



**Government  
of South Australia**

*Mining Act 1971*

**TENEMENT DOCUMENT**

**MISCELLANEOUS PURPOSES LICENCE**

<b>TENEMENT HOLDER</b>	Pirie Resources Pty Ltd (ACN 119 903 301)
<b>MISCELLANEOUS PURPOSES LICENCE NUMBER</b>	150
<b>PURPOSE</b>	Processing facility for the refinement of Graphite and tailings storage
<b>COMMENCEMENT DATE</b>	5 December 2017
<b>TERM OF MINING TENEMENT</b>	Twenty-one (21) years
<b>EXPIRY DATE</b>	4 December 2038
<b>AREA OF MINING TENEMENT</b>	499.21 hectares

**DATE BY WHICH THE PROPOSED PEPR MUST BE SUBMITTED: 4 December 2018**

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### **Details of Grant of a Mining Tenement**

1. On 5 December 2017, pursuant to Part 8 of the Act, the Minister made a statutory grant of a miscellaneous purposes licence (the Mining Tenement) described in this Tenement Document.
2. The Mining Tenement is granted:
  - 2.1. To Pirie Resources Pty Ltd (ACN 119 903 301);
  - 2.2. For the purpose of constructing a processing facility for the refinement of Graphite and tailings storage.
3. The Mining Tenement is numbered MPL150.
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 499.21 hectares and is located in the Campoona area approximately 25 km northwest of Cleve.
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 5 December 2017, and, unless it is earlier renewed, surrendered or cancelled, the Mining Tenement will cease on 4 December 2038.

**Rental**

8. The Tenement Holder shall pay, by way of rental, such sums as may be prescribed and in accordance with section 52(6),(7),(8) and (9) of the Act and regulation 54 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 56(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 56(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 56(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 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 Tenement Document.

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

18. The Tenement Holder must not carry out mining operations unless there is an approved program for environment protection and rehabilitation (an Approved PEPR).
  
19. A Proposed PEPR will only be approved when it complies with the requirements of Part 10A of the Act and the Regulations.
  
20. To comply with Part 10A of the Act, the Proposed PEPR must:
  - 20.1. 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);
  - 20.2. Comply with any applicable conditions specified in this Tenement Document (if any);
  - 20.3. 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.statedevelopment.sa.gov.au/publications\\_and\\_information/ministerial\\_determinations](http://www.minerals.statedevelopment.sa.gov.au/publications_and_information/ministerial_determinations)*

21. 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 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: Other**

22. 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:

- 22.1. Comply with the applicable provisions of Part 9 of the Act (entry onto land and use of declared equipment).
- 22.2. Comply with the applicable provisions of Part 9B of the Act (native title).
- 22.3. Comply with the provisions of section 76 of the Act (mining returns) to the extent relevant to a miscellaneous purposes licence.
- 22.4. Comply with section 77 of the Act (records and geological samples) and regulation 84 of the Regulations.
- 22.5. 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.
- 22.6. Comply, insofar as applicable to a miscellaneous purposes licence, with regulation 86 of the Regulations (compliance reports).
- 22.7. Comply with the requirement in regulation 55 of the Regulations to maintain all posts, boundary indicator markers and notices in the positions required by the Regulations as applicable.
- 22.8. 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**

23. 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**

24. 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:

- 24.1. Any civil or statutory liability likely to be incurred by the Tenement Holder in the course of carrying out mining operations;
- 24.2. 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 Miscellaneous Purposes Licence which increases the rehabilitation liability or increases the cost of civil or statutory liability.*

**Restatement of Fees**

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

**Restatement of Renewal**

26. This mining Tenement shall be renewed in accordance with the Act.

**Restatement of Surrender**

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

**Restatement of Forfeiture**

28. The Mining Tenement is subject to the forfeiture provision of the Act being section 85.

**Restatement of Notices**

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



**Restatement of Mining Register**

30. Section 15A of the Act requires the Mining Registrar to keep a register of, amongst other things, miscellaneous purposes licences. Upon payment of the prescribed fee, the public may inspect the Mining Register.

**Restatement of Mining Operations**

31. As defined by section 6 of the Act “mining operations” means:

- 31.1. Operations carried out in the course of prospecting, exploring or mining for minerals; or
- 31.2. Without limiting paragraph 28.1, 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
- 31.3. 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
- 31.4. Operations for the rehabilitation of land on account of the impact of any operations under a preceding paragraph; or
- 31.5. Operations that are directly related to any operations under a preceding paragraph;  
but does not include –
- 31.6. An investigation or survey under section 15 of the Act ; or
- 31.7. Fossicking; or
- 31.8. The surface removal of loose rock material disturbed by agricultural operations.

32. This definition applies to operations that occur during all phases of the Mining Tenement’s life.

**Restatement of requirement to notify of a change in status**

33. The Tenement Holder must comply with regulation 98(1)(c) and 98(2).

- 33.1. 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.

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- 33.2. 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**

34. Comply with regulation 90, which concerns public liability insurance.

## Definitions

35. In this Tenement Document, the following words have the following meanings:

- 35.1. “**acoustic engineer**” means a person eligible for membership of both the Institution of Engineers Australia and the Australian Acoustical Society;
- 35.2. “**Act**” means the *Mining Act 1971* of South Australia;
- 35.3. “**Additional Terms and Conditions**” means the Additional Terms and Conditions authorised by section 52(3) of the Act and set out in the First and Second Schedule of this Tenement Document respectively;
- 35.4. “**ANCOLD**” means Australian National Committee on Large Dams;
- 35.5. “**Applicant**” means the person or persons who applied for the Mining Tenement;
- 35.6. “**Approved PEPR**” means the program for environment protection and rehabilitation under Part 10A of the Act, which has received ministerial approval;
- 35.7. “**Business Day**” means any day that is not a Saturday, Sunday or a public holiday in South Australia;
- 35.8. “**CEP**” means Community Engagement Plan;
- 35.9. “**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 59(1) of the Regulations and there is no obstacle under sub-regulation 59(3) of the Regulations;
- 35.10. “**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:
  - 35.10.1. Actual or potential harm to the health or safety of human beings that is not trivial, or
  - 35.10.2. Actual or potential harm to water that is not trivial, or
  - 35.10.3. Other actual or potential environmental harm that is not trivial;
- 35.11. “**DDD**” means Directional Dust Deposition (including both ambient and mine related dust);
- 35.12. “**DRP**” means the Decommissioning and Rehabilitation Plan;
- 35.13. “**Environmental Values (ground and surface water)**” means the environmental values recognised in the *‘Australian and New Zealand Guidelines for Fresh and Marine Water Quality, October 2000, Paper No 4’*;

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- 35.14. “**EPA**” means the Environment Protection Authority under the *Environment Protection Act 1993* of South Australia;
- 35.15. “**Freeboard**” means the difference in height between the level of the supernatant pond and the lowest point of the tailings dam embankment;
- 35.16. “**Fluoride**” means the compounds that contain both ionic fluoride and those where fluoride does not dissociate;
- 35.17. “**HF Facility**” means any plant, infrastructure and related upstream or downstream processes on the Land that involves the use Hydrofluoric Acid;
- 35.18. “**Mining Related Activities**” means activities authorised by the Miscellaneous Purposes Licence;
- 35.19. “**Mining Tenement**” means the Miscellaneous Purposes Licence granted to the Tenement Holder, as referred to in paragraphs 1 of this Tenement Document;
- 35.20. “**the Minister**” means the Minister for Mineral Resources and Energy (or any substituted Minister);
- 35.21. “**Miscellaneous Purposes Licence**” means the Mining Tenement granted to the Tenement Holder as referred to in paragraph 1 and 2 of this Tenement Document;
- 35.22. “**PEPR**” means Program for Environment Protection and Rehabilitation;
- 35.23. “**pH**” means a numeric scale used to specify the acidity or basicity of an aqueous solution;
- 35.24. “**PM10**” means the fraction of particulates in air 10 micrometres or less in aerodynamic diameter;
- 35.25. “**PM2.5**” means the fraction of particulates in air 2.5 micrometres or less in aerodynamic diameter;
- 35.26. “**Proposed PEPR**” means the document required by regulation 65(10) to be submitted for ministerial approval within twelve (12) months of the date of grant of the Mining Tenement;
- 35.27. “**Real time monitoring**” means the system for making monitored environmental parameters, acquired by the Tenement Holder, available immediately to stakeholders in an easily understood format;
- 35.28. “**Regulations**” means the Mining Regulations 2011 of South Australia;

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- 35.29. “**Significant Environmental Benefit**” means a benefit provided as a requirement of authorisation to clear native vegetation under the Native Vegetation Regulations 2003;
- 35.30. “**site**” means the Land;
- 35.31. “**TDD**” means the Total Dust Deposition (including both ambient and mine related dust);
- 35.32. “**TDS**” means Total Dissolved Solids;
- 35.33. “**Tenement Document**” means this document;
- 35.34. “**Tenement Holder**” means the person, or persons, to whom this Mining Tenement is granted and includes;
- 35.34.1. If the Tenement Holder is a natural person the executors, administrators and assigns of that person;
- 35.34.2. 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.*
- 35.35. “**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;
- 35.36. “**the Program**” means the Approved PEPR as defined above;
- 35.37. “**third party land users**” means the owner of land as defined by the Act (which includes native title holders 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;
- 35.38. “**TRH**” means Total Recoverable Hydrocarbons;
- 35.39. “**TSF**” means the Tailings Storage Facility;
- 35.40. “**TSP**” means Total Suspended Particulate matter;
- 35.41. “**Weeds**” means any invasive plant that threatens native vegetation in the local area or any species recognised as invasive in South Australia.

### **Interpretation**

36. For the purposes of interpreting this Tenement Document the following will apply:

- 36.1. 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;
- 36.2. 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 –
  - 36.2.1. “amendment” includes an addition, excision or substitution;
  - 36.2.2. “the Land” includes any part thereof; and
  - 36.2.3. “the term” includes any renewal or extension thereof.
- 36.3. 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;
- 36.4. 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;
- 36.5. If any act pursuant to 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;
- 36.6. 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;
- 36.7. 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;
- 36.8. 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

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Condition, and, on the other hand, any amendments to the Act or Regulations, the amended Act or Regulations shall prevail;

36.9. Footnotes and Explanatory notes do not form part of this Tenement Document;

36.10. The contents page does not form part of this Tenement Document;

36.11. The front page and all of the Schedules form part of this Tenement Document.

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**Executed by the Tenement Holder(s) in accordance with regulation 57**

SIGNED by Pirie Resources Pty Ltd (ACN 119 903 301) )  
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

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

Entered in the Mining Register on 5 December 2017  
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 Related Activities****Miscellaneous Purposes Licence**

1. The Mining Tenement is granted for the purpose of the construction, operation and rehabilitation of a:
  - 1.1. Crushing and processing facility;
  - 1.2. Tailings storage facility; and
  - 1.3. Ancillary infrastructure;directly related to the conduct of mining operations authorised under mining tenement ML6470.
2. Mining related activities on the Land must be consistent with the activities described in the Miscellaneous Purposes Licence Management Plan dated 26 October 2016 and subsequent Response Document dated 30 June 2017.

**SECOND SCHEDULE**  
**ADDITIONAL CONDITIONS**

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

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### **Hydrofluoric Acid**

1. The Tenement Holder must provide a Safety Case for all potential hazards related to the use of Hydrofluoric Acid in any plant, infrastructure and related upstream or downstream processes on the Land (the HF Facility) to the Director of Mines (or other authorised officer).
2. The Tenement Holder must prepare the Safety Case using suitably qualified experts who have the relevant knowledge and experience to prepare a Safety Case for the HF Facility.
3. The Safety Case (required by Second Schedule Condition 1) must contain all of the information set out in Regulation 561 of the Work Health and Safety Regulations 2012 to the satisfaction of the Director of Mines (or other authorised officer).
4. If the Tenement Holder provides a Program for Environment Protection and Rehabilitation (PEPR) in accordance with Part 10A of the Act that includes a HF Facility within the PEPR description of operations, then the Tenement Holder must provide the Safety Case (required by Second Schedule Condition 1) to the Director of Mines (or

other authorised officer) at the same time the PEPR is provided, or such other time as the Director of Mines (or other authorised officer) may allow.

5. The Tenement Holder must keep records of all Hydrofluoric Acid deliveries, including as a minimum, records of the quantity and concentration of the delivery.
6. The Tenement Holder must analyse the concentration of Hydrofluoric Acid in all deliveries received on the Land, unless otherwise instructed by the Director of Mines (or other authorised officer). The results of the analysis for each delivery must be provided to the Director of Mines (or other authorised officer) on a monthly basis, or such longer period as the Director of Mines (or other authorised officer) may allow.
7. The Tenement Holder must develop and implement operational and management systems to minimize Hydrofluoric Acid use in the concentrate upgrade facility, thereby limiting concentrations of Hydrofluoric Acid in tailings. The operational and management system must include as a minimum:
  - 7.1. A model that predicts all Hydrofluoric Acid inputs and outputs during operations (i.e. deliveries, usage and consumption), including the ultimate fate of all Hydrofluoric Acid;
  - 7.2. A process and method to measure and account for all Hydrofluoric Acid inputs and outputs during operations (i.e. deliveries, usage and consumption), including the ultimate fate of all Hydrofluoric Acid; and
  - 7.3. Reconciliation of actual inputs, outputs, usage, consumption and ultimate fate against the model.
8. The Tenement Holder must develop and implement a maintenance plan, procedures and schedule for the HF Facility for the term of the Mining Tenement.
9. The Tenement Holder must develop a plan and procedures that sets out:
  - 9.1. how the HF Facility would be safely placed into care and maintenance; and
  - 9.2. how the HF Facility can be safely re-started following any period of care and maintenance.
10. The Tenement Holder must ensure modelling of ground level concentrations of Hydrofluoric Acid from stack emissions is validated with operational monitoring data within twelve (12) months of commencement of the use of Hydrofluoric Acid, or such longer period as the Director of Mines (or other authorised officer) may allow.
11. The Tenement Holder must undertake annual safety audits of the HF Facility against the Safety Case (required by Second Schedule Condition 1). The audit must be

undertaken by a suitably qualified independent expert approved by the Director of Mines (or other authorised officer). The expert must prepare reports of the findings of each audit. All expert reports must be provided to the Director of Mines (or other authorised officer) within one month of completion of the audit and all reports will be made publically available.

12. The Tenement Holder must undertake annual maintenance audits of the HF Facility against the maintenance plan, procedures and schedule (required by Second Schedule Condition 8). The audit must be undertaken by a suitably qualified expert approved by the Director of Mines (or other authorised officer). The expert must prepare reports of the findings of each audit. All expert reports must be provided to the Director of Mines (or other authorised officer) within one month of completion of the audit and all reports will be made publically available.

### **Tailings Storage Facility (TSF)**

13. The TSF construction and operation must be audited by a suitably qualified independent expert approved by the Director of Mines (or other authorised officer), against the design and plans that have been adopted for the TSF construction and operation:
  - 13.1. for the initial stage of TSF foundation preparation and construction; and
  - 13.2. for each subsequent stage of TSF foundation preparation and construction; and
  - 13.3. on an annual basis for construction and operations (including tailings deposition data and the construction of the cover system) or at a frequency as the Director of Mines (or other authorised officer) may specify by notice in writing.
  - 13.4. The expert must prepare reports of the findings of each audit.
  - 13.5. The initial expert report for TSF foundation preparation and construction audit must be provided to the Director of Mines (or other authorised officer) prior to the initial placement of tailings and waste in the TSF.
  - 13.6. Subsequent reports must be provided to the Director of Mines (or other authorised officer) within one month of completion of the audit and all reports will be made publically available.

**Additional Information in the Program**

14. In accordance with section 70B(2)(d) of the Act it is a condition of the grant of the Mining Tenement that a Proposed PEPR submitted in accordance with Part 10A of the Act must include reports from suitably qualified independent experts on the following matters:

14.1. The effectiveness of the proposed strategies in the Proposed PEPR in achieving the environmental outcomes identified in the Proposed PEPR, including but not limited to reports from:

14.1.1. an Independent Tailings Storage Facility Expert (i.e.: for TSF design, construction methodology, operation and seepage assessment).

14.1.2. an Independent Mine Waste Cover System Expert (i.e.: for TSF cover system design).

14.1.3. an Independent Geomorphology Expert (i.e.: for Landform design, soil and erosion management).

14.1.4. an Independent Chemical, Process or Metallurgical Engineering Expert (i.e: for:

14.1.4.1. achieving the density necessary for geotechnical stability of the TSF and timely construction of the TSF cover system;

14.1.4.2. the design, construction, and operation of the processing facility in relation to Hydrofluoric Acid;

14.1.4.3. neutralization of Hydrofluoric Acid in the tailings; and

14.1.4.4. the ultimate fate of Hydrofluoric Acid and hydrocarbons).

14.1.5. These reports must include identification of any risks, assumptions and uncertainties associated with the relevant strategies.

14.2. The capacity of the Tenement Holder to achieve compliance with the Act and the Proposed PEPR in light of its management systems, personnel, policies, procedures, practices and resources.

**Transparency**

15. 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**

16. Within thirty (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 seven (7) days and prior to the cessation of mining operations, the Tenement Holder must notify the Director of Mines (or other authorised officer) in writing of the event or decision. The notice must specify the date upon which the mining operations are expected to cease, or have ceased and an estimate of the period of cessation.

**Decommissioning and Rehabilitation Plan (DRP)**

17. If the Tenement Holder decides to cease mining operations or an event occurs that is likely to give rise to the permanent cessation of mining operations, the Tenement Holder must develop a DRP and submit it to the Director of Mines (or other authorised officer) for approval within thirty (30) days of the decision or event (or such longer period as approved by the Director of Mines (or other authorised officer)).
18. The DRP must:
  - 18.1. set out the activities and scheduling required for the carrying out of the rehabilitation works specified in the Approved PEPR;
  - 18.2. be prepared in accordance with any guidelines provided by the Director of Mines (or other authorised officer).
19. The Tenement Holder must carry out decommissioning and rehabilitation in accordance with the approved DRP and the Approved PEPR.
20. If, in the opinion of the Director of Mines, mining operations have substantially ceased for a period of two consecutive years, the Director of Mines may direct the Tenement Holder:
  - 20.1. To develop and submit a DRP (which must address the requirements of condition 18) for approval within thirty (30) days of the direction or such longer period as the Director of Mines may allow; and/or
  - 20.2. To carry out decommissioning and rehabilitation in accordance with the approved DRP and the Approved PEPR.

**Community Engagement**

21. The Tenement Holder must prepare, implement and maintain (to the satisfaction of the Director of Mines or other authorised officer) a Community Engagement Plan (CEP) that:
- 21.1. Sets out the purpose, objectives and parameters of engagement with the community;
  - 21.2. Identifies all community stakeholders likely to be affected by mining operations;
  - 21.3. Sets out the tools and techniques that the Tenement Holder intends to use for;
    - 21.3.1. identifying community attitudes and expectations;
    - 21.3.2. providing information to the community;
    - 21.3.3. receiving feedback from the community;
    - 21.3.4. analysing community feedback and considering community concerns or expectations; and
    - 21.3.5. registering, documenting and responding to communications from members of the community;
  - 21.4. Outlines an action plan to commence the proposed engagement activities; and
  - 21.5. Addresses any further matters that the Director of Mines (or other authorised officer) advises in writing.
22. The CEP must be submitted to the Director of Mines (or other authorised officer) for approval within three months of the grant of the Mining Tenement or within such longer period as the Director of Mines (or other authorised officer) may allow.

**Communications Protocol**

23. In this condition 'the relevant landowners' means the owners of land on and adjacent to the Land.
24. Before commencing mining operations, the Tenement Holder must develop a Communications Protocol. The purpose of the Communications Protocol is to facilitate communications about the practical matters that need to be discussed, as between the Tenement Holder and relevant landowners, so as to allow mining operations to be conducted efficiently and effectively whilst having regard to relevant landowners' use of their land.
- 24.1. In developing the Communications Protocol, the Tenement Holder must:

- 24.1.1. Contact the relevant landowners and seek their input for the Communications Protocol; and
  - 24.1.2. Incorporate any such input to the extent it is appropriate to do so.
- 24.2. The practical matters that the Communications Protocol must address include:
- 24.2.1. The interaction of mining operations and the land use activities of individual relevant landowners;
  - 24.2.2. Land access protocols;
  - 24.2.3. Land management arrangements;
  - 24.2.4. Safety procedures;
  - 24.2.5. Emergency procedures; and
  - 24.2.6. Any additional practical matters identified by the Director of Mines (or other authorised officer), in writing, from time to time.
- 24.3. The Communications Protocol must contain processes for:
- 24.3.1. Relevant landowners to communicate changes to or updates about their land use;
  - 24.3.2. The Tenement Holder to communicate updates about its mining operations;
  - 24.3.3. Receiving and considering feedback from relevant landowners;
  - 24.3.4. Dispute resolution; and
  - 24.3.5. Any additional processes identified by the Director of Mines (or other authorised officer), in writing, from time to time.
25. The Tenement Holder must maintain and adhere to the Communications Protocol to the satisfaction of the Director of Mines (or other authorised officer) for the term of the Mining Tenement.

### **Complaints Register**

26. The Tenement Holder must operate a 24 hour per day, seven day per week, telephone complaints line for the purpose of receiving complaints from members of the public in relation to mining operations.
27. The Tenement Holder must take reasonable measures to notify the public of the complaints line telephone number and the fact that it is a complaints line.



28. The Tenement Holder must establish and maintain a public complaints register. The public complaints register must, as a minimum, record the following detail in relation to each complaint received in which it is alleged that environmental harm (including an environmental nuisance) has been caused by the mining operations:
- 28.1. the date and time at which the complaint was received;
  - 28.2. all personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
  - 28.3. the subject-matter of the complaint;
  - 28.4. the action taken by the Tenement Holder in relation to the complaint, including any follow-up contact with the complainant; and
  - 28.5. if no action was taken by the Tenement Holder, the reasons why no action was taken.
29. All records in respect of the public complaints must be maintained for a period of at least seven years.
30. The Tenement Holder must make the public complaints register publically available except for the name and contact details of each complainant.

### **Compliance with regulation 98(1)**

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

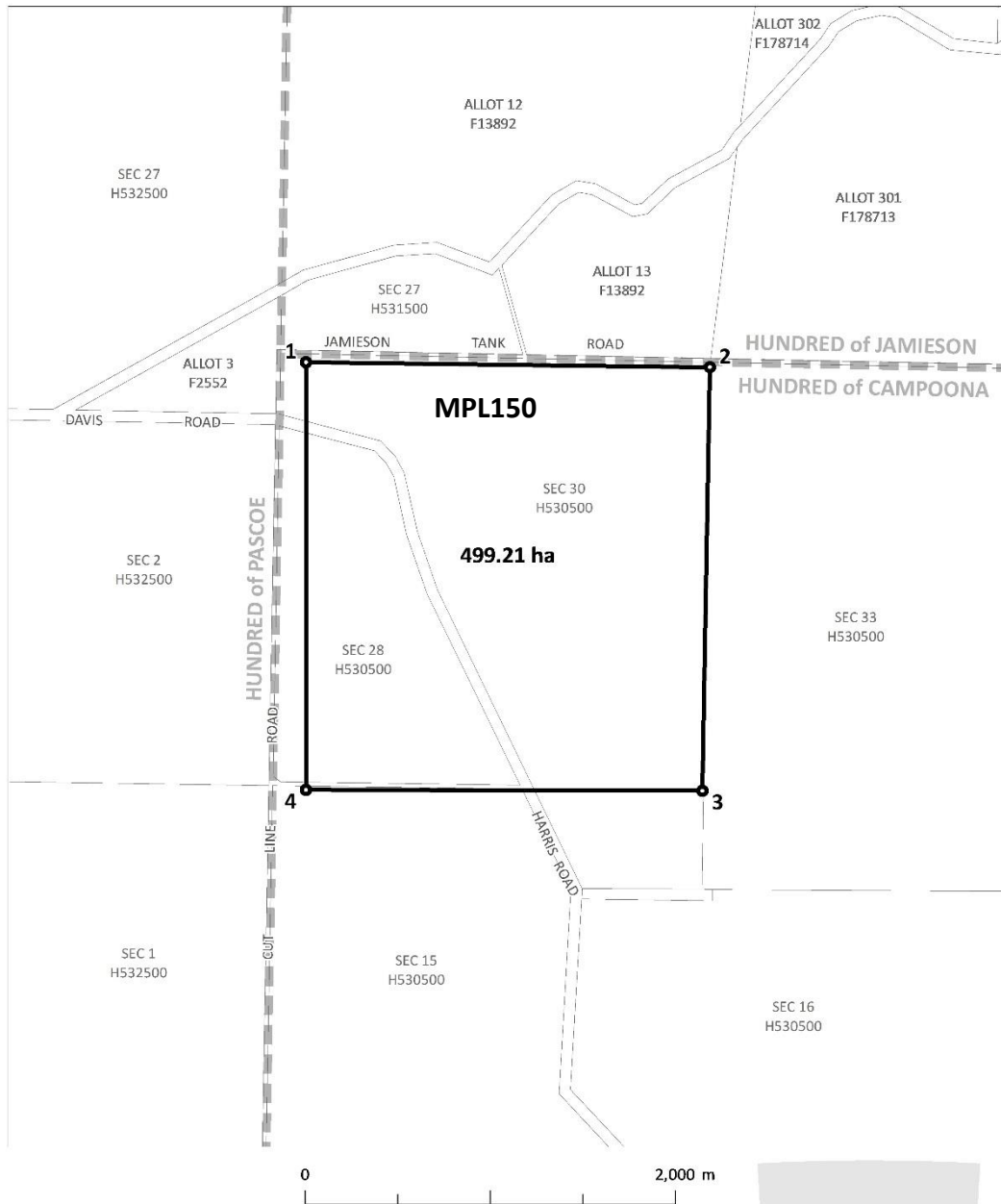
### **Other Legislation**

32. 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:
- 32.1. *Environment Protection and Biodiversity Conservation Act 1999*;
  - 32.2. *Development Act 1993*;
  - 32.3. *Dangerous Substances Act 1979*;
  - 32.4. *National Parks and Wildlife Act 1972*;
  - 32.5. *Natural Resources Management Act 2004*;
  - 32.6. *Public and Environmental Health Act 1987*;
  - 32.7. *Aboriginal Heritage Act 1988*;

- 32.8. *Heritage Places Act 1993;*
- 32.9. *Work Health and Safety Act 2012;*
- 32.10. *Environment Protection Act 1993;*
- 32.11. *Native Vegetation Act 1991;*
- 32.12. *Mines and Works Inspection Act 1920;*
- 32.13. *Road Traffic Act 1961; and*
- 32.14. *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: 5/12/2017



**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	623205.43 mE	6295793.73 mN
2	625389.00 mE	6295764.34 mN
3	625348.99 mE	6293469.97 mN
4	623205.39 mE	6293475.67 mN

Area: 499.21 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;
  - 6.4. Inform the Tenement Holder of their right of appeal to the Environment, Resources and Development Court in accordance with subsection 56(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 56(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 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 56(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 56(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 56(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 56(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 56(5) of the Act.

#### **The Mining Register**

9. All stages in the suspension 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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### **Visual Amenity Outcome**

1. The Tenement Holder must during construction, operation and post completion (including during care and maintenance), ensure that the form, contrasting aspects and reflective aspects of mining related activities are visually softened to blend in with the surrounding landscape.

### **Visual Amenity Strategies**

2. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Visual Amenity Outcome Sixth Schedule clause 1;
  - 2.1. Develop and implement strategies in consultation with affected parties for the management of visual amenity which should include (but not limited to):
    - 2.1.1. The Tenement Holder must ensure that all 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;
    - 2.1.2. Screening of prominent built structures and use of non-reflective, natural coloured materials;
    - 2.1.3. Establishing vegetation to screen built infrastructure and minimise views into the site. If the Tenement Holder believes that the screening vegetation would be more effective in providing screening, if established on land

outside of the Mining Tenement (neighbouring land), the Tenement Holder may consult with the owner of the neighbouring land and if that person agrees to that establishment, and gives permission to the Tenement Holder to enter their land for that purpose, the Tenement Holder may plant the screening on that neighbouring land;

- 2.1.4. Positioning and design of permanent landforms (e.g. the TSF) or other earthen bunds to screen activities;
- 2.1.5. Sculpture permanent landforms (e.g. the TSF) to soften the visual impact and reflect surrounding landscape;
- 2.1.6. Prompt rehabilitation of disturbed areas once no longer required for mining related activities, utilising every available opportunity provided by the operations plan;
- 2.1.7. Progressive rehabilitation of disturbed areas and landforms (e.g. the TSF);
- 2.1.8. Progressive rehabilitation of TSF embankments as early as possible during operations;
- 2.1.9. Vegetate external faces of permanent landforms (e.g. the TSF) to reduce the impact of changes in landscape colour.

### **Noise Outcome**

3. The Tenement Holder must during construction and operation, ensure noise emanating from mining related activities is in accordance with the current amenity as defined by the Environment Protection (Noise) Policy 2007 and the District Council of Cleve Development Plan at the date that the Mining Tenement was granted.

### **Noise Strategies**

4. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Noise Outcome Sixth Schedule clause 3;
  - 4.1. At a minimum, implement all noise mitigation strategies described in the Management Plan and Response Document.

**Noise Criteria**

5. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(d) in relation to the Noise Outcome Sixth Schedule clause 3;
  - 5.1. Measurement Criteria must include:
    - 5.1.1. noise measurements for, or at, all sensitive receivers in accordance with the Environment Protection (Noise) Policy 2007, under the *Environment Protection Act 1993* of South Australia; and
    - 5.1.2. the following noise limits must not be exceeded at those sensitive receivers:
      - 5.1.2.1. 57 dB(A) between the hours of 7am and 10pm and 50 dB(A) between the hours of 10pm and 7am within a Primary Production Zone (as delineated in the District Council of Cleve Development Plan at the date that the Mining Tenement was granted).
    - 5.1.3. Mine noise measured at, or for, noise-affected premises must be adjusted in accordance with the relevant environment protection noise policy by the inclusion of a penalty for each characteristic where tonal / modulating / impulsive / low frequency characteristics are present as identified by an acoustic engineer.

**Air Quality Outcome – Nuisance and Public Health**

6. The Tenement Holder must during construction, operation and post completion ensure no public nuisance impacts or public health impacts from air emissions and/or dust generated as a result of mining related activities.

**Air Quality Strategies – Nuisance and Public Health**

7. 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 Sixth Schedule clause 6;
  - 7.1. Progressive rehabilitation and stabilisation of disturbed areas undertaken throughout the life of the Tenement to control dust emissions generated by wind erosion;
  - 7.2. Undertake continuous dust and meteorological monitoring to inform decisions for operational response and contingency measures to be implemented to prevent exceedance of measurement criteria;

- 7.3. In the event that it has been established from monitoring data that the air quality measurement criteria has been breached, the Tenement Holder must immediately take steps to cease the activity that caused the non-compliance;
- 7.4. Design the HF Facility stack height to ensure achievement of the ground level concentration limits for Hydrofluoric Acid and fluoride.

### **Air Quality Criteria – Nuisance and Public Health**

8. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(d) in relation to the Air Quality Outcome Sixth Schedule clause 6;
  - 8.1. Undertake meteorological monitoring in accordance with relevant Australian Standards to measure and record meteorological data including (but not limited to) wind speed and direction, temperature, humidity, atmospheric pressure, rainfall and evaporation;
  - 8.2. The measurement criteria for the air quality human health outcome must include (but not limited to):

#### **Public Health - PM10 and PM2.5**

- 8.2.1. Measurement of PM10 dust concentration (including both ambient and mine related dust) using monitoring methodology, equipment and instruments that adhere to Australian Standard AS/NZS 3580.9.11, and any future updates or variants to that Standard;
- 8.2.2. The total PM10 dust concentration (including both ambient and mine related dust) leaving the site is less than  $50\mu\text{g}/\text{m}^3$  as a 24 hour (midnight to midnight) average of measurements taken at intervals of not more than 10 minutes; or
- 8.2.3. where the total PM10 dust concentration entering the site exceeds  $50\mu\text{g}/\text{m}^3$  as a 24 hour (midnight to midnight) average of measurements taken at intervals of not more than 10 minutes, the total PM10 dust leaving the site does not exceed the measured level entering the site during that period.
- 8.2.4. The total PM10 dust concentration (including both ambient and mine related dust) is less than  $25\mu\text{g}/\text{m}^3$  as an annual average for any twelve (12) month period.

- 8.2.5. Investigate and determine the appropriateness of including PM2.5 measurements as a criterion for the human health aspect of the air quality outcome.

### **Nuisance**

- 8.2.6. The measurement criteria for the air quality nuisance outcome must include (but not limited to):
- 8.2.7. Measurement of Total Dust Deposition (including both ambient and mine related dust) (TDD) using monitoring methodology, equipment and instruments that are recognised by a relevant International or Australian Standard;
- 8.2.8. TDD leaving the site does not exceed 4g/m<sup>2</sup>/month and no more than 2g/m<sup>2</sup>/month above background;
- 8.2.9. Investigate and determine the appropriateness of including Total Suspended Particulate matter (TSP) measurements as a criterion for the nuisance aspect of the air quality outcome.
- 8.2.10. Investigate and determine the appropriateness of including Directional Dust Deposition (including both ambient and mine related dust) (DDD) measurements as a criterion for the nuisance aspect of the air quality outcome.

### **Public Health - Hydrofluoric Acid**

- 8.2.11. Measurement of Hydrofluoric Acid concentrations in emissions from the stack using appropriate monitoring methodology, equipment and instruments that are recognised by a relevant International or Australian Standards (if applicable);
- 8.2.11.1. The maximum concentration of fluorine, Hydrofluoric Acid and/or fluorine compounds in emissions from the stack must be less than 50 mg/m<sup>3</sup> Hydrofluoric Acid equivalent;
- 8.2.12. Measurement of fluoride concentrations at ground level using appropriate monitoring methodology, equipment and instruments that are recognised by a relevant International or Australian Standards (if applicable):
- 8.2.12.1. The maximum concentration of fluoride at ground level must be less than:
- 8.2.12.2. 3µg/m<sup>3</sup> as a 24 hour average,

8.2.12.3.  $2\mu\text{g}/\text{m}^3$  as a 7 day average,

8.2.12.4.  $1\mu\text{g}/\text{m}^3$  as a 90 day average.

8.2.13. The measurement criteria data must be retained for the life of the Mining Tenement.

8.2.14. The locations of measurements for fluoride ground level concentrations must be appropriate to demonstrate achievement of the outcome.

8.2.15. All measurements for stack emissions must be made on a continuous basis.

8.2.16. All measurements for fluoride ground level concentrations must be made on a continuous basis (where possible).

### **Agricultural Productivity Outcome**

9. The Tenement Holder must during construction, operation and post completion, ensure no impacts to agricultural productivity, including but not limited to:

- 9.1. reduction in crop yield;
- 9.2. reduction in crop quality;
- 9.3. reduction in stock feed; or
- 9.4. adverse health impacts to livestock;

for third party land users on or off the Land as a result of mining related activities, other than those agreed between the Tenement Holder and the affected land user.

### **Agricultural Productivity Strategies**

10. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Agricultural Productivity Outcome Sixth Schedule clause 9;

10.1. Progressive rehabilitation and stabilisation of disturbed areas undertaken throughout the life of the Tenement to control dust emissions generated by wind erosion;

10.2. In the event that it has been established from monitoring data that the agricultural productivity measurement criteria has been breached, the Tenement Holder must immediately take steps to cease the activity that caused the non-compliance.



**Agricultural Productivity Criteria**

11. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(d) in relation to the Agricultural Productivity Outcome Sixth Schedule clause 9;

11.1. The measurement criteria adopted (including all aspects of Regulation 65(2)(d)) must be based on technical scientific evidence which demonstrates achievement of the outcome.

11.2. Measurement of fluoride concentrations in ambient air using monitoring methodology, equipment and instruments that are recognised by a relevant International or Australian Standards (if applicable):

11.2.1. The fluoride concentration in ambient air is less than  $1.5\mu\text{g}/\text{m}^3$  as an average for any 24 hour period.

11.2.2. The fluoride concentration in ambient air is less than  $0.8\mu\text{g}/\text{m}^3$  as an average for any 7 day period;

11.2.3. The fluoride concentration in ambient air is less than  $0.25\mu\text{g}/\text{m}^3$  as an average for any 90 day period;

11.2.4. The locations of measurements for fluoride concentrations in ambient air must be appropriate to demonstrate achievement of the outcome.

11.3. Investigate and determine the appropriateness of including measurements of fluoride concentrations in forage, hay or silage as a criterion for the livestock aspect of the air quality outcome. If appropriate, measurement of fluoride concentrations in crops and livestock forage must be in accordance with the ANZEC Guideline titled 'National Goals for Fluoride in Ambient Air and Forage' (March 1990), which includes the following standards:

11.3.1. Running averages of twelve (12) monthly samples of forage or hay or silage grown in the area as feed must be less than 40 micrograms fluoride per gram dry tissue in unwashed samples.

11.3.2. The average for two consecutive months samples of forage or hay or silage grown in the area as feed must be less than 60 micrograms fluoride per gram dry tissue in unwashed samples.

11.3.3. The monthly sample of forage or hay or silage grown in the area as feed must be less than 80 micrograms fluoride per gram dry tissue in unwashed samples more than once in any twelve (12) consecutive samples.

- 11.3.4. The locations of measurements for fluoride concentrations in forage, hay or silage must be appropriate to demonstrate achievement of the outcome.

### **Surface Water Outcomes**

12. The Tenement Holder must ensure no adverse impact to the quantity of surface water available to water dependent ecosystems and existing users, on and off the Land, caused by mining related activities during construction, operation and post completion.
13. The Tenement Holder must ensure no adverse impact on surface water quality and water dependent ecosystems, on or off the Land, as a result of contamination and sedimentation caused by mining related activities including construction, operation and post completion.

### **Surface Water Strategies**

14. 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 Sixth Schedule clause 13;
- 14.1. Ensure no surface water contaminated (including by sedimentation) as a result of mining related activities leaves the Land;
- 14.2. Ensure that:
- 14.2.1. no surface water contaminated (including by sedimentation) prior to completion remains within the Land after completion; and
- 14.2.2. no contamination of surface water (including by sedimentation) occurs after completion as a result of mining related activities within the Land.

### **Groundwater Outcomes**

15. The Tenement Holder must ensure that there is no adverse impact to groundwater dependent ecosystems and no adverse change to the environmental values of water within the aquifers:
- 15.1. outside of the Land during construction and operations as a result of mining related activities, and
- 15.2. inside or outside of the Land post completion as a result of mining related activities.

**Groundwater Strategies**

16. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Groundwater Water Outcome Sixth Schedule clause 15;
  - 16.1. Conduct a detailed hydrogeological baseline investigation of the site to determine the depth and quality (including a minimum of Fluoride, TRH, TDS, pH) of the groundwater within the Land;
  - 16.2. Conduct a detailed investigation and testing of the material within the foundation of the TSF and a representative sample of the tailings material itself, including (but not limited to) investigations and tests to determine the hydraulic conductivity and saturated volumetric water content of the material;
  - 16.3. Review and update the seepage assessment for the TSF and associated water storage ponds to take into account the results of the investigations and testing;
  - 16.4. Update the control and management strategies for the TSF and associated water storage ponds in response to the reviewed seepage assessment to ensure achievement of outcomes related to the TSF and associated water storage ponds;
  - 16.5. Undertake groundwater monitoring at appropriate locations during operations to validate the presence or absence of groundwater and monitor for seepage from the TSF and associated water storage ponds.

**Groundwater Criteria**

17. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(d) in relation to the Groundwater Water Outcome Sixth Schedule clause 15;
  - 17.1. Establish representative baseline water quality and quantity for groundwater within the Land and at sensitive receptors, with consideration of existing groundwater users and groundwater dependent ecosystems;
  - 17.2. Establish compliance groundwater monitoring bores either on the Land or at sensitive receptors that are of sufficient density and depth to detect the quality of water (including a minimum of Fluoride, TRH, TDS, pH) and the movement of groundwater off the Land;
  - 17.3. Measurements must include:

17.3.1. TSF and associated water storage pond seepage rates and seepage water quality; and

17.3.2. groundwater mounding;

which are to be measured at appropriate locations.

### **Native Vegetation Outcomes**

18. The Tenement Holder must, during construction, operation and post completion, ensure no loss of abundance or diversity of native vegetation on or off the Land through;

18.1. clearance;

18.2. dust;

18.3. salt/contaminant deposition;

18.4. sedimentation;

18.5. fire;

18.6. reduction in water availability; or

18.7. other damage;

unless a significant environmental benefit has been approved in accordance with the relevant legislation.

19. The Tenement Holder must ensure that the Land is progressively and finally rehabilitated to support the future land use.

### **Native Vegetation Criteria**

20. 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 Sixth Schedule clause 18;

20.1. Baseline native vegetation condition (abundance and diversity) is required as a component of the measurement criteria. Baseline native vegetation surveys must be undertaken to ensure appropriate baseline data is included in the criteria.

### **Weeds and Pests Outcome**

21. The Tenement Holder must during construction, operation and post completion, ensure no introduction of new species of weeds, plant pathogens or pests (including feral

animals), nor sustained increase in abundance of existing weed or pest species in the Land.

### **Weeds and Pests Criteria**

22. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(d) in relation to the Weeds and Pests Outcome Sixth Schedule clause 21;

22.1. Baseline weeds and pest data is required as a component of the measurement criteria. Baseline weeds and pests surveys must be undertaken to ensure appropriate baseline data is included in the criteria.

### **Fauna Outcome**

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

### **Fauna Strategies**

24. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Fauna Outcome Sixth Schedule clause 23;

24.1. Ensure fauna access to the TSF is restricted through implementation of appropriate strategies;

24.2. Monitoring of the TSF and process water dams for fauna deaths is conducted as part of regular inspections.

### **Topsoil and Subsoil Outcome**

25. The Tenement Holder must, during construction, operation and post completion ensure that the existing (pre-tenement) soil quality and quantity is maintained.

### **Topsoil and Subsoil Strategies**

26. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Topsoil and Subsoil Outcome Sixth Schedule clause 25;

- 26.1. Strategies to achieve recovery of topsoil and subsoil from areas to be disturbed by mining related activities;
- 26.2. Strategies for maintaining the quality and quantity of stockpiled soil until such time that it is used for rehabilitation purposes;
- 26.3. Strategies that take into consideration the optimal soil stockpile heights for achieving the soil outcome;
- 26.4. Strategies for reinstatement of these soils so as to maximise the likelihood of achieving the soil outcome;
- 26.5. An auditable record of soil movement including recovery, stockpiling and reinstatement;
- 26.6. Strategies for the establishment of post completion land uses and areas, including the re-establishment of land for agriculture where practicable;
- 26.7. Progressive rehabilitation would be implemented for all domains as soon as practicable.

### **Topsoil and Subsoil Criteria**

27. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(d) in relation to the Topsoil and Subsoil Outcome Sixth Schedule clause 25;
  - 27.1. Baseline data to characterise the pre-tenement condition of all soils within the Tenement. This survey must ensure that acid sulphate soils are identified and mapped at a sufficient resolution for effective management.

### **Heritage Outcome**

28. The Tenement Holder must during construction and operation, ensure that there is no disturbance to Aboriginal or European heritage sites, objects or remains unless prior approval under the relevant legislation is obtained.

### **Waste Outcome**

29. The Tenement Holder must ensure that all commercial or industrial waste (which does not include Tailings) is disposed of in an EPA licensed facility.

**Traffic and Transport Outcome**

30. The Tenement Holder must during construction and operation, ensure that there are no traffic accidents involving the public at Tenement access points that could have been reasonably prevented by the Tenement Holder.

**Traffic and Transport Strategies**

31. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Traffic and Transport Outcome Sixth Schedule clause 30;
- 31.1. Establish detailed strategies and procedures for safety, security, release prevention, training and emergency response for the transport and storage of Hydrofluoric Acid.

**Public Safety, Third Party Property and Land Use Outcomes**

32. The Tenement Holder must during construction and operation ensure that unauthorized entry to the Land does not result in public injuries and or deaths that could have been reasonably prevented.
33. The Tenement Holder must during construction, operation and post completion ensure that there are no public injuries or deaths as a result of uncontrolled fires caused by mining related activities that could have been reasonably prevented.
34. 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 related activities are as low as reasonably practicable.
35. The Tenement Holder must during construction, operation and post completion ensure that there are no adverse impacts to third party property and adjacent land use as a result of mining related activities, other than those agreed between the Tenement Holder and the affected landowner.
36. The Tenement Holder must, ensure that:
- 36.1. There is no contamination of land and soils either on or off the Land as a result of mining related activities; and
- 36.2. no contamination of land and soils either on or off the Land post completion occurs as a result of mining related activities.

37. The Tenement Holder must ensure that the Land is progressively and finally rehabilitated to support the future land use.
38. Before completion, the Tenement Holder must satisfy the Director of Mines (or other authorised officer) that where practicable, the pre-tenement land use can be recommenced post completion.

### **Public Safety, Third Party Property and Land Use Strategies**

39. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Public Safety Outcome Sixth Schedule clause 34, 35, 36 and 38;
  - 39.1. Develop strategies to ensure final landform design for the TSF meets the outcome for protection of public safety post 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 vehicle incidents/accidents; and
    - 39.1.3. Ground instability.
40. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Public Safety Outcome Sixth Schedule clause 34;
  - 40.1. The Tenement Holder must ensure that post completion, all final mining related landforms (including the TSF) will be chemically and physically stable in the long term.
41. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Land Use Outcome Sixth Schedule clauses 37 and 38;
  - 41.1. Strategies for the establishment of post completion land uses and areas, including the re-establishment of land for agriculture (where practicable), should be consistent with the Management Plan and Response Document;
  - 41.2. Progressive rehabilitation must be implemented for all domains as soon as practicable;
  - 41.3. The design, construction and maintenance of the TSF cover system including, but not limited to, a detailed cover system design, construction methodology, cover system modelling and erosion modelling;



- 41.4. Provision of a program of works for field trials and collection of site specific data to validate/calibrate the model(s);
- 41.5. Field trials for the cover system(s), rehabilitation and revegetation will commence as soon as practicable after commencement of operations;
- 41.6. Quality control arrangements for all stages of construction and operation of the TSF and cover system(s), including supervision by appropriately qualified and experienced persons, documented procedures, quality control testing and record keeping.
42. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(c) in relation to the Land Use Outcome Sixth Schedule clauses 35, 36, 37 and 38;
- 42.1. 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 Tailings Dam Guidelines;
- 42.2. Quality control arrangements for all stages of construction of the TSF including supervision by appropriately qualified and experienced persons, documented procedures, quality control testing and record keeping;
- 42.3. The minimum freeboard height and maximum supernatant pond dimensions for the TSF must be specified;
- 42.4. The maximum dimensions of the supernatant pond must be consistent with the method of tailings deposition;
- 42.5. 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 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;
- 42.6. Strategies for the control of seepage through the TSF base, embankment and walls;
- 42.7. 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;
- 42.8. Tailings discharge density trigger limits and remedial actions to ensure design densities are achieved;

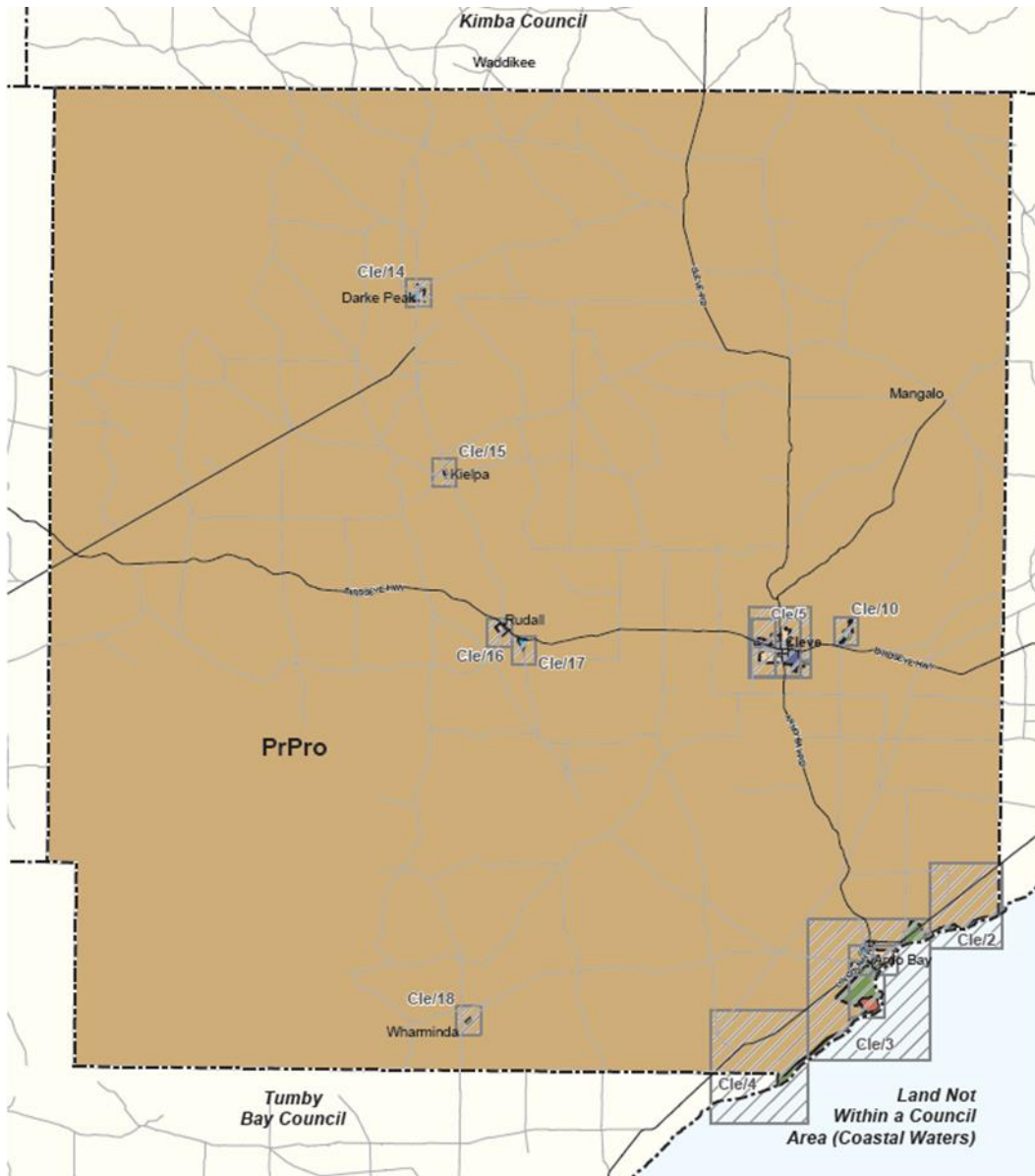
- 42.9. A leak detection program for monitoring seepage through the embankment and the base of the TSF;
- 42.10. The design, construction and maintenance of mine waste cover systems including, but not limited to, a detailed cover system design, construction methodology, cover system modelling and provision of a program of works for field trials and collection of site specific data to validate/calibrate the model(s);
- 42.11. Ensure that the TSF final landforms will be chemically and physically stable post mine completion;

### **Public Safety, Third Party Property and Land Use Criteria**

- 43. The Tenement Holder is required to address the following matters for the purposes of Regulation 65(2)(d) in relation to the Land Use Outcome Sixth Schedule clauses 35, 36, 37 and 38;
  - 43.1. Continuous measurement of Hydrofluoric Acid concentrations in tailings discharged to the TSF.
  - 43.2. Measurement criteria in relation to the outcomes relevant to the TSF must include, as a minimum, the measurement of process and tailings solutions:
    - 43.2.1. at a frequency of at least weekly;
    - 43.2.2. with analysis of the following analytes, as a minimum: Hydrofluoric Acid, fluoride, TRH, TDS, pH; and
    - 43.2.3. at the TSF supernatant, at the TSF water storage pond and other appropriate locations depending on the final design of the TSF and associated infrastructure.

**SEVENTH SCHEDULE**

**DISTRICT COUNCIL OF CLEVE DEVELOPMENT PLAN  
AT DATE OF GRANT OF THIS LICENCE**



See enlargement map for accurate representation.

# Zone Map Cle/1

- Zones**
- Primary Production
  - Zone Boundary
  - Development Plan Boundary

CLEVE COUNCIL  
Consolidated - 23 April 2015