



**Government
of South Australia**

Mining Act 1971

TENEMENT DOCUMENT

MINERAL LEASE

TENEMENT HOLDER OZM Carrapateena Pty Ltd (ACN 007 756 443) and
OZ Minerals Carrapateena Pty Ltd (ACN 149 626 255)

CLASS OF LEASE Mineral Lease (ML)

MINERAL LEASE NUMBER 6471

COMMENCEMENT DATE 3 January 2018

TERM OF LEASE Twenty-one (21) years

EXPIRY DATE 2 January 2039

MINERAL(S) Minerals (Copper, Gold and Silver)

AREA OF LEASE 11,633 hectares

DATE BY WHICH THE PROPOSED PEPR MUST BE SUBMITTED: 2 January 2019

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Details of Grant of a Mining Tenement

1. On 3 January 2018, pursuant to Part 6 of the Act, the Minister made a statutory grant of a mineral lease (the Mining Tenement) described in this Tenement Document.
2. The Mining Tenement is granted:
 - 2.1. To OZM Carrapateena Pty Ltd (ACN 007 756 443) and OZ Minerals Carrapateena Pty Ltd (ACN 149 626 255);
 - 2.2. For the purpose of recovering the Mineral(s) described in the First Schedule of this Tenement Document.
3. The Mining Tenement is numbered ML 6471.
4. The Mining Tenement is:
 - 4.1. Subject to the Terms and Conditions prescribed by the Act and Regulations and specified in this Tenement Document; and
 - 4.2. Subject to the Additional Terms and Conditions specified in the First and Second Schedules (respectively) of this Tenement Document.

Terms and conditions required by the Act to be specified in the Tenement Document

Description of the Land

5. The Mining Tenement is granted over an area of 11,633 hectares and is located in the Pernatty area, approximately 62km east of Woomera.
6. The location of the Mining Tenement is more specifically defined in the map and coordinates specified in the Third Schedule of this Tenement Document.

Term, Commencement and Expiration

7. The Mining Tenement is granted for the term of twenty-one (21) years. The term of the Mining Tenement commenced on 3 January 2018, and, unless it is earlier renewed, surrendered or cancelled, the Mining Tenement will cease on 2 January 2039.

Rental

8. The Tenement Holder shall pay, by way of rental, such sums as may be prescribed and in accordance with section 40 of the Act and regulation 42 of the Regulations.

Compensation

9. The Minister may, at any time, require the Tenement Holder to pay to any person an amount of compensation stipulated by the Minister, to which that person is, in the opinion of the Minister, entitled in consequence of mining operations in pursuance of the rights granted and the obligations imposed by the grant of the Mining Tenement.

Suspension and Cancellation: Stipulation of Process

10. Pursuant to subsection 41(1) of the Act, the Minister may suspend or cancel the Mining Tenement if the Tenement Holder contravenes or fails to comply with a term or condition of this Tenement Document or a provision of the Act (which includes the Regulations).
11. Pursuant to subsection 41(2) of the Act, the Minister may stipulate in the tenement document a process for suspension or cancellation that must be followed before the powers in subsection 41(1) may be exercised.
12. The process for suspension of the Mining Tenement shall be as stipulated in the Fourth Schedule of this Tenement Document.
13. The process for cancellation of the Mining Tenement shall be as stipulated in the Fifth Schedule of this Tenement Document.

Environmental outcomes specified pursuant to Regulation 65 of the Regulations

14. The Sixth Schedule of this Tenement Document sets out outcomes contemplated in regulation 65(2) of the Regulations, that the Tenement Holder is required to address in any program submitted in accordance with Part 10A of the Act.

Explanatory note: The Sixth Schedule may also contain strategies and criteria which the Department of the Premier and Cabinet has formed the view would address the outcomes set out in that Schedule.

Restatement of selected provisions from the Act

Explanation of Restatements

15. All of the restatements in this portion of this Tenement Document are included for guidance only and do not replace the substantive provisions of the Act or the Regulations.
16. If any restatement is inconsistent with the substantive provisions of the Act or the Regulations, the restatement will be invalid and the substantive provision of the Act or the Regulations will prevail and the Tenement Holder is required to comply with the substantive provision of the Act or the Regulations.
17. The Tenement Holder is still required to comply with any provision of the Act or Regulations that is not restated in this Mineral Lease.

Restatement of rights conferred on Tenement Holder

18. The grant of the Mining Tenement confers an exclusive right upon the Tenement Holder including officers, employee(s), contractor(s) or duly authorised agent(s) of the Tenement Holder, to conduct mining operations on the Land, for the Mineral(s), subject to the provisions of the Act and the Regulations, and the terms and conditions of this Tenement Document.
19. The grant of the Mining Tenement authorises the Tenement Holder, including officers, employee(s), contractor(s) or duly authorised agent(s) of the Tenement Holder, to sell, or dispose of, the Mineral(s) recovered in the course of mining operations conducted in pursuance of the grant or to utilise any such mineral(s) for any commercial or industrial purpose, subject to the payment of royalty.

Restatement of rights and powers not conferred on the Tenement Holder

20. The grant of the Mining Tenement does not confer any right on the Tenement Holder:
 - 20.1. To use the Land for any purpose other than the authorised mining operations.
 - 20.2. To confer any rights on any other person in relation to the Mining Tenement.

Explanatory note: For example, the Tenement Holder cannot grant rights to a party under a Joint Venture Agreement (or other agreement however described), to conduct mining operations on the Land in that party's own right. The Tenement Holder may engage employees, contractors or agents to perform work on the tenement on the Tenement Holder's behalf.

Restatement of obligations imposed on Tenement Holder: Program for environment protection and rehabilitation

21. The Tenement Holder must not carry out mining operations unless there is an approved program for environment protection and rehabilitation (an Approved PEPR).
22. A Proposed PEPR will only be approved when it complies with the requirements of Part 10A of the Act and the Regulations.
23. To comply with Part 10 A of the Act, the Proposed PEPR must:
 - 23.1. Contain the information specified in section 70B(2) of the Act and regulation 65(2), (5), (6) of the Regulations and determinations made by the Minister under regulation 65(7) of the Regulations (if any);
 - 23.2. Comply with any applicable conditions specified in this Tenement Document (if any);
 - 23.3. Address any relevant environmental outcomes listed in the Sixth Schedule of this Tenement Document.

*Explanatory note: At the date of grant, the determinations are available at:
www.minerals.dpc.sa.gov.au/publications_and_information/ministerial_determinations*

24. In accordance with regulation 65(10) of the Regulations, the Tenement Holder must submit to the Department of the Premier and Cabinet for ministerial approval of a Proposed PEPR that fully complies with the Act and Regulations within twelve (12) months after the grant of the Mining Tenement unless the Tenement Holder has been granted an extension of time for such submission.

Explanatory note: Until otherwise notified, the Tenement Holder may apply for an extension of time in writing to the Director of Mines, GPO Box 320, Adelaide, SA 5001, setting out the reasons why the Tenement Holder seeks an extension and the date when the Tenement Holder estimates that the document will be ready for submission to the Minister.

Restatement of obligations imposed on Tenement Holder: Working conditions

25. In accordance with regulation 35 of the Regulations, unless otherwise determined or agreed by the Minister, the Tenement Holder must:
 - 25.1. Commence mining operations in accordance with the Approved PEPR within twelve (12) months after its approval; and

- 25.2. Thereafter continue mining operations in accordance with the requirements of the program in the Approved PEPR.

Explanatory note: Until otherwise notified, the Tenement Holder may apply for an extension of time in writing to the Director of Mines, GPO Box 320, Adelaide, SA 5001, setting out the reasons why the Tenement Holder seeks an extension and the date when the Tenement Holder estimates that the document will be ready for submission to the Minister.

Restatement of obligations imposed on Tenement Holder: Other

26. In addition to obligations about the conduct of mining operations and rehabilitation, the Act and Regulations impose other obligations on the Tenement Holder including obligations to:
- 26.1. Comply with Part 3 of the Act (royalties).
 - 26.2. Comply with the applicable provisions of Part 9 of the Act (entry onto land and use of declared equipment).
 - 26.3. Comply with the applicable provisions of Part 9B of the Act (native title).
 - 26.4. Comply with the provisions of section 76 of the Act (mining returns) to the extent relevant to a mineral lease.
 - 26.5. Comply with section 77 of the Act (records and geological samples) and regulation 84 of the Regulations.
 - 26.6. Comply, as necessary, with section 83 of the Act (ministerial consent for dealings in relation to the Tenement) and regulations 44 and 70 of the Regulations.
 - 26.7. Comply, insofar as applicable to a mineral lease, with regulation 86 of the Regulations (compliance reports).
 - 26.8. Comply with the requirement in regulation 43 of the Regulations to maintain all posts, boundary indicator markers and notices in the positions required by the Regulations as applicable.
 - 26.9. Permit the pastoral lessee (if any) of the Land to have free access and use at all times for domestic purposes, and for the purposes of watering stock from any surface water on the land which shall not have been provided or stored by artificial means by the Tenement Holder.

Restatement of Exempt Land

27. In accordance with section 9 of the Act, the grant of the Mining Tenement does not authorise prospecting, exploring or mining upon any exempt land unless or until the benefit of the exemption is waived under section 9AA.

Restatement of Bond

28. In accordance with section 62 of the Act, the Minister may by written notice require the Tenement Holder to pay a bond in such sum and subject to such terms and conditions as ensure, in the opinion of the Minister, that the following will be satisfied:

- 28.1. Any civil or statutory liability likely to be incurred by the Tenement Holder in the course of carrying out mining operations;
- 28.2. The present and future obligations of the Tenement Holder in relation to the rehabilitation of land disturbed by mining operations.

Explanatory note: The terms and conditions referred to in this paragraph will be imposed in the written notice given by the Minister. The Minister may include a term or condition that the bond may be increased if circumstances arise during the term of this Mineral Lease which increases the rehabilitation liability or increases the cost of civil or statutory liability.

Restatement of Fees

29. The Tenement Holder shall pay all fees imposed by the Act and Regulations from time to time.

Restatement of Renewal

30. This Mineral Lease shall be renewed in accordance with the Act.

Restatement of Surrender

31. The Tenement Holder may apply to surrender the Mining Tenement during its term in accordance with the Act and the Regulations.

Restatement of Forfeiture

32. The Mining Tenement is subject to the forfeiture provision of the Act being sections 70 and 85.

Restatement of Notices

33. Notices under the Act will be served in accordance with regulation 106 of the Regulations.

Restatement of Mining Register

34. Section 15A of the Act requires the Mining Registrar to keep a register of, amongst other things, mineral leases. Upon payment of the prescribed fee, the public may inspect the Mining Register.

Restatement of Mining Operations

35. As defined by section 6 of the Act “mining operations” means:
- 35.1. Operations carried out in the course of prospecting, exploring or mining for minerals; or
 - 35.2. Without limiting paragraph 35.1, any operations by which minerals are recovered from any place or situation, including by recovering minerals from the sea or a natural water supply; or
 - 35.3. On-site operations undertaken to make minerals recovered from the site a commercially viable product, other operations involving such minerals, or other operations involving minerals brought on to the site of a mine for processing; or
 - 35.4. Operations for the rehabilitation of land on account of the impact of any operations under a preceding paragraph; or
 - 35.5. Operations that are directly related to any operations under a preceding paragraph;
but does not include –
 - 35.6. An investigation or survey under section 15 of the Act; or
 - 35.7. Fossicking; or
 - 35.8. The surface removal of loose rock material disturbed by agricultural operations.
36. This definition applies to operations that occur during all phases of the mine’s life.

Restatement of requirement to notify of a change in status

37. The Tenement Holder must comply with regulation 98(1)(c) and 98(2).
 - 37.1. If the Tenement Holder is a natural person, he or she is required to notify the Mining Registrar of a declaration of bankruptcy within fourteen (14) days of the declaration.
 - 37.2. If the Tenement Holder is a company, it is required to notify the Mining Registrar of its being placed under official management, or in liquidation or receivership within fourteen (14) days of any of those events.

Restatement of Public Liability Insurance

38. The Tenement Holder must comply with regulation 90, which concerns public liability insurance.

Definitions

39. In this Tenement Document, the following words have the following meanings:
- 39.1. **“Act”** means the *Mining Act 1971* of South Australia;
 - 39.2. **“Additional Terms and Conditions”** means the Additional Terms and Conditions authorised by section 34(4) of the Act and set out in the First and Second Schedules of this Tenement Document respectively;
 - 39.3. **“AEP”** means Annual Exceedance Probability;
 - 39.4. **“AMD”** means Acid and Metalliferous Drainage;
 - 39.5. **“ANCOLD”** means Australian National Committee on Large Dams;
 - 39.6. **“Approved PEPR”** means the Program for Environment Protection and Rehabilitation under Part 10A of the Act, which has received ministerial approval;
 - 39.7. **“Business Day”** means any day that is not a Saturday, Sunday or a public holiday in South Australia;
 - 39.8. **“Completion”** means the Land has been rehabilitated to an extent that the Minister could approve an application for surrender of the Mining Tenement on the basis that the Tenement Holder has complied with sub-regulation 45(1) of the Regulations and there is no obstacle under sub-regulation 45(3) of the Regulations;
 - 39.9. **“Contamination”** and **“contaminated”** mean the presence of chemical substances in concentrations greater than the background concentrations (if any), where the presence of the chemical substances in the greater concentrations has resulted in:
 - 39.9.1. Actual or potential harm to the health or safety of human beings that is not trivial, or
 - 39.9.2. Actual or potential harm to water that is not trivial, or
 - 39.9.3. Other actual or potential environmental harm that is not trivial;
 - 39.10. **“CTP”** means Concentrate Treatment Plant;
 - 39.11. **“DRP”** means Decommissioning and Rehabilitation Plan;
 - 39.12. **“Environmental Values”** means the environmental values recognised in the South Australian Environment Protection (Water Quality) Policy 2015 and the *‘Australian and New Zealand Guidelines for Fresh and Marine Water Quality, October 2000, Paper No 4’*;

- 39.13. “**EPA**” means the Environment Protection Authority under the *Environment Protection Act 1993* of South Australia;
- 39.14. “**ICP**” means Iron Calcium Precipitate, a waste product from the CTP;
- 39.15. “**mineral lease**” means the Mining Tenement granted to the Tenement Holder as referred to in paragraph 1 of this Tenement Document;
- 39.16. “**Mineral(s)**” means the Mineral(s) referred to on the front page of this Mineral Lease and in the First Schedule;
- 39.17. “**Mining Tenement**” or “**Tenement**” means the mineral lease granted to the Tenement Holder as referred to in paragraph 1 of this Tenement Document;
- 39.18. “**Minister**” means the Minister for Mineral Resources and Energy (or any substituted Minister);
- 39.19. “**NAF**” means non-acid forming material;
- 39.20. “**PAF**” means potentially acid forming material;
- 39.21. “**PEPR**” means Program for Environment Protection and Rehabilitation;
- 39.22. “**PMP**” means Probable Maximum Precipitation;
- 39.23. “**Proposed PEPR**” means the document required by regulation 65(10) of the Regulations to be submitted for ministerial approval within twelve (12) months of the date of grant of the Mining Tenement;
- 39.24. “**QA/QC**” means Quality Assurance and Quality Control
- 39.25. “**Regulations**” means the Mining Regulations 2011 of South Australia;
- 39.26. “**Significant Environmental Benefit**” means a benefit provided as a requirement of authorisation to clear native vegetation under the Native Vegetation Regulations 2003.
- 39.27. “**site**” means the Land;
- 39.28. “**TDS**” means Total Dissolved Solids;
- 39.29. “**Tenement Document**” means this document;
- 39.30. “**Tenement Holder**” means the person, or persons, to whom this Mining Tenement is granted and includes:
- 39.30.1. If the Tenement Holder is a natural person the executors, administrators and assigns of that person;
- 39.30.2. If the Tenement Holder is a body corporate the successors, administrators or permitted assigns thereof.

Explanatory note: "The Tenement Holder" has the same meaning as "the mining operator" as defined by section 6 of the Act.

- 39.31. **“the Land”** means the land over which this Mining Tenement is granted and which is described in paragraphs 5 and 6 of this Tenement Document and in the Third Schedule of this Tenement Document;
- 39.32. **“the Program”** means the Approved PEPR as defined above;
- 39.33. **“third party land users”** means the owner of land (as defined by the Act) and any persons lawfully occupying land with the licence of the owner, or the consent of the owner and **“third party land use”** has a corresponding meaning;
- 39.34. **“TSF”** means Tailing Storage Facility;
- 39.35. **“Weeds”** means any invasive plant that threatens native vegetation in the local area or any species recognised as invasive in South Australia.

Interpretation

40. For the purposes of interpreting this Tenement Document the following will apply:
- 40.1. Unless otherwise stated, any term which is used in this Tenement Document which has a specific meaning in the Act or the Regulations, has that same meaning in this Tenement Document;
 - 40.2. The masculine shall include the feminine, words importing persons shall include corporations, and the singular shall include the plural when the context or circumstances require and unless inconsistent with or repugnant to the context the following words shall have the meanings set opposite to them respectively –
 - 40.2.1. “amendment” includes an addition, excision or substitution;
 - 40.2.2. “the Land” includes any part thereof; and
 - 40.2.3. “the term” includes any renewal or extension thereof.
 - 40.3. If the Mining Tenement is granted to more than one person, all of the persons to whom it is granted are all jointly and severally liable for compliance with the Act, the Regulations and this Tenement Document, including the Additional Terms and Conditions in the First and Second Schedules of this Tenement Document respectively;
 - 40.4. If, by virtue of a dealing under section 83 of the Act, the Mining Tenement comes to be held by more than one person, they will all be jointly and severally liable for compliance with the Act, the Regulations and this Tenement Document including the Additional Terms and Conditions in the First and Second Schedules of this Tenement Document respectively;
 - 40.5. If any act pursuant to the Tenement Document would otherwise be required to be done on a day which is not a Business Day, then that act may be done on the next Business Day;
 - 40.6. To the extent that there is any inconsistency, on the one hand, between a term of this Tenement Document or any Additional Term or Condition, and, on the other hand, the Act or Regulations, the Act or Regulations shall prevail;
 - 40.7. Subject to the transitional provisions in any amendment to the Act or the Regulations, all provisions referred to in this Tenement Document shall be taken to include any such amendment;

- 40.8. Subject to the transitional provisions in any amendment to the Act or the Regulations, to the extent that there is any inconsistency, on the one hand, between a term of this Tenement Document or any Additional Term or Condition, and, on the other hand, any amendments to the Act or Regulations, the amended Act or Regulations shall prevail;
- 40.9. Footnotes and Explanatory notes do not form part of this Tenement Document;
- 40.10. The contents page does not form part of this Tenement Document;
- 40.11. The front page and all of the Schedules form part of this Tenement Document.

Executed by the Tenement Holders in accordance with regulation 41

SIGNED by OZM Carrapateena Pty Ltd (ACN 007 756 443))
in accordance with section 127 of the)
Corporations Act 2001 and its Constitution)

.....
Signature of Director

.....
Signature of Director/Secretary

.....
Print Name of Director

.....
Print Name of Director/Secretary

.....
Date

.....
Date

SIGNED by OZ Minerals Carrapateena Pty Ltd (ACN 149 626 255))
in accordance with section 127 of the)
Corporations Act 2001 and its Constitution)

.....
Sig **When executed, the Tenement Document will**
be entered into the Mining Register and will
.....
Prir **be available through the Mining Register**
Search Tool on the South Australian Resources
.....
Dat **Information Gateway (SARIG) at**
<https://map.sarig.sa.gov.au>

Entered in the Mining Register on 3 January 2018
In accordance with section 15A(1)(c) of the Act.

Signed by
Junesse Martin
Mining Registrar

.....
Date

FIRST SCHEDULE
ADDITIONAL TERMS

Explanatory note: A term is a clause that gives a right to a Mining Tenement.

Authorised Mining Operations

1. The grant of the Mining Tenement authorises mining operations (only) for the recovery of Copper, Gold and Silver.
2. The grant of the Mining Tenement authorises mining operations (only) that are consistent with the mining operations described in the Mining Proposal document dated 26 May 2017 and subsequent Response Documents dated 22 September 2017, 6 October 2017, 21 November 2017 and 29 November 2017.

SECOND SCHEDULE
ADDITIONAL CONDITIONS

Explanatory note: A condition is a clause that imposes a restriction on a Mining Tenement.

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Aboriginal Heritage

1. The Tenement Holder must during construction, operation and post Completion ensure that there is no damage, disturbance or interference to Aboriginal heritage sites, objects or remains unless it is authorised under the relevant legislation.

Tailings Storage Facility (TSF)

2. The Tenement Holder must ensure that post Completion, all final mine landforms (including the TSF) will be chemically and physically stable in the long term.
3. Following completion of detailed design of the TSF and Decant Dam, the following documentation for the TSF and Decant Dam must be developed and maintained:
 - 3.1. Construction documentation;

- 3.2. Design drawings and quantity schedule;
- 3.3. Technical specifications;
- 3.4. Construction Quality Assurance (CQA) Manual;
- 3.5. Operations, Maintenance and Surveillance (OMS) Manual; and
- 3.6. Dam Safety Emergency Plan (DSEP).

Explanatory note: This condition reflects a commitment made in the Mining Proposal and Response Documents.

Tailings Storage Facility (TSF) Audits

4. The TSF and Decant Dam construction, operation and closure must be audited against (i) the design, design criteria and plans that have been adopted for the TSF and Decant Dam construction, operation and closure, (ii) all of the documentation listed in Second Schedule Condition 3 and (iii) the most recent version of the ANCOLD Tailings Dam Guideline:
 - 4.1. for the Stage 1 TSF and Decant Dam embankment foundation preparation and embankment construction; and
 - 4.2. for each subsequent stage of TSF and Decant Dam embankment foundation preparation and embankment construction; and
 - 4.3. on a three (3) monthly basis during Stages 1 and 2 of TSF and Decant Dam operations or at a frequency as the Director of Mines (or other authorised officer) may specify by notice in writing; and
 - 4.4. on a six (6) monthly basis during Stages 3, 4, 5 and 6 (and any subsequent stages) of TSF and Decant Dam operations or at a frequency as the Director of Mines (or other authorised officer) may specify by notice in writing; and
 - 4.5. after the final discharge of tailings into the TSF and prior to commencement of final rehabilitation, closure and decommissioning of the TSF and Decant Dam; and
 - 4.6. after the final TSF and Decant Dam rehabilitation, closure and decommissioning works have been completed.
5. The expert must prepare reports of the findings of each audit.
6. The initial expert report for the audit of the Stage 1 TSF and Decant Dam foundation preparation and embankment construction must be provided to the Director of Mines (or other authorised officer) prior to the placement of tailings and waste into the TSF.

7. The expert report for the audit which occurs after the final discharge of tailings into the TSF must be provided to the Director of Mines (or other authorised officer) prior to the commencement of final rehabilitation of the TSF and Decant Dam.
8. All other expert reports must be provided to the Director of Mines (or other authorised officer) within forty-five (45) days or such longer period approved by the Director of Mines (or other authorised officer) of completion of the audit.
9. All expert reports will be made publically available.
10. The expert reports for the audits of Stage 1 and each subsequent stage of TSF embankment construction must address the following matters (but not limited to):
 - 10.1. Demonstrate that sufficient freeboard has been achieved to ensure flood storage capacity for a 1-in-100 AEP rainfall event including wave freeboards (1 in 10 AEP winds) and contingency freeboard of 0.5 m;
 - 10.2. Demonstrate emergency spillways for each stage of the operation have the capacity for flow resulting from a 1-in-1000 AEP critical duration event including wave freeboard;
 - 10.3. Demonstrate that tailings properties in operations are consistent with the adopted tailings properties, including density and strength as specified in the detailed final design;
 - 10.3.1. Should the tailings density or strength be inconsistent, undertake an assessment of the potential impact on the TSF (including, but not limited to, TSF storage capacity) and propose any remediation to the design if deemed necessary;
 - 10.4. Liquefaction assessment based on in-situ test work of the tailings prior to upstream raises;
 - 10.5. A seismic hazard assessment (SHA) to provide site-specific peak ground acceleration (PGA) parameters for stability assessments;
 - 10.6. The geometry of upstream raises and foundation treatment has been confirmed prior to each upstream raise;
 - 10.7. The suitability and compatibility of the various embankment fill materials has been assessed; and
 - 10.8. Assessment of all of the documentation listed in Second Schedule Condition 3 to ensure that the content of the documents is appropriate for the next stage of TSF embankment construction.

Explanatory note: This condition reflects a commitment made in the Mining Proposal and Response Document.

11. The expert report for the audit which occurs after the final TSF and Decant Dam rehabilitation, closure and decommissioning works have been completed must address the following matters (but not limited to):
 - 11.1. Spillway designed for the seventy-two (72) hour PMP critical duration event and in accordance with ANCOLD;
 - 11.2. Decant system is decommissioned in accordance with the design; and
 - 11.3. Reshaping of the TSF embankment in accordance with the design to provide a profile that is resistant to erosion.

Explanatory note: This condition reflects a commitment made in the Mining Proposal and Response Document.

12. The audits required by Second Schedule Conditions 4.1, 4.2, 4.5, 4.6 and associated reports required by Second Schedule Condition 5 must be conducted and provided by an independent and suitably qualified expert approved by the Director of Mines (or other authorised officer).
13. The audits required by Second Schedule Conditions 4.3, 4.4 and associated reports required by Second Schedule Condition 5 must be conducted and provided by an independent and suitably qualified expert approved by the Director of Mines (or other authorised officer) at least once for each twelve (12) month period.
14. An audit required by Second Schedule Conditions 4.3, 4.4 and associated reports required by Second Schedule Condition 5 may be conducted and provided by a suitably qualified Tenement Holder employee previously approved by the Director of Mines (or other authorised officer). To apply for approval the Tenement Holder must:
 - 14.1. Apply in writing; and
 - 14.2. Provide the employee's Curriculum Vitae showing their academic qualifications, publications (if any) and practical experience.

Explanatory note: The Department of the Premier and Cabinet is seeking to ensure that if the auditing and reporting person is an employee of the Tenement Holder that they are suitably qualified and that an independent audit is conducted at least once for each twelve (12) month period.

Concentrate Treatment Plant (CTP)

15. The Tenement Holder must during operations ensure that any CTP constructed on the Land is equipped with scrubbers which are designed appropriately to prevent acid mist emissions.

Concentrate Transport

16. The Tenement Holder must during operations ensure that copper concentrate is transported in fit for purpose sealed containers to prevent copper concentrate release to the environment.

Waste

17. The Tenement Holder must ensure that all commercial or industrial waste (which does not include CTP process residue, tailings and waste rock) is disposed of in an EPA licensed facility.

Removal of Infrastructure

18. The Tenement Holder must ensure that all mining related infrastructure is decommissioned and removed from the Land at Completion unless the Director of Mines (or other authorised officer) has approved, in writing, for the infrastructure to remain.

Transparency

19. The Tenement Holder agrees to the Approved PEPR and any compliance reports and reportable incident reports, submitted in accordance with the Regulations, being made available for public inspection.

Notification of cessation of operations

20. Within thirty (30) days of becoming aware of any event or decision which is likely to give rise to the cessation of mining operations or mining related activities for a period of more than seven (7) days and where possible prior to the cessation of mining operations or mining related activities, the Tenement Holder must notify the Director of Mines in writing of the event or decision. The notice must specify the date upon which the mining operations or mining related activities are expected to cease or have ceased, an estimate of the period of cessation and an outline of the steps to develop any required DRP under Second Schedule Condition 22.

Decommissioning and Rehabilitation Plan (DRP)

21. The Tenement Holder must comply with a DRP approved in accordance with Second Schedule Conditions 22 and 23 when decommissioning or rehabilitating the Mining Tenement.
22. Unless the Director of Mines (or other authorised officer) otherwise directs, a DRP must be submitted to the Director of Mines (or other authorised officer) for approval within sixty (60) days or such longer period which is approved by the Director of Mines (or other authorised officer) of any notification provided to the Director of Mines in relation to the notification of cessation of operations under Second Schedule Condition 20, and that DRP must:
 - 22.1. set out the activities and scheduling required for the carrying out of the rehabilitation works specified in the Approved PEPR;
 - 22.2. be prepared in accordance with any guidelines provided by the Director of Mines (or other authorised officer).
23. If, in the opinion of the Director of Mines (or other authorised officer), mining operations or mining related activities on the Mining Tenement have substantially ceased for two (2) consecutive years or more, the Director of Mines (or other authorised officer) may:
 - 23.1. require that the Tenement Holder submits a DRP for approval dealing with the requirements set out in Second Schedule Condition 22; and/or
 - 23.2. direct the Tenement Holder to rehabilitate the Mining Tenement in accordance with the Approved PEPR and/or any DRP.

Operating Protocol

24. The Tenement Holder must develop (in consultation with the owners of land and to the satisfaction of the Director of Mines (or other authorised officer)) a communication and operating protocol, or an agreement incorporating such a protocol, between itself and owners of land adjacent to and on the Land prior to the commencement of mining operations and mining related activities that includes, unless the Director of Mines (or other authorised officer) is otherwise satisfied, the following matters:
 - 24.1. interaction with landowner operations;
 - 24.2. emergency procedures;
 - 24.3. communications and issue management processes;
 - 24.4. land management;
 - 24.5. dispute resolution;

- 24.6. ongoing communication about the Tenement Holder's operations;
 - 24.7. receiving and considering feedback;
 - 24.8. safety procedures;
 - 24.9. access protocols; and
 - 24.10. any matters identified by the Director of Mines (or other authorised officer) in writing.
25. The Tenement Holder must:
- 25.1. provide the protocol(s) to the Director of Mines (or other authorised officer) within six (6) months of the grant of the Mining Tenement or such longer period that the Director of Mines (or other authorised officer) may allow; and
 - 25.2. maintain and adhere to the protocol(s) to the satisfaction of the Director of Mines (or other authorised officer) for the term of the Mining Tenement.

Compliance with regulation 98(1)

26. A notification required by regulation 98(1) must be in writing.

Plains Mouse

27. For the purposes of this Additional Condition:
- 27.1. 'Plains Mouse' means *Pseudomys australis*;
 - 27.2. 'existing population' means an area of suitable habitat for the Plains Mouse where the species has been observed/recorded;
 - 27.3. 'existing habitat' means an area of suitable habitat for the Plains Mouse;
 - 27.4. 'suitable habitat' means large open gypseous cracking clay areas associated with minor drainage features, and depressions within gibber stony plains (National Recovery Plan for the Plains Mouse *Pseudomys australis* 2012).
 - 27.5. To compensate for the residual impact from mining operations on the existing Plains Mouse habitat, the Tenement Holder must provide an environmental offset that:
 - 27.5.1. contains suitable habitat for the Plains Mouse or is known to have an existing population of Plains Mouse;
 - 27.5.2. contains no less than 750ha of suitable habitat to offset the permanent loss of the existing Plains Mouse habitat;

- 27.5.3. the quality of the suitable habitat must be at least equal to that of the quality of the existing habitat that will be permanently lost;
 - 27.5.4. is connected to existing habitat of Plains Mouse by biodiversity corridors to ensure the Plains Mouse can utilise the environmental offset;
 - 27.5.5. is a direct on-ground offset located on land using an appropriate legal mechanism (to the satisfaction of the Director of Mines (or other authorised officer)) that ensures the environmental offset is secured for conservation purposes for the life of the Mining Tenement or longer;
 - 27.5.6. is located as close as practical to the existing habitat that will be permanently lost;
 - 27.5.7. the implementation of which is commenced either before, or at the same point in time as, the impact to the Plains Mouse habitat arising from the mining operations; and
 - 27.5.8. is managed for the life of the Mining Tenement or longer to maintain or improve the existing suitable habitat quality.
28. To ensure the protection of Matters of National Environmental Significance, the Tenement Holder must:
- 28.1. Develop, implement and maintain appropriate management actions to ensure the control of feral animal populations, including cats and foxes;
 - 28.2. Provide data from any future sightings and records of the Thick-billed Grasswren to the Biological Database of South Australia (BDBSA) to enable effective monitoring and record keeping, as per the Recovery Plan Actions;
 - 28.3. Provide data from any future sightings and records of the Night Parrot to the Night Parrot Recovery Team; and
 - 28.4. Provide data from any future sightings and records of the Plains Mouse to the Biological Database of South Australia (BDBSA) to enable effective monitoring and record keeping, as per the Recovery Plan Actions.

Explanatory note: This condition reflects a commitment made in the Mining Proposal and Response Document.

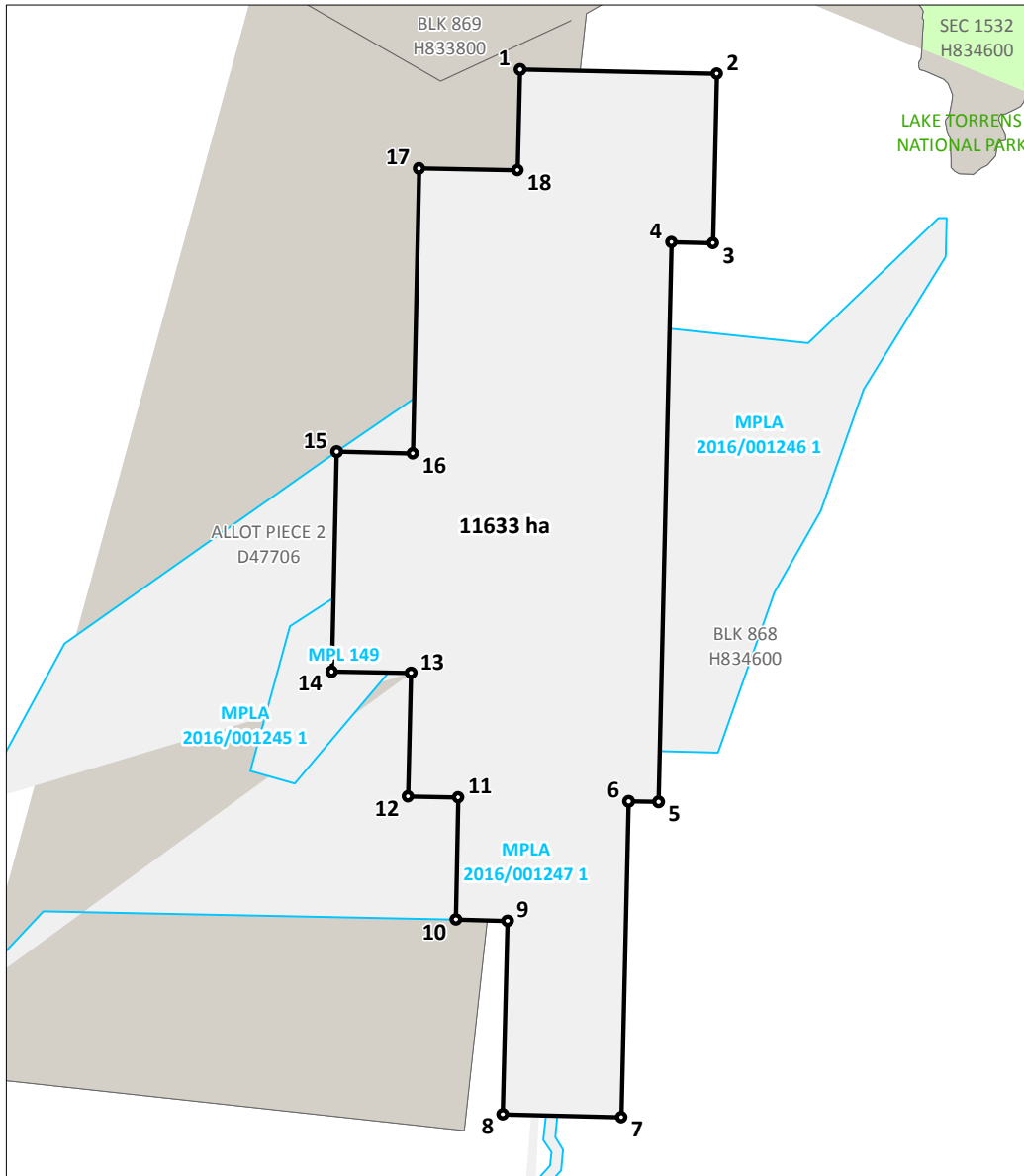
Other Legislation

29. The Tenement Holder must comply with all State and Commonwealth legislation and regulations applicable to the activities undertaken pursuant to this Mining Tenement including (but not limited to) the:

- 29.1. *Environment Protection and Biodiversity Conservation Act 1999;*
- 29.2. *Development Act 1993;*
- 29.3. *Planning, Development and Infrastructure Act 2016;*
- 29.4. *Dangerous Substances Act 1979;*
- 29.5. *National Parks and Wildlife Act 1972;*
- 29.6. *Natural Resources Management Act 2004;*
- 29.7. *Public and Environmental Health Act 1987;*
- 29.8. *Aboriginal Heritage Act 1988;*
- 29.9. *Heritage Places Act 1993;*
- 29.10. *Work Health and Safety Act 2012;*
- 29.11. *Environment Protection Act 1993;*
- 29.12. *Radiation Protection and Control Act 1982;*
- 29.13. *Native Vegetation Act 1991;*
- 29.14. *Mines and Works Inspection Act 1920;*
- 29.15. *Road Traffic Act 1961; and*
- 29.16. *Wilderness Protection Act 1992.*

THIRD SCHEDULE

MAP



NOTE: The boundary of this lease is depicted so as to best represent the relationship to the surrounding cadastral parcels. The legal boundary is to be ascertained by the coordinates specified.

DATE PRODUCED: 18/12/2017

THIRD SCHEDULE**DESCRIPTION OF AREAS**

All that part of the State of South Australia, bounded by a line joining the points of coordinates set out in the following table:

Map Grid of Australia 1994 Zone 53

Point	Easting		Northing	
1	737605.63	mE	6547494.97	mN
2	741925.70	mE	6547396.68	mN
3	741840.45	mE	6543684.64	mN
4	740924.39	mE	6543705.65	mN
5	740643.15	mE	6531439.16	mN
6	739989.59	mE	6531454.15	mN
7	739830.87	mE	6524530.05	mN
8	737231.01	mE	6524589.38	mN
9	737327.26	mE	6528832.87	mN
10	736197.27	mE	6528858.43	mN
11	736257.73	mE	6531538.95	mN
12	735153.27	mE	6531563.79	mN
13	735213.82	mE	6534263.10	mN
14	733481.47	mE	6534301.80	mN
15	733588.58	mE	6539116.70	mN
16	735256.32	mE	6539079.49	mN
17	735396.14	mE	6545329.14	mN
18	737555.69	mE	6545280.65	mN

Area: 11,633 ha

Based on information provided by the applicant.

FOURTH SCHEDULE
PROCESS FOR SUSPENSION

Issuance of Suspension Show Cause Notice

1. Where the Minister is of the view that there may be grounds to consider whether to suspend the grant of the Mining Tenement, the Minister shall give written notice to the Tenement Holder, which shall:
 - 1.1. Specify the provision of the Act or the Regulations, or the term or condition of the grant of the Mining Tenement, that the Minister believes the Tenement Holder has contravened or failed to comply with; and
 - 1.2. Give the Tenement Holder thirty (30) Business Days from the date of the written notice to show cause why the grant of the Mining Tenement should not be suspended (“the Suspension Show Cause Notice”).

Minister’s action if Tenement Holder does not respond

2. If the Tenement Holder does not respond to the Suspension Show Cause Notice within thirty (30) Business Days, the Minister may suspend the grant of the Mining Tenement without further notice (in accordance with the process outlined below).

Minister’s action if Tenement Holder does respond

3. If the Tenement Holder responds to the Suspension Show Cause Notice within thirty (30) Business Days, the Minister will consider the Tenement Holder’s submission and decide whether to suspend the grant of the Mining Tenement (in accordance with the process outlined below).

Written Notice of Minister’s decision

4. The Minister shall give written notice to the Tenement Holder of the Minister’s decision;
 - 4.1. if the decision is to suspend the grant of the Mining Tenement, the written notice shall be called “Notice of Decision: Suspended”.
 - 4.2. if the decision is to not to suspend the grant of the Mining Tenement, the written notice shall be called “Notice of Decision: Not Suspended”.
5. A Notice of Decision: Not Suspended, may contain any information that the Minister considers relevant.
6. A Notice of Decision: Suspended, shall:

- 6.1. Specify the reason for suspension;
- 6.2. specify the period of suspension;
- 6.3. specify the action (if any) the Tenement Holder may be required to take for the Minister to consider revoking the suspension, and the time frame for taking that action; and
- 6.4. inform the Tenement Holder of their right of appeal to the Environment, Resources and Development Court in accordance with subsection 41(3) of the Act.

Minister's action if Tenement Holder takes action as specified in Notice of Decision

7. If the Tenement Holder takes the action specified by the Minister under paragraph 6.3, the Minister will consider revoking the suspension.
8. If the Minister revokes the suspension, the Minister will, within a reasonable time write to the Tenement Holder informing the Tenement Holder of the revocation.

Minister's action if Tenement Holder appeals

9. If the Tenement Holder appeals to the Environment, Resources and Development Court the Minister will consider exercising the discretion under section 41(4) of the Act, to stay the operation of the suspension until the appeal is finally disposed of.
10. If the Environment, Resources and Development Court, or a court of further appeal finally determines that it is satisfied that there is no proper ground for the suspension, and so orders, the Minister will reinstate the grant of the Mining Tenement in accordance with section 41(5) of the Act.

The Mining Register

11. All of the stages in the suspension process shall be recorded on the Mining Register by way of appropriate memoranda, for example:
 - 11.1. A memorandum Notice of Decision: Suspended;
 - 11.2. A memorandum Notice of Decision: Not Suspended;
 - 11.3. A memorandum of Minister's Decision to Revoke the Suspension;
 - 11.4. A memorandum of Appeal;
 - 11.5. A memorandum of Stay of Suspension by the Minister;
 - 11.6. Memoranda of all of the courts' orders (whether the Environment Resources and Development Court or subsequent appeal courts).

FIFTH SCHEDULE
PROCESS FOR CANCELLATION

Issuance of Cancellation Show Cause Notice

1. Where the Minister is of the view that there may be grounds to consider whether to cancel the grant of the Mining Tenement, the Minister shall give written notice to the Tenement Holder, which shall:
 - 1.1. Specify the provision of the Act or the Regulations, or the term or condition of the grant of the Mining Tenement, that the Minister believes the Tenement Holder has contravened or failed to comply with; and
 - 1.2. give the Tenement Holder sixty (60) Business Days from the date of written notice to show cause why the grant of the Mining Tenement should not be cancelled (“the Cancellation Show Cause Notice”).

Minister’s action if the Tenement Holder does not respond

2. If the Tenement Holder does not respond to the Cancellation Show Cause Notice within sixty (60) Business Days, the Minister may cancel the grant of the Mining Tenement without further notice (in accordance with the process outlined below).

Minister’s action if the Tenement Holder does respond

3. If the Tenement Holder responds to the Cancellation Show Cause Notice within sixty (60) Business Days, the Minister will consider the Tenement Holder’s submission and decide whether to cancel the grant of the Mining Tenement (in accordance with the process outlined below).

Written notice of Minister’s decision

4. The Minister shall give written notice to the Tenement Holder of the decision.
 - 4.1. If the decision is to cancel the grant of the Mining Tenement, the written notice shall be called “the Notice of Decision: Cancelled”.
 - 4.2. If the decision is not to cancel the grant of the Mining Tenement, the written notice shall be called “the Notice of Decision: Not Cancelled”.
5. A Notice of Decision: Not Cancelled may contain any information that the Minister considers relevant.

6. A Notice of Decision: Cancelled shall:
 - 6.1. Specify the reason for cancellation;
 - 6.2. specify the date from which cancellation is effective; and
 - 6.3. inform the Tenement Holder of their right of appeal to the Environment, Resources and Development Court in accordance with subsection 41(3) of the Act.

Minister's action if Tenement Holder appeals

7. If the Tenement Holder appeals to the Environment, Resources and Development Court the Minister will consider exercising his discretion under section 41(4) of the Act, to stay the operation of the cancellation until the appeal is finally disposed of.
8. If the Environment, Resources and Development Court, or a court of further appeal finally determines that it is satisfied that there is no proper ground for the cancellation, and so orders, and the cancellation has not been stayed by the Minister under section 41(4) of the Act, or by order of the Environment, resources and Development Court, the Minister will reinstate the grant of the Mining Tenement in accordance with section 41(5) of the Act.

The Mining Register

9. All stages in the cancellation process shall be recorded on the Mining Register by way of appropriate memoranda, for example:
 - 9.1. A memorandum Notice of Decision: Cancelled;
 - 9.2. A memorandum of Notice of Decision: Not Cancelled;
 - 9.3. A memorandum of Minister's Decision to Revoke the Cancellation;
 - 9.4. A memorandum of Appeal;
 - 9.5. A memorandum of Stay of Cancellation by the Minister;
 - 9.6. Memoranda of all of the courts' orders (whether the Environment, Resources and Development Court or subsequent appeal courts).

SIXTH SCHEDULE**ENVIRONMENTAL OUTCOMES****AND ASSOCIATED CRITERIA AND STRATEGIES PURSUANT TO
REGULATION 65 OF THE MINING REGULATIONS 2011**

Explanatory note: The Sixth Schedule of this Tenement Document sets out outcomes contemplated in regulation 65(2) of the Regulations, that the Tenement Holder is required to address in any program submitted in accordance with Part 10A of the Act. The Sixth Schedule may also specify requirements for strategies and criteria relevant to the outcomes set out in that Schedule.

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Aboriginal Heritage Outcome

1. The Tenement Holder must during construction, operation and post Completion ensure that there is no damage, disturbance or interference to Aboriginal heritage sites, objects or remains unless it is authorised under the relevant legislation.

Public Safety Outcomes

2. The Tenement Holder must during construction and operation ensure that unauthorised entry to the Land does not result in public injuries and or deaths that could have been reasonably prevented.
3. The Tenement Holder must demonstrate that post Completion, the risks to the health and safety of the public so far as it may be affected by mining operations or mining related activities are as low as reasonably practicable.

Public Nuisance Outcome

4. The Tenement Holder must during construction and operation ensure that there are no public nuisance impacts from dust and noise generated by mining operations or mining related traffic.

Traffic Outcomes

5. The Tenement Holder must during construction and operation, ensure that there are no traffic accidents involving members of the public and mine related traffic that could have been reasonably prevented by the Tenement Holder.

Weeds and Pests Outcome

6. The Tenement holder must during construction and operation ensure no introduction of new species of Weeds declared or listed under relevant legislation, plant pathogens or pests (including feral animals), nor sustained increase in abundance of existing weed or pest species in the Land as a result of mining operations or mining related activities.

Land Use and Property Outcomes

7. The Tenement Holder must during construction, operation and post Completion ensure there are no impacts to third-party land use or property on or off the Land as a result of mining operations or mining related activities other than those agreed between the Tenement Holder and the affected user or determined by an appropriate court as evidenced in its order(s) (and the Tenement Holder must provide the Director of Mines (or other authorised officer) with a copy of the order(s), which shall be placed on the Mining Register).
8. Before Completion, the Tenement Holder must satisfy the Director of Mines (or other authorised officer) that where practicable, the pre-Tenement land use of the Land can be recommenced post Completion.
9. The Tenement Holder must ensure that the Land is progressively and finally rehabilitated to support the future land use.

Land and Soil Outcome

10. The Tenement Holder must, ensure that:
 - 10.1. There is no contamination of land and soils either on or off the Land as a result of mining operations or mining related activities; and
 - 10.2. No contamination of land and soils either on or off the Land post Completion occurs as a result of mining operations or mining related activities.

Native Vegetation Outcome

11. The Tenement Holder must during construction, operation and post Completion ensure that there is no loss of abundance and/or diversity of native vegetation on or off the Land unless a significant environmental benefit has been approved in accordance with the relevant legislation.

Native Vegetation Criteria

12. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(d) in relation to the Native Vegetation Outcome in Sixth Schedule Clause 11:
 - 12.1. Where baseline native vegetation condition (abundance and diversity) is required as a component of the measurement criteria, baseline native vegetation surveys must be undertaken prior to the impact of mining operations or mining related activities on the existing environment.

Native Fauna Outcome

13. The Tenement Holder must during construction, operation and post Completion ensure that there are no native fauna injuries or deaths due to mining operations or mining related activities that could have been reasonably prevented.

Air Quality Outcome

14. The Tenement Holder must during construction, operation and post Completion ensure no adverse change to the air quality environment as a result of particulate emissions and/or dust generated by mining operations or mining related activities.

Air Quality Strategies

15. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Air Quality Outcome in Sixth Schedule Clause 14:
 - 15.1. Develop and implement a future works program that investigates the requirement (or otherwise) for a cover system for the TSF surface.
 - 15.2. The future works program must ensure that the investigation into the requirement (or otherwise) for a cover system is completed in a timely manner.

Radiation Outcome

16. The Tenement Holder, must during construction, operation and post Completion ensure no public health or environmental impacts from radionuclides (including radon) as a result of mining operations or mining related activities.

Surface Water Outcome

17. The Tenement Holder must during construction, operation and post Completion ensure no adverse impact to surface water quality and water dependent ecosystems (excluding surface water in the mine subsidence zone), on or off the Land, as a result of contamination and sedimentation caused by mining operations or mining related activities.

Surface Water Strategies – Model

18. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Surface Water Outcome in Sixth Schedule Clause 17:
 - 18.1. Establish a program for the ongoing review and calibration of the surface water model using data obtained from ongoing monitoring to address any assumptions and uncertainty within the model. Any significant variations in surface water flow measured during operations from those predicted by the models must result in a review of the effectiveness of surface water strategies to demonstrate that the outcomes are achievable.

Surface Water Strategies – Contamination, Erosion and Sediments

19. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Surface Water Outcome in Sixth Schedule Clause 17:
 - 19.1. Ensure that during construction, operation and post Completion no surface water contaminated (including by sedimentation) as a result of mining operations or mining related activities leaves the Land.
 - 19.2. Develop and implement appropriate strategies to ensure erosion caused by mining operations and mining related activities is effectively managed and controlled.
 - 19.3. Develop and implement appropriate strategies to ensure sediment caused by mining operations and mining related activities is effectively managed and controlled.
 - 19.4. Ensure that topsoil and subsoil can be used for rehabilitation where appropriate.
 - 19.5. Develop a program to undertake erosion field studies, including detailed surveys of the embankment size and shape, together with measurement of runoff and sediment load from the downstream embankment surface and isolated areas of tailings beach, to validate outputs of the landform evolution modelling (OZ Minerals Response Document dated 22 September 2017 page 75).
 - 19.6. Adopt effective strategies to prevent the exposure, puncturing and/or tearing of any geotextile liners used to contain tailings at the TSF embankment, for example, ensure that the design of the TSF embankment includes a protective layer between the geotextile liner and the rock armouring layer.

- 19.7. Adopt an effective thickness and construction methodology for rock armour which is used for erosion control for rehabilitation and closure. The thickness and construction methodology should be validated through testwork and trials.
- 19.8. The design of the final landform of the TSF embankment must ensure that re-profiling of the embankment does not adversely impact on the effectiveness of any geotextile liners which are required for the achievement of the outcome.
- 19.9. A program for determining the erodibility of waste rock to ensure that waste rock of an appropriate erodibility is used on the external batters of final landforms. The results of the program are to inform the material selection and design of the final landforms.

Surface Water Strategies – TSF

20. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Surface Water Outcome in Sixth Schedule Clause 17:
 - 20.1. All future works listed in Section 7 of Appendix F2 of the Mining Proposal ("Independent Tailings Storage Facility Design Review" (ATC Williams)).
 - 20.2. All future works listed in Section 14 of Appendix B of the Response Document dated 22 September 2017 ("TSF Design Report for the Mining Lease Proposal", Updated September 2017, (Golders)).
 - 20.3. The recommendation in Section 7 of Appendix C of the Response Document dated 22 September 2017 (ATC Williams) which states, optimising the thickness and extent of the clay liner and depth of the interception trench downstream of the TSF embankment will need to be provided as part of detailed design.
 - 20.4. The conclusions and recommendations in Section 6 of Appendix D of the Response Document dated 22 September 2017 (SRK), including (but not limited to):
 - 20.4.1. The Landform Evolution Model should be calibrated with measured parameters to improve model predictions; and
 - 20.4.2. If mining operations are suspended prior to completion of the TSF, the TSF will need to be upgraded to prevent the embankment overtopping during large storm events. The effect of this strategy on the maximum rehabilitation liability must be considered.

- 20.5. Review the input concentrations for elements and metals used in the solute transport geochemistry model (Mining Proposal Appendix C4 – Table 4-1). Based on the review, provide an updated or revised solute transport geochemistry model. If required, adopt revised strategies.
- 20.6. Undertake the following works to demonstrate that the upstream methodology for the construction of the Stage 3 TSF upstream embankment will be effective in achieving all relevant environmental outcomes:
 - 20.6.1. Conduct settling tests on a representative sample of the fine fraction of the tailings material (particle size less than 30 microns);
 - 20.6.2. Conduct drying tests to determine whether the expected maximum required drying time of twenty-six (26) days is appropriate or not. Such drying tests must ensure the sample tested is thick enough so that it does not unrealistically estimate the required drying time; and
 - 20.6.3. Based on the results of the test work, demonstrate that the upstream construction methodology for TSF embankment lifts will be effective.
- 20.7. Clarify the design details of the geomembrane liner on the upstream face of the Stage 1 embankment, and demonstrate that appropriate stability calculations have been done. Ensure that the geomembrane liner will be protected during installation of the decant facility.
- 20.8. Demonstrate that the TSF decant water outfall pipe will be stable under the likely maximum vertical stress resulting from being buried by tailings material.
- 20.9. Develop a process to ensure that the inclined decant tower is appropriately decommissioned prior to Stage 3 of the TSF in order to ensure that it does not leak or become structurally unsound.
- 20.10. Review the conclusion (from the Mining Proposal and Response Documents) that the decant pond will take up to three years to recede after an extreme rainfall event (i.e. a seventy-two (72) hour, PMP rainfall event occurring at the end of the 95% wet season). Evaluate whether the absorption capacity of the tailings has been reasonably accounted for. Based on the review, if it is confirmed that the decant pond will take a number of years to recede following an extreme rainfall event, (i) assess if the TSF freeboard will remain acceptable should another high intensity rainfall event occur during the three (3) year period, and (ii) assess the potential impact on stability of an elevated phreatic surface resulting from a temporarily large decant pond.
- 20.11. Demonstrate that the drainage and decant system would function as designed following an extreme rainfall event should it occur early in the life of the TSF operation (e.g. in the first year).

- 20.12. Review the TSF dam break study with consideration of whether the initial release (and thus initial hydrograph) could be water-only, followed by release of non-Newtonian tailings.
- 20.13. Adopt appropriate strategies to ensure effective operations of the tailings pipelines (as committed to in the Mining Proposal and Response Documents) including (but not limited to):
 - 20.13.1. Tailings pipelines are to be inspected for condition, integrity, signs of wear and leaks at an appropriate frequency;
 - 20.13.2. Alarmed pressure indicators are to be installed on the tailings pipelines and monitored continuously; and
 - 20.13.3. Remote isolation valves are to be installed on the tailings pipelines to isolate sections of the pipelines if required.
- 20.14. The minimum freeboard height and maximum supernatant pond dimensions for the TSF and Decant Dam must be specified.
- 20.15. The maximum dimensions of the supernatant pond must be consistent with the subaerial method of tailings deposition.
- 20.16. Cease deposition of tailings to the TSF if the specified limits for freeboard height or supernatant pond dimensions are exceeded and report this exceedance to the Director of Mines (or other authorised officer) within twenty-four (24) hours. Freeboard is defined as the difference in height between the level of the supernatant pond and the lowest point of the tailings dam embankment or spillway.
- 20.17. Ensure that the TSF final landforms will be chemically and physically stable post Completion.
- 20.18. Provide strategies to ensure that the installed drainage (toe drain) on the upstream side of the TSF embankment is protected from blinding and/or clogging during initial deposition of tailings.
- 20.19. Develop strategies to ensure that the compacted clay liner proposed for watercourses within the TSF footprint is effective in mitigating seepage. Consider strategies to ensure compacted clay seals do not dry out and crack prior to being covered with tails, such as inspections and a protective layer to be applied over the compacted clay seals.
- 20.20. Review the size of the lined decant cell in the Decant Dam to ensure that the lined area is of an appropriate size to manage seepage.

- 20.21. Review the seepage assessment and modelling for the Decant Dam. As a result of the review update the strategies for the management of seepage (if required).

Surface Water Strategies – Acid and Metalliferous Drainage

21. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Surface Water Outcome in Sixth Schedule Clause 17:
 - 21.1. The recommendations in Section 7 of Appendix E of the Response Document dated 22 September 2017 (“Geochemical Characterisation of Tailings and ICP” (EGI)).
 - 21.2. Ensure that no stockpiles that include PAF material are left on the surface of the Land post Completion.
 - 21.3. Strategies to ensure that stockpiles that include PAF material are appropriately managed should the operation enter a phase of care and maintenance.
 - 21.4. Develop and implement an AMD management plan that includes the following, but not limited to:
 - 21.4.1. Develop a program for confirming the NAF classification and long-term leach (kinetic) testing results of the tailings under field conditions;
 - 21.4.2. Develop a program to investigate the potential for metalliferous drainage to be generated by NAF material which contains sulphides;
 - 21.4.3. Refine the sulphur cut-off grade for PAF material through further testing of waste units;
 - 21.4.4. Develop an ore, waste rock and sulphur block model;
 - 21.4.5. Develop the block model to include the sulphur distribution of all waste and ore to be mined for the purpose of determining the distribution and estimating the volume of NAF and PAF using the sulphur cut-off grade;
 - 21.4.6. Regular updating of the block model with new geological and sulfur assay data in the course of operations and aligning to the materials handling program;
 - 21.4.7. Develop a QA/QC process for validation of Acid Base Accounting (ABA) characteristics;

- 21.4.8. Develop a QA/QC process for the waste rock block model and testing to ensure the correct rock is placed in the correct destination;
- 21.4.9. Segregation of PAF waste rock, NAF waste rock, and waste rock with the potential for metalliferous drainage (based on a classification process) and a mining schedule for each;
- 21.4.10. Ensure stockpiles containing PAF material are appropriately located;
- 21.4.11. Develop appropriate stockpile management strategies;
- 21.4.12. Confirm final end uses for waste rock and marginal ore based on geochemical classification; and
- 21.4.13. Develop strategies that prevent AMD from being generated from the TSF embankment and decant causeway, such as avoiding the use of PAF material and marginal ore for construction of the TSF embankment and decant causeway.

Surface Water Leading Indicator Criteria – TSF

- 22. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(e) in relation to the Surface Water Outcome in Sixth Schedule Clause 17:
 - 22.1. Leading indicator criteria in relation to the outcomes relevant to the TSF must include, as a minimum, the measurement of appropriate process solutions and tailings supernatant solutions.

Groundwater Outcomes

- 23. The Tenement Holder must during construction, operation and post Completion ensure that there is no adverse change to the Environmental Values of the groundwater within the shallow perched aquifer within the Land as a result of chemicals or hydrocarbons from mining operations or mining related activities.
- 24. The Tenement Holder must during construction, operation and post Completion ensure that there is no adverse change to groundwater quality within aquifers outside of the TSF seepage zone of influence area delineated by the groundwater model as a result of mining operations or mining related activities.
- 25. The Tenement Holder must during construction, operation and post Completion ensure that there is no adverse change to groundwater quantity within aquifers outside of the predicted extent of groundwater drawdown delineated by the groundwater model as a result of mining operations or mining related activities.

Groundwater Strategies

26. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Ground Water Outcomes in Sixth Schedule Clauses 23, 24 and 25:
- 26.1. Provide a groundwater solute transport, geochemistry and hydrogeological model that delineates the predicted TSF seepage zone of influence area within the groundwater aquifers.
 - 26.2. Establish a program for the ongoing calibration of the groundwater solute transport, geochemistry and hydrogeological models using data obtained from ongoing monitoring to address any assumptions and uncertainty within the models.
 - 26.3. Provide a transient groundwater model that delineates the predicted extent of groundwater drawdown within the groundwater aquifers.
 - 26.4. Establish a program for the ongoing calibration of the transient groundwater model using data obtained from ongoing groundwater monitoring.
 - 26.5. Provide a calibrated transient groundwater model within an appropriate time frame.

Groundwater Criteria

27. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(d) in relation to the Groundwater Quality Outcome in Sixth Schedule Clause 24:
- 27.1. Establish compliance groundwater monitoring bores that are at appropriate locations and of sufficient density and depth to measure the movement of TSF seepage and groundwater.
 - 27.2. Establish compliance groundwater monitoring bores that are at appropriate locations and of sufficient density and depth to measure the groundwater quality within and outside of the TSF seepage zone of influence area delineated by the groundwater model.