

# Rehabilitation Working Group response to draft Mine Closure plan 14<sup>th</sup> Jan. 2018

## Section 1: introductory comments

### 1.1 Need for constant reappraisal

This Plan, possibly more than any of the others, will need to be progressively refined, adapted and changed as the project develops to respond to:

- Acquisition of more comprehensive data and knowledge of the Hillside site;
- Results from field tests/trials of proposed strategies during operations;
- Potential technological advances in rehab techniques and knowledge over the next 10- 20+ years which may mean strategies and options currently considered impractical and uneconomic become achievable in the future; and
- Potential shifts in political and community expectations regarding best practice rehabilitation.

As a result of these uncertainties, at this stage the WG can only provide limited and very preliminary feedback on the draft Mine Closure Management Plan.

### 1.2 Key strategies still to be tested over short/long term

The draft MP contains few acknowledgements that much of what is planned is unverified at this stage. More significantly, no consideration is given to what may happen over the long term – not just in the one or five years post closure but over the next 50 or 100+ years when Rex will be long gone.

For the record, the following lists some of the WG's ongoing concerns not just for the short term but for the very long term post-mine transfer:

- Whether a viable cropping/agricultural industry with long-term productivity equal to pre-mining levels can be reinstated and sustained over approx. 67% of land as suggested;
- Whether proposed strategies to prevent erosion of WRDs will work;
- Whether the proposed cover strategy to minimise ingress of surface water and reduce development of downwards flow through tailings works;
- Whether contaminated groundwater seepage from WRDs, tailings, remnant oxide stockpile etc will be avoided;
- Whether surface water runoff within the mine site will, as predicted, be free of contaminants in the long term;
- Whether the containment strategies for PAF material will prevent AMD;
- Whether the pit lake will be highly saline as claimed or whether it will become acidic over time;
- Whether surface water drainage strategies cater for a PMP flood event;

- Whether pit wall stability be maintained, with no potential for long term damage to third party property users adjacent to the site.

In light of this need for a long-term perspective, the WG is concerned about the very short duration proposed for the monitoring program; ie one year post closure (see later discussion) . A mounting body of evidence from across Australia points to mine-related contamination issues that have taken decades to emerge. We are concerned this may also happen at Hillside. But in the absence of a long-term monitoring program, any issues that emerge 12 months post closure is likely to go undetected.

### 1.3 Lack of certainty re timing of mine closure

Also of concern is the complete lack of certainty about when mine closure and transference will actually take place. Will it move to the full scale operation and if so when? Will it progress to an underground operation as initially proposed? If it remains as a small scale mine, will it be placed in care and maintenance for an unspecified duration until commodity prices make extraction of iron from the tailings viable (Description of Mining Operations, Rex Minerals, 2016; p. 3-19).

None of these issues are likely to be known for many years. The negative impact of this uncertainty on the local community (especially those farmers living within the mining lease) needs to be acknowledged.

## Section 2: General

### 2.1 Survey of community expectations

*Recommendation 1: Prior to the commencement of operations, Rex and the HMCV undertake a broad-based community survey to develop a clear set of over-arching principles to help guide all on-going rehab/mine closure planning and practices during the life of the mine.*

Rex Minerals has consistently claimed that the current Mine Closure plan and design incorporates the key wishes identified so far from the community (eg: MLP, 2013 6-151: *“Rex intends to implement a closure plan that not only complies with legal obligations but also reflects community expectations....”*). We continue to dispute this. The list of community expectations which ostensibly formed the basis of the conceptual closure plan as outlined in the MLP were primarily derived from a survey of the CCG conducted in the very early days of that group’s existence without any broad-based community consultation and at a time when local knowledge of mine closure/rehab was virtually non-existent.

Now that the community is far better informed about what is planned for Hillside, a more comprehensive and rigorous survey of local expectations is required. The resultant set of principles would help inform/guide the work of the Advisory Panel (see recommendation 2) and would need to be regularly updated to take account of changing technological advances, shifting political/community expectations etc.

### 2.2: Establishment of a Mine Rehabilitation and Closure Advisory Panel

### *Recommendation 2:*

- *Prior to mine commencement, a Mine Rehabilitation and Closure Advisory Panel, auspiced by the HMCV, be established to ensure direct and INFORMED community involvement/input into every aspect of mine rehabilitation and closure planning, practices and monitoring.*
- *This Panel be established before any work commences at Hillside and operate during the life of the mine;*
- *It include independent mine closure experts with prime responsibility to advise and represent the interests of the community;*
- *It be recognised as an key participating stakeholder by DPC, Rex, EPA and other relevant agencies.*

The large no. of uncertainties (noted earlier) and the requirement for the MP to be constantly revisited and upgraded justifies the establishment of such a committee.

It meet DPC's requirement that: *A "detailed plan outlining mine closure and rehabilitation processes .... must be developed in consultation with the local community throughout life of mine"* (DSD Frequently Asked Questions: nd; page 12).

It would also fulfil a valuable role during any transitional and post-transitional stage if the mine moves from a small scale to the full scale project at some future point.

***Roles and Responsibilities:*** While specific details re the roles and responsibilities of this Panel will need further discussion, it should include direct involvement in all aspects of future strategy development and implementation, setting of performance indicators, assessment of level to which these are being achieved, Identification of alternatives based on changes in new technologies etc.

***Composition:*** Community representatives and Independent – preferably academic – mine closure/rehab technical experts to work collaboratively with Rex, DPC, EPA and other key players. These experts could either be full members of the Panel, or available on an as-needs basis depending on the issues under consideration. However, a small core group is required for continuity.

***Justification for independent experts:*** Existing community consultative processes are significantly hampered by the fact that members lack necessary technical knowledge and authority to critique and challenge information given to them. They don't know what questions to ask, whether the answers they are being given are accurate and what alternatives may be preferable. As a result, they are forced to rely on analyses/explanation/assessments provided by either company consultants or government experts, none of whom have a primary responsibility to advise or represent the interests of the community.

In this context, academic experts are considered preferable because they are more likely to be independent of the mining industry with greater freedom to provide full and frank advice to community-based groups.

### ***The role of Panel technical experts***

This could include to:

- Provide the community with independent advice on/critical analysis of all information/reports provided by the company and DPC;
- Act as advocates or spokespeople for the community, as required, in key discussions with Rex and DPC re. rehab/mine closure strategic planning, implementation, development of performance criteria, assessment of monitoring results etc;
- Keep the community informed of new mine closure technologies and their potential applicability to Hillside to ensure closure strategies reflect “best practice” standards;
- Assist in developing initiatives/programs/projects to encourage Involvement of students and community members in rehab research projects.

## **2.3 Mining Lease conditions not listed in draft MP**

The list of conditions (pages 8 – 10 of draft MP) do not include all those that seem to have some bearing on mine closure (see Appendix 1). A number of these were included by DPC in its presentation on closure conditions to the Mine Closure Community meeting on 26<sup>th</sup> Nov.

We had anticipated the draft MP would provide a comprehensive listing of all conditions, even if some do not require a strategic plan from Rex at this stage (eg ‘care and maintenance’ conditions).

### ***Questions:***

- Have these conditions been addressed in other Management Plans or in the main PEPR report? If so, please provide details of their location?
- If not, why have these been omitted from this listing, given DPC’s statement that all conditions must be addressed in the PEPR?

## **Section 3: Specific Issues re final closure strategies**

### **3.1 Reinstatement of cropping/agriculture**

**Terminology:** Draft MP uses 2 terms: cropping, agriculture (other). How is the latter defined? Does it include areas suitable for pasture only?

### ***Top-soil maintenance;***

- How can top-soil quality be maintained given that
  - the deposits will be strung out around the base of the WRDs rather than consolidated into several larger stockpiles?

- Stripping/deposition of the top soil will, it seems, predate the construction of the WRDs around which they are to be based?

#### ***Change of plans:***

- In a 2016 excerpt from Rex's submission to DSD re. additional information on its *Descriptions of Operations of the EFS* (p. 12) "*the south-eastern and north-eastern WSFs will be planted to native vegetation to link with the infill planting proposed to occur along the coastal zone and the previous and realigned highway*". Why the shift to cropping in the draft MP? What changes/factors now make this a feasible option?

#### ***Plan to crop WRD plateaus (excluding TSF)***

- Given the size of current farm machinery (and the potential they will get even bigger in the future), will they be able to access the WRD plateaus? Many farmers dispute this.
- Figure 18 suggests the top of the s.e WRD will be stepped, rather than completely flat. Is this correct? If so, what are the implications for machinery access?

#### ***Cropping trials***

- Rex has indicated that trials during operations will help inform the final (soil ) depth required to rehabilitate the RSFs to agriculture. In what year will this occur and how will it be possible to conduct cropping trials when the ne and Se WRD is being continually disturbed until reaching their final height in Yr 8 and 9 with some dumping occurring after that.

#### ***What 'minor' structures will be left on-site and what are the implications for cropping post-mining?***

- Apart from the major structures – eg the pit - it seems there will be a number of smaller structures/features left in the landscape post mine closure. For example:
  - Rom pad high wall;
  - Majority of access haul roads (35 metres wide) to open pit to remain open and used as drainage system to divert run-off to pit;
  - Unspecified number of sedimentation dams, drains and costeans;
  - Throoka Creek diversion channel (15 m deep) and bunds (2 m high); and
  - Other surface drain and pond abandonment bunds which appear to circumscribe virtually entire base of WRDs (see Fig 21.
- How will these additional impediments impact on cropping activities, given that the current practice is for farmers to remove as many existing obstacles as possible (including internal fences) to create large open paddocks needed to accommodate increasingly large farm machinery.
- **Request:** That Rex provide a list and map identifying what and how many of these smaller obstacles will potentially be left at mine closure?

### **Backfilled area of pit:**

- Of the currently proposed 30 hectares of pit backfilling, how much (if any) will be above water level and therefore potentially available for agriculture post mining?

## 3.2 The Pit

### **Pit backfill**

One of the most important community preferences to emerge before, during and after MLP consultations is the requirement that Rex maximise pit backfill.

The draft MP (p. 19) states that 30 hectares of the southern and eastern area of the pit will be backfilled. However, this represents only a small (but unspecified) percentage of the total pit volume and seems to have been largely motivated by a lack of waste rock dumping space, rather than by a deliberate attempt to meet community expectations.

Page 23 states that the **assessment** of the proportion of material available to backfill will occur on an ongoing basis but this could mean either a reduction or increase in the extent of backfill.

### **Recommendations:**

- *That Rex commit to working collaboratively with the proposed Advisory Panel to investigate all options to increase/maximise (not just reassess) the amount of pit backfilling as operations progress;*
- *That in these deliberations community requirements be given equal, if not greater, weighting than economic considerations which, until now, seem to have driven pit backfill decisions (see, for example, MLP, 2013; 8-97: Backfilling is “unachievable economically and practically).*

### **DPC requirements re “keeping resource accessible for future exploitation”**

- Rex has consistently stated that “The South Australian Government ...requires that access for any future mining or reprocessing is maintained” (see MLP, 2013; 6-176 and Description of Mining Operations, 2016; 3-180). This has been implicitly used as further justification for leaving an open pit.
- However, the advice received from DPC on this issue stated:  
*“Government’s position on sterilisation of mineral resources is that the tenement holder should take steps to ensure mining operations will not sterilise future mineral resources, however this should also take into due consideration the impacts mining activities may have on the environment (Section 3.3.2.1 of MG2a)”* (Nathan Zeman, emailed response; 27 October, 2017).

This suggests that the Government’s position on future access to resources is not as absolute as Rex have stated, leaving the way open for further attempts to maximise backfilling of the open pit.

### **Potential options for Pit use post mining**

- Draft MP (p. 13) states land use options “currently being workshopped with stakeholders” . This issue is not currently being considered by either our Working Group or the community at large because there are too many unknowns to even begin to put forward any viable suggestions at this early stage.

Options for potential uses can only start to be identified/assessed during operations, once far more data has been accumulated and a better understanding of all constraining factors has been developed.

*This statement should be deleted from the draft MP and a more accurate statement inserted indicating that alternative land use options will be explored in full consultation with the community during the life of mine.*

- Draft MP (p.13) “Open pit could be made available for eco-tourism or aquaculture uses”. These suggestions are potentially ludicrous, lacking any evidentiary basis or community-based discussion. *They should be deleted from the MP.*
- Any suggested uses put forward will need to take account of, and be significantly constrained by, such factors as:
  - Slow rate of filling - pit will contain almost no water for first 62 years post mine closure and won't reach equilibrium for 550 yrs;
  - Pit water chemistry – predicted to be saline, but not yet verified. Possibility of AMD assessed as improbable but still unproven;
  - Possible issues arising from fact that pit will act as sink in perpetuity, with internal drainage systems directed to it. Claim that “run off into pit not expected to have any pollutants other than initially, possible sediment” still to be verified;
  - Two 35 m. wide haul roads to remain in pit;
  - Role of ‘new’ third party owners. Our understanding from the 26<sup>th</sup> November 2017 community meeting is that Rex will not be responsible for implementing any pit-use strategies. Instead, this will be depend primarily on what any interested third party purchaser of the open pit site is prepared to invest in, presumably taking into account associated financial and legal risks and the possibility that the pit could be subject to a new mining claim in the future if remaining resources justify further exploitation. Hence, while the community will, at some stage, be in a position to suggest preferred uses for the pit, these may not be acted upon.

### **Pit water chemistry**

- Page 20 draft MP: amount of pit walls available for oxidation declines with time as its walls are inundated with water during filling.... Only a small rind of pit wall rock remains when pit lake reaches equilibrium sulphide oxidation and subsequent water-rock

*reactions effectively cease when rocks are inundated so submerged portions of its walls are treated as unreactive.*

Given that the pit will fill very slowly, what are the risks of oxidation during the 550 years before it reaches equilibrium and esp. during first 67 yrs when rate of filling will be very slow and most of pit wall will continue to be exposed?

- *Page 20: Water quality reaches chlorinity typical of seawater between 80 and 320 years ...rising to steady state system value only after 500 years. What is situation before Year 80?*
- *Page 20: “Low predicted levels of metals UNLIKELY to be available to ecological receptors” – how can this be guaranteed in the long-term, given the pit will exist in perpetuity and water levels won’t reach equilibrium for 550 years?*

#### ***Pit wall stability re backfilled section?***

- Given the small volume of the pit which will be backfilled, what are the implications of this backfilled section for pit wall stability? How will the backfill area be stabilised to prevent subsidence into pit?

### 3.3 TSF

- ***Conceptual cover strategy for TSF (and oxide stockpile):***
  - *Page 15: conceptual cover strategy based on current available guidelines and mine sites in similar climates .... What mine sites and where?*
  - *Placement of cover materials over TSF can commence during final months of operations .... [with] final TSF capping ...undertaken once processing completed (p. 23). This suggests no monitoring of the effectiveness of this strategy can commence until very late in the life of the mine. Given that it may take many decades for any failure of capping to occur and become evident, why is monitoring limited to only one year post mine closure?*
- What are Rex’s contingency plans if it fails?
- ***High probability that all tailings material will remain circum-neutral in PH (p. 16)*** How verified and over what time period?

### 3.4 Oxide stockpile

- *Oxides may be processed ...after mining operations have ceased (p. 23). What does this mean? Could it result in delays to closure and dismantling of processing plant and infrastructure and delays in closure of TSF?*

- *Stockpile will either be rounded or pushed back into western RSF and re-profiled.* What does ‘pushed back’ into WRD mean?
- How will the proposed low water flux cover plan be implemented under these circumstances?
- If pushed back, presumably it will be at the toe of the WRD in the 0 – 10 degree zone designated for cropping. But stated intention is to cover with salt tolerant grasses. Doesn’t accord with Figure 4.
- As per TSF, potential for contamination from what Rex acknowledge is *a potential source of soluble copper* (p.14) to occur over decades. The rehab. strategy won’t be implemented until after operations cease. So no ability during life of mine to determine whether the proposed cover strategy will work. Only 12 months monitoring post closure seems completely inadequate.

### 3.5 Processing plant and infrastructure

- Page 14: *if of downstream benefit to community these structure will be left in place and handed over to new owner on relinquishment who will be responsible for any future maintenance and liability.*

Sounds good on paper, but no exploration of the practical impediments that may render community access to/use of these facilities difficult. Given this infrastructure will sit in the midst of land presumably designated for cropping, how would a small area be excised for recreational/educational/other community uses? What liability would the community be taking on if it were to assume responsibility for these structures and who would pay?

### 3.6 Strategies for dealing with Probable maximum Precipitation (PMP) flood event.

- For example, see claim, (p 23) “*Spillway and outlet channels to cater for probable maximum precipitation (PMP) flood event*” .

If no such flood event occurs during 13 – 14 year mine life, these strategies will remain untested at mine closure. If so, how will Rex verify its surface water management strategies are adequate to protect third party property if such an event occurs post mine closure?

## Section 4. Other

### 4.1 Progressive rehabilitation strategies

#### ***Progressive mining schedule maps missing***

- In mid 2016, the Rehab Working Group was given an excerpt from Rex’s submission to DSD re. additional information on its *Descriptions of Operations of the EFS*. This

document contained a series of diagrams showing progressive mining stages/activities from Yr 0 to Yr 14 and provided a vital adjunct to a second series of maps showing progressive sequencing of rehabilitation.

- While the progressive rehab. maps have been included as Appendix 1 in the Soils MP, the progressive mining stages sequence does not seem to have been included elsewhere.
- **Questions:** Is this latter sequence still valid, and does it appear elsewhere in the main PEPR document? If there have been changes, could copies please be provided to the WG.

#### **Delayed timing of rehabilitation of NE and SE WRDs**

- According to the original MLP, the SE and NE WRDs would reach their maximum height in years 3 to 4. This is no longer the case. Instead, the *“NE and SE RSFs will reach max height in years 8 and 9 respectively. (.p.17)*
- More significantly, according to the mining sequence maps (referred to above), significant dumping will continue to the end of Yr 10 in the central and ne section, with small patches still being worked on in Yr 11.
- **Implications for nearby communities:**
  - Not only is the eastern WRD significantly larger than outlined in the MLP but dumping activity will persist for a much longer period of time than originally proposed.
  - **Question:** What are the potential risks from this extended and drawn-out rehabilitation strategy for nearby communities such as Rogues Point and for Gulf waters in terms of longer exposure to dust emissions, noise and light pollution, surface water runoff etc from exposed WRD surfaces?
- Why is the progressive rehab of the eastern WRD not listed as a priority, as is the case with the Western WRD (see p. 23)?

#### 4.2 Cessation of mining operations; care and maintenance

- Page 12: company insolvency prior to mine closure listed as a risk. But fails to mention option outlined in Change Document (page 3-19): *In this scenario, all the material is mined within Stage 1, and the mine is closed. RSFs are rehabilitated and **the plant put on care and maintenance** until metal price recovers sufficiently to warrant an economically viable continuation of the project (presumably involving expansion to full scale operation).*
- Would lease surrender and site transference be delayed for the duration of this care and maintenance period?
- How much of the infrastructure and land area will remain unrehabilitated?

#### 4.3 Bond

- Presumably the amount of bond to be set aside is based on the conceptual mine closure plan outlined in the draft MP. We understand that the bond can be reduced over the life of the mine in response to successful progressive rehabilitation.  
**Question:** Can the opposite happen? That is, can the bond be increased during the life of the mine in response
  - to major contamination issues that require considerable expenditure to rectify or
  - If changing technologies provide better, but more expensive alternatives?
- "Description of Mining Operations" 2016 p. 3-181: *Rex Minerals will provide the maximum third party cost of rehabilitation at any time over the life of mine covered by the PEPR. The estimate will be based on reasonable third party costs of undertaking the rehabilitation strategies as outlined in the document.*  
**Question:** Who determines what is "reasonable" – Rex or Govt?
- **Question:** How can Government determine appropriate bond given uncertainty re whether many aspects of the draft mine closure plan are ultimately achievable?

## Section 5 Monitoring

**Question:** Definition of "one year post closure"? Does this mean one year from the completion of all rehabilitation strategies?

### 5.1 Surface water

- Inundation of 3<sup>rd</sup> parties - measured during precipitation event. As noted earlier, what happens if no significant/PMP flood event occurs during or post-closure operations? Other than recourse to predictive modelling, how can Rex verify this condition will be met in the long term?
- No explanation of how inundation levels of 3<sup>rd</sup> party properties will be assessed to determine whether or not they are greater than "expected".
- Surface water monitoring re contamination:
  - Figure 8: number of monitoring sites seems inadequate. Only 2 locations to cover the entire northern, eastern and southern sections.
  - No indication (Table 4) of how long monitoring will take place. Is there a definition of what constitutes a sufficiently large "precipitation event" to provide accurate assessment? How many such events should be monitored post-closure before monitoring ceases?

### 5.2 Native veg

- Why isn't large scrub on the Brown's farm north of mine site defined as impacted native veg. and subject to monitoring? It constitutes a very significant area of native veg and is right in the path of winds from south, se and sw.

### 5.3 Agriculture

- PM10 dust monitoring: “All areas outside mine operational area have PM10 below 150 ug/m3 for all 24 hour periods (midnight to midnight”. Why 150, not 50?
- Why no ongoing TDD monitoring – relevant re dust deposition on crops and potential suffocation of plants with attendant loss of productivity?
- *Copper measurement*: Limiting assessment to Crop Quality Monitoring Area inadequate. Why no monitoring on and off land on W., NW, SW sides that are exposed to constant S, SW and SE winds?

### 5.4 Visual amenity:

- *Site inspection by Geomorphology expert*. Presumably community assessment will form part of determining whether this conditions is met?
- *Six photo monitoring locations*: Views from Black Point and Pine Point included but does not include a view from Rogues Point even though residents are looking straight at the Eastern WRD. Perspective from Highway near James Well Road not reflective of view from RP.
- *Recommendation: A photo monitoring location at Rogues Point is essential because of its different visual perspective of the mine site.*

### 5.5 Stability of WRD and TSF final landforms

- One year post closure seems completely inadequate, given that, as noted earlier,
  - final rehabilitation of sections of these landforms (eg TSF) will not be completed until after mining operations cease and
  - instability may not become evident for decades.

### 5.6 Water seepage from TSF, WRDs and ore stockpiles - impact on adjacent land use

- PAF: Figure 18: Shows PAF located around western WRD and in backfill in SW toe of pit. **Question**: Why no groundwater monitoring along central SE section of WRD within third party-owned paddock?
- **Question**: Why is water seepage measured for only one year post closure, given problems may not become evident for decades.
- **Question**: How will adverse impacts on adjacent land use be assessed? No details provided.

### 5.7 Marine

- Monitoring one year post closure insufficient.

### 5.8 Risks to health and public safety

- Focuses only on abandonment bunds: this covers the safety aspect but is only marginally relevant to health issues.

- *Recommendation: During life of mine, any health impacts on local community need to be assessed, and if any detected, strategies identified and implemented to ensure they do not continue post closure.*

## 5.9 Geotechnical failure

- Pit wall stability: Important because it has clear implications for any uses to which pit could be put post mining. But doesn't seem to be addressed in draft MP.
- **Question:** Why only 2 geotechnical monitoring points ( Fig. 21) and why no monitoring of stability of pit backfill section?

## Appendix 1: conditions not listed in draft MP

### SCHEDULE 2

s. 2 18. Unless the Director of Mines has approved (in writing) an alternative agreement between the Tenement Holder and a land owner relating to the removal of infrastructure, the Tenement Holder must ensure that ***all infrastructure is decommissioned and removed from the Land at mine completion.***

s. 2 19. The Tenement Holder must, ensure that:  
 19.2. ***no contamination of land and soils*** either on or off site ***after mine completion*** occurs as a result of mining operations.

s.2 27. The Tenement Holder must ensure there is no adverse change to the environmental values of the basement fractured rock aquifer within or outside of the Land as a result mining operations ***after mine completion.***

#### **Cessation of operations:**

s. 2 36 Notification of cessation of operations. Within 30 days of becoming aware of any event or decision which is likely to give rise to the cessation of mining operations for a period of more than 7 days the tenement holder must notify the director of mines in writing of the event or decision. The notice must specify the data upon which the mining operations are expected to cease, or have ceased and an estimate of the period of cessation.

s. 2 37. Unless the Director of Mines otherwise directs, a DRP must be submitted to the Director of Mines for approval within 30 days of any decision or event that is likely to give rise to the permanent cessation of mining operations, and that DRP must:

- 37.1. Set out the activities and scheduling required for the carrying out of the rehabilitation works specified in the approved PEPR;
- 37.2. be prepared in accordance with any guidelines provided by the Director of Mines.

s. 2 38. The Tenement Holder must comply with a DRP approved in accordance with **Condition 37** or **39** when decommissioning or rehabilitating the Land.

- s. 2 39. If, in the opinion of the Director of Mines, mining operations on the Land have substantially ceased for 2 years or more, the Director of Mines may:
- 39.1. Require that the Tenement Holder submits a DRP for approval dealing with the requirements set out in **Condition 37**; and/or
  - 39.2. direct the Tenement Holder to rehabilitate the Land in accordance with the approved PEPR and/or any DRP.

## SCHEDULE 6

- s. 6 .4. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) of the Regulations in relation to the outcome in Sixth Schedule Clause 1;
- 4.2. **Progressive rehabilitation and stabilisation** of disturbed areas undertaken throughout the life of mine to control dust emissions generated by wind erosion.
- s. 6 14. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) of the Regulations in relation to the outcome in Sixth Schedule Clause 11;
- 14.1. develop and implement strategies in consultation with affected parties for the management of visual amenity which should include (but not limited to):  
.....
  - 14.4. positioning and design of **permanent mine landforms** or other earthen bunds to screen activities;
  - 14.5. **sculpture permanent mine landforms** to soften the visual impact and reflect surrounding landscape;
  - 14.6. **prompt rehabilitation of disturbed areas once no longer required for mining** operations, utilising every available opportunity provided by the mine plan;
  - 14.7. **rehabilitation** of the final batters immediately following the completion of each WRD lift;
  - 14.8. vegetate external faces of permanent mine landforms where practical to reduce the impact of changes in landscape colour.
- s. 6 21. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) of the Regulations in relation to Second Schedule Conditions 19 (soil) and 25 (surface water), and Sixth Schedule Clauses 18 and 19:
- 21.1. The design, construction, operation and **closure of the Tailings Storage Facility** must be prepared in accordance with, but not limited to, the most recent ANCOLD guidelines relating to Tailings Dams;
  - 21.5. Strategies for achieving and maintaining design tailings discharge densities and tailings consolidation rates to ensure timely construction of the cover system **post cessation of tailings deposition**.
- s 6 29. Tenement Holder required to address the following matters .....
- 29.11. A program for determining the erodibility of waste rock to ensure that no erodible waste rock is placed immediately underneath subsoil on external batters
  - 29.12 Waste rock dumps designed to ensure PAF material is not exposed as a result open pit wall failure **post mine completion**.
- s. 6 30. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) of the Regulations in relation to Sixth Schedule Clause 41:
- 30.2.** A plan for establishing appropriate mechanisms to ensure effective transfer of

responsibility for any maintenance of the site and control of any future development **post mine completion**.

s. 6 39. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) of the Regulations in relation to Sixth Schedule Clause 37:

39.1. Develop strategies to ensure **final landform design** for the open pit void meets the outcome for protection of public safety post mine completion and in the long term to address the following potential hazards (but not limited to);

39.1.1. the risk of falling;

39.1.2. the risk of drowning;

39.1.3. the risk of vehicle incidents/accidents; and

39.1.4. ground instability.

#### **RESTATEMENT OF BOND**

s 1 28. In accordance with S 62 of the [Mining] act, Minister may... require tenement holder to pay a bond ... to ensure Minister is satisfied that it covers

28.1 Any civil or statutory liability

28.2 Present and future obligations of tenement holder re rehabilitation of land disturbed by mining operations.