magma Club**

TIME	ITEM	RESPONSIBLE
8:00 AM	Day Introduction · Health and Safety moment · Review of meeting objectives · Review of action items so far	RCM /JP
8:30 AM	Tailings characterization · Ore body and ore sampling to date · Mill design · Geotechnical characterization · Geochemical characterization	RCM RCM KCB Duke
10:30 AM	**Coffee break**	
11:00 AM	Predictive geochem modeling	Hatch
11:45 AM	Fate and transport	Wickham
12:30 PM	**Lunch**	
1:30 PM	Liner Assessment	KCB
1:45 PM	Embankment Trade-off Assessment	KCB
2:45 PM	**Coffee break**	
3:00 PM	Filtered Assessment	KCB
3:30 PM	Overall Project Plan and Scheduling	RCM
4:00 PM	Discussion and update on Action Items	RCM/JP
6:00 PM	**Dinner (free)**	

Thursday November 10th **Location: Magma Club**

TIME	ITEM	RESPONSIBLE
8 AM to 12 PM	Review board deliberation	Review board
	Project team meetings, summary of action items	Everyone else
12 PM to 1PM	**Lunch**	
1PM – 3PM	· Review board presentation of findings and recommendations · Confirmatin of action items · Confirm next Review Board meeting date	Review board/RCM
3PM	**FINISH**	

Rio Tinto

ATTACHMENT C

March 2, 2017

Mr. Andrew Lye
General Manager, Studies
Resolution Copper
PO Box 1944
Superior, Arizona 85173

RE: RCML – ITRB MEETING OF NOVEMBER 9-11, 2016

Dear Andrew:

The second ITRB meeting was held from November 9 to 11, 2016, at the Magma Club in Superior, Arizona. In attendance were the following individuals:

- ITRB Members
  - Professor Norbert Morgenstern
  - Professor David Blowes
  - Mr. Richard Davidson
  - Mr. David Carr
- Geochemistry Representatives
  - Ted Eary, Hatch
  - Kate Duke, Duke Consultants
  - Matt Wickham, Wickham Consultants
- RCML Representatives
  - Frank Deal
  - Heather Gluski
  - Vicky Peacey
  - Andrew Luke
  - Rich Borden (Rio Tinto)
- KCB Representatives
  - Bob Chambers
  - Rick Friedel (part time)
  - Kate Patterson

The agenda for the meeting is included as Attachment B. The three-day meeting included active discussion of the agenda topics and a half-day tour of the near west site. Topics discussed during the meeting included the following:

- Day 1
  - An overview of RCM tailings planning setting the background for the near west site selection
  - An overview of the site investigation program
  - An afternoon site tour
- Day 2
  - A summary of the physical and geochemical tailings characterization
  - A discussion and summary of the geochemical and fate/transport modelling to predict tailing effluent
  - A discussion of liner alternatives, embankment construction alternatives, including filter tailings assessment
- Day 3
  - Deliberation by the ITRB and presentation of their findings to RCM management and the design team

Based on these discussions, a series of questions were developed for the review board to address. The questions and ITRB letter comments presented in the ITRB letter.

Mr. Andrew Lye
Resolution Copper

March 2, 2017

The next site meeting is tentatively planned for July 16-19, 2017 in Superior, Arizona. Individual WebEx meetings may be scheduled when the site investigation report are complete, the Multiple AA work is complete and hydrology data summary is complete for review.

Sincerely,

Joergen Pilz
Senior Consultant

JP/rjg