

The Minister for Mineral Resources Development has granted a Mineral Lease ML6229 to Terramin Australia NL to conduct mining operations for the recovery of metallic mineral ores over the area of Mineral Claim 3567, and

The Lessee is advised to comply with the following (non-inclusive) list of Acts, Codes and Standards, which may not be directly administered by the Minister for Mineral Resources Development:

- *Electricity Act 1996 and the Electricity (General) Regulations 1997*
- *Environment Protection Act 1993*
- *Occupational Health, Safety and Welfare Act 1986 (SA)*
- *Natural Resources Management Act 2004*
- *Native Vegetation Act 1991 (Reprint No.4) and Regulations 2003*
- *River Murray Act 2003.*
- *Workers Rehabilitation and Compensation Act 1986*
- *Aboriginal Heritage Act 1988*
- *Environmental Protection and Biodiversity Conservation Act 1999 (Commonwealth of Australia).*

The lease agreement is subject to the following terms and conditions:-

The term of the lease agreement will be for 10 years; and
The following First and Second Schedules

LEASE CONDITIONS

FIRST SCHEDULE

1. Mining operations are authorised for the recovery of metallic mineral ores from the area of the lease.
2. The Lessee must keep proper and accurate books and records showing the quantity and value of all minerals mined from the said lands and the manner of disposition of all minerals and, whenever required to do so, shall submit such books and records for inspection by any person authorised by the Minister.
3. The Lessee must, from time to time as requested by the Chief Inspector of Mines, demonstrate to the satisfaction of the Chief Inspector of Mines, the Lessee's capability and competence to comply with the requirements of the *Mining Act, 1971*, the conditions of this lease and the approved Mining and Rehabilitation Program (MARP) by demonstrating aspects of the management system for the mine operations including:
 - a. Work procedures and practices;
 - b. Risk management system;
 - c. Compliance monitoring system;

- d. Emergency response plans;
 - e. Communication strategies to employees, contractors and visitors;
 - f. Resources allocated to compliance monitoring activities; and
 - g. Previous experience of operator
4. This Lease permits processing operations only for ore recovered on the lease area. Ore from outside the lease area must not be brought on to the lease.
 5. The Lessee must ensure that all detailed plans and specifications relating to the design and construction of all structural elements associated with the proposed development are accompanied by certification provided by a practicing professional structural engineer or an accredited certifier certifying the structural adequacy of the proposed building design and compliance with the Building Code of Australia.
 6. Should the lease holder request any of the lease conditions in Schedule 1 or 2 to be modified to reflect a change in scope of the mining project from that originally proposed, the proposal will be required to follow the same statutory assessment and consultation process as is required for a new mining lease under the *Mining Act, 1971*.

SECOND SCHEDULE

Community Consultative Committee

1. The Lessee must take responsibility for resourcing, participating with and maintaining to the satisfaction of the Minister, a Strathalbyn Community Consultative Committee (CCC) for the term of the lease, with terms of reference as specified from time to time by the Minister.

Mining and Rehabilitation Program (MARP)

2. The Lessee must ensure that mining operations on the land are carried out in an orderly and skilful manner in accordance with a program for mining and rehabilitation of the land (MARP) approved from time to time by the Minister in consultation with the Environment Protection Authority (EPA), Planning SA, Department of Water Land and Biodiversity Conservation (DWLBC) Department of Health and Transport Services Division (TSD).
3. The MARP must comply with the requirements of the guidelines approved by the Chief Inspector of Mines and include environmental outcomes and measurement criteria that are developed in consultation with relevant stakeholders.

4. The approved MARP will be available to the public in manner and form as determined by the Chief Inspector of Mines in consultation with the Community Consultative Committee.
5. The MARP must be reviewed and resubmitted by the Lessee for approval if at any time the sum of the total mine production and the remaining ore reserve exceeds 2.5 Million tonnes.

Reporting

6. The Lessee will be responsible for recording and addressing complaints received from the public with respect to the mining operations by: -
 - 6.1 Providing a dedicated and publicly advertised telephone line, 24 hours a day, 7 days a week;
 - 6.2 Record details of complaints and the Lessee's response in a register, which will be made available to authorised officers under the *Mining Act, 1971*;
 - 6.3 Ensuring that a response is provided to the complainant as early as possible and within two working days; and
 - 6.4 Reporting the complaint details and the Lessee's response at the next relevant Strathalbyn Community Consultative Committee meeting.
7. The Lessee must, if requested by the Chief Inspector of Mines, undertake an independent audit of achievement of the environmental outcomes any or all in clauses 16 to 63 below, by an independent expert approved by the Chief Inspector of Mines. The audit will be made available to the public, in a manner and form as determined by the Minister in consultation with the Community Consultative Committee.
8. The Lessee must, on an annual basis, provide to the satisfaction of the Chief Inspector of Mines a survey of mine workings.
9. The Lessee must provide to the Chief Inspector of Mines a Mining and Rehabilitation Compliance Report (MARCR) on operations carried out on the lease and compliance with the MARP.
10. The MARCR must include a geotechnical and operational audit of the Tailings Storage Facility undertaken by an independent certified geotechnical engineer.
11. The MARCR must be submitted every year, or any other period as requested in writing and agreed with the Chief Inspector of Mines.
12. The MARCR must be submitted within 2 months after the anniversary of a date agreed with the Chief Inspector of Mines.

13. The MARCR must be prepared in accordance with guidelines approved by the Chief Inspector of Mines.
14. The MARCR will be made available to the public in a manner and form as determined by the Chief Inspector of Mines in consultation with the Community Consultative Committee.
15. The following significant incidents, should they occur, must be reported to the Chief Inspector of Mines, immediately after the Lessee is aware of them:
 - 15.1 Any unexpected groundwater flow in the underground mine workings;
 - 15.2 Any unplanned collapse of underground workings;
 - 15.3 Any detection of microbiological material in the mine water, likely to be sourced from the overlying effluent ponds;
 - 15.4 Any fires caused by mining operations;
 - 15.5 Any unauthorised entry to site by any member or members of the public, or breach of security measures;
 - 15.6 Any injury to member of the public caused by mining operations (including by truck movements);
 - 15.7 Any breach of environmental outcomes to be achieved as detailed in clauses 16 to 63; and
 - 15.8 Any flora and/or fauna deaths or sickness likely to be caused by the mining operation.

Groundwater and surface water:

16. The Lessee must, in constructing and operating the lease and post mine closure, ensure that there is no adverse impact to the supply of water by the lessees operations to existing users and water dependent ecosystems.
17. The Lessee must ensure that groundwater monitoring well locations and all data are supplied to PIRSA and Department of Water Land and Biodiversity Conservation (DWLBC) on an annual basis in a format stipulated by DWLBC.
18. The Lessee must report on an annual basis groundwater ingress zones encountered within the mine workings and report on groundwater flow and quality and microbiological content.

Erosion:

19. The Lessee must, in constructing and operating the lease and post mine closure, stabilise disturbed areas and prevent sediment from leaving the site.

Topsoil:

20. The Lessee must, in constructing and operating the lease and post mine closure, ensure that soil quality and quantity are protected.

21. The Lessee must ensure that topsoil stockpiles are protected from erosion (eg be sown with a cover crop) and monitored for erosion.

Vegetation clearance and weed management:

22. The Lessee must, in constructing and operating the lease, and post mine closure, avoid permanent loss of biodiversity through clearance of native vegetation.
23. The Lessee must minimise the spread of weeds and plant pathogens (including phytophthora) and ensure that all employees and contractors on-site are made aware of this requirement.
24. The Lessee must undertake a detailed baseline survey on flora present in the lease area to identify all flora of conservation significance and include the results from the completed survey as part of the MARP documentation.

Silt and stormwater:

25. The Lessee must, in constructing and operating the lease and post mine closure, ensure no water contaminated as a result of mining operations leaves the lease area or results in contamination of soil at mine closure within the lease area.
26. The Lessee must ensure that surface water monitoring site locations and data is supplied to the Chief Inspector of Mines and Department of Water Land and Biodiversity Conservation (DWLBC) on an annual basis in a format stipulated by DWLBC.
27. The Lessee must ensure water discharged from the site is compliant with the relevant environment protection policy under the *Environment Protection Act, 1993*.
28. The Lessee must, prior to commencement of mining, design and construct stormwater diversion infrastructure to manage the largest known historical storm event or the estimated 1 in 100 year storm event, whichever is the larger.

Waste disposal and hazardous substances

29. The Lessee must, in constructing and operating the lease, and post mine closure ensure that no contamination and pollution is caused by waste products and hazardous materials used in the mine operations.
30. The MARP must include a waste management and recycling plan.
31. The Lessee must ensure that fuel and liquid chemical storage is adequately bunded to capture spillage and to prevent the migration or infiltration of any spillage or leakage to the surrounding environment in conformance with relevant Environment Protection Authority guidelines.

32. The process water ponds must include a double liner and leakage detection and leachate recovery system to the satisfaction of the Environment Protection Authority.

Acid mine drainage and tailings management

33. The Lessee must, in constructing and operating the lease and indefinitely post mine closure, ensure that no contamination of natural water drainage systems, streams and rivers, groundwater, land and soils occurs either on or off site resulting from permanent disposal or temporary storage of mine ore or waste material.
34. The Lessee must dispose the tailings into the underground workings to the extent it is technically feasible. Material other than tailings should only be disposed of underground if it can be shown that this will not decrease the maximum amount of tailings and other sulphidic waste that can be placed in the underground workings.
35. The Lessee must design, operate, close and rehabilitate the Tailings Storage Facility (TSF) according to the following conditions:-
- 35.1 The 100-year flood level for the site must be modelled to the satisfaction of the Department of Water Land & Biodiversity Conservation (DWLBC) and included in the MARP;
 - 35.2 The TSF must be located above the modelled 100-year flood level with a buffer of at least 100m horizontally outside of that zone;
 - 35.3 The tailings must be produced to < 30% moisture (by weight);
 - 35.4 The TSF must be designed, constructed, operated and decommissioned in accordance with the tailings management guidelines as approved from time to time by the Chief Inspector of Mines and Environmental Protection Authority (EPA);
 - 35.5 The MARP must include the design of the TSF and management plan prepared in accordance with the tailings management guidelines;
 - 35.6 The TSF must include a double liner and leakage detection and leachate recovery system to the satisfaction of the Environment Protection Authority
 - 35.7 Engage an independent certified geotechnical engineer to audit the design of the TSF and management plan against the tailings management guidelines, and submit the audit to the Chief Inspector of Mines with the MARP;
 - 35.8 Provide to the Chief Inspector of Mines certification by an appropriate chartered professional that the TSF has been constructed in accordance with the approved design;
 - 35.9 The Run of Mine (ROM) pad, waste rock stockpiles must be suitably contained and bunded. The Run of Mine pad, waste rock stockpiles, must collect any run off water from those

areas for reuse or disposed to the TSF or for treatment and disposal off site; and

- 35.10 The location of the TSF footprint must be no closer than 10 metres from the lease boundary.

Traffic

36. The Lessee must, in constructing and operating the lease, ensure that no impacts offsite are caused by accidents, noise, dust and dragout by traffic from or to the mine site.
37. The Lessee must ensure that there will be no truck dragout onto the Callington- Strathalbyn Road.
38. All traffic accidents or near misses involving mine vehicles on public roads must be investigated by the Lessee and reported to the Chief Inspector of Mines.
39. The Lessee must monitor all traffic movements associated with the mine construction, operation and closure and must ensure that: -
- 39.1 No B-Double vehicles are to be driven through Strathalbyn township roads;
 - 39.2 B-Double vehicle movements on public roads limited to hours as approved in the MARP in consultation with Transport SA;
 - 39.3 All concentrate trucks on public roads must be covered and well sealed to prevent loss of loaded material; and
 - 39.4 All vehicles leaving the site that have entered the operating area must go through an approved wheel wash to prevent dragout on public roads;
 - 39.5 Drivers are to be instructed on school bus routes and schedules.
40. The Lessee must liaise with the Transport Services Division (TSD) to upgrade and maintain the intersection of the proposed "Mine Road" with Callington Road to specifications determined by TSD. The upgrade shall be designed and constructed to the satisfaction of TSD, with all costs (design, construction and project management) being borne by the Lessee. With regards to the design, the Lessee is required to seek approval for the concept plan from TSD before undertaking any detailed design work.

Noise

41. The Lessee must, in constructing and operating the lease ensure that there are no public nuisance impacts from noise emanating from the operating site.
42. Noise must at all times comply with the relevant environment protection policy under the *Environment Protection Act, 1993*.

Blasting

43. The Lessee must, in constructing and operating the lease, ensure that there are no public nuisance impacts from airblast and vibration caused by blasting.
44. The Lessee must ensure that airblast and ground vibration levels from blasting operations comply with the following requirements at the nearest, non-Terramin owned residence: -
- 44.1 Vibration to not exceed 10mm/sec at any time, with no more than 5% of blasts in any one year to within the range 5-10mm/sec; and
- 44.2 Airblast to not exceed 120dB Linear at any time, with no more than 5% of blasts in any one year to be within the range 115-120dB Linear.

Public health and nuisance

45. The Lessee must, in constructing and operating the lease and post mine closure, ensure that there are no public health, loss of amenity and nuisance impacts to local residents from air emissions, dust and odour generated on site as a result of mining operations.
46. The Lessee must measure within 3 months of start-up of the ore processing plant, the odour emission rates at the following locations, and demonstrate that they have not exceeded the following limits:

TSF pond	550 Odour Units
TSF wet beach (winter)	13,000 Odour Units
TSF wet beach (summer)	3,800 Odour Units

The odour emission rates must be measured using AS4323.3:2001 Stationary Source Emissions - Determination of odour concentration by dynamic olfactometry.

The Lessee must submit within 3 months of start-up of the ore processing plant (and at any other time if requested by the Chief Inspector of Mines) a revised odour dispersion model (prediction of odour impact from TSF and flotation processes) produced by a recognised independent expert approved by the Chief Inspector of Mines and based on the additional sampling of odour emission rates from the TSF pond and the TSF wet beach, that demonstrates odour levels in the vicinity of the site do not exceed those in Attachment A.

47. The Lessee must ensure that noise; blasting, visual amenity and dust monitoring points are determined and approved by the Minister in consultation with EPA, Health Department and the Community Consultative Committee.

48. The Lessee must ensure that no lead contaminated items (including clothing, tools and equipment) are taken off the mine site.
49. The Lessee must manage this operation to comply with the Environment Protection Authority's National Environment Protection Measures for Ambient Air Quality, including EPA criteria for all dispersions, depositions and dust management standards.
50. The Lessee must include in the MARP an environmental dust-monitoring program to the Ministers satisfaction, in consultation with the Department of Health and the EPA.

Fire

51. The Lessee must, in constructing and operating the lease, ensure that there are no unplanned fires onsite, and ensure control measures are in place to manage potential off site impacts.

Public safety

52. The Lessee must, in constructing and operating the lease and post mine closure, ensure that there are no public injuries/deaths resulting from unauthorised entry to the mine site.

Geotechnical stability

53. The Lessee must, in constructing and operating the lease and post mine closure, ensure that no damage occurs to third party infrastructure and no injuries/deaths result from collapse of the underground workings.
54. The Lessee must demonstrate that the mine design cannot allow surface subsidence to occur at any time during mining operations. The demonstration must be made by submitting to the Chief Inspector of Mines (prior to commencing mine development under the Callington Road) a review of the design of the proposed underground operations undertaken by an independent chartered professional mining engineer. The section of the report pertaining to mining under the Callington Road must also be submitted to Transport Services Division (TSD) for its advice.

The Lessee must survey the road prior to, during and post mining to ascertain if subsidence has occurred. TSD requires the Lessee to pay for any remediation works on the Callington Road that are required as a direct result of the mining operations, irrespective of the amount of subsidence. This condition applies from the commencement of the mine operation to 1 year after the mine closure.

The Lessee shall be responsible for the cost of any remediation works required to be undertaken to the Strathalbyn effluent ponds located north of the Callington Road that has occurred as a direct result of mining operations.

55. The Lessee must demonstrate that all underground voids are filled to the extent that subsidence cannot occur at any time after mine closure.

Visual impact

56. The Lessee must, in constructing and operating the lease, minimise the adverse visual impact and maintain a clean, rubbish free site.
57. The Lessee must improve the visual amenity of the mine site in the long-term post mine closure.
58. The Lessee must ensure that all external materials, colours and finishes are non-reflective and of a natural colour and tone to blend with the landscape.
59. The Lessee must, in areas visible to the public and where it is not possible to completely ameliorate visual impacts, use bunding and/or vegetation to improve visual screening.
60. The Lessee must ensure that the screening utilizes local species and is maintained in good condition at all times, to the reasonable satisfaction of the Chief Inspector of Mines.
61. The Lessee must ensure that external lighting on the site, including car-parking areas and around buildings is designed and constructed to conform to Australian Standards. External lighting must not cause any nuisance, inconvenience or loss of amenity to any person beyond the mine site.

Fauna

62. The Lessee must, in constructing and operating the lease and post mine closure, ensure that there are no net adverse impacts from site operations on native fauna in the lease area and in adjacent areas. The lessee must, prior to construction, undertake baseline monitoring of all fauna in the area.

Aboriginal Heritage

63. The Lessee must ensure that all employees and contractors on-site are properly advised of the significance of Aboriginal heritage and culture and are to take due care to preserve all Aboriginal Sites and Objects as defined by the *Aboriginal Heritage Act, 1988*.

Rehabilitation and mine closure

64. The Lessee must ensure that upon mine closure, all plant and equipment (unless otherwise agreed with the Chief Inspector of Mines) is removed from the site.

65. The Lessee must ensure that upon mine closure, the site (including the Tailings Storage Facility) is left in a stable, non-polluting state indefinitely post closure.
66. The Lessee must ensure that upon mine closure, the site is returned to a land use as agreed with the landowner, consistent with practicalities of ensuring the integrity of the TSF and consistent with the Alexandrina Council Development Plan, after consulting with the Strathalbyn Community Consultation Committee.
67. The Lessee must ensure that upon mine closure, the decline under the Strathalbyn- Callington Road is be backfilled in a manner to ensure the long term integrity of the public road structure.
68. The Lessee must ensure that the MARP includes measurable completion criteria for the mine site and must include measures to indicate that the stability and integrity of the site (including the TSF) is likely to continue to be met indefinitely into the future.
69. The Lessee must ensure that the area of the TSF and a 10m wide buffer on all sides is protected in perpetuity from development that may affect the integrity of the TSF design. This protection must include a caveat on the relevant freehold land title.

Financial security

70. The Lessee must, before commencing operations under this lease, lodge a Rehabilitation Bond (Bond) in accordance with Section 62 of the Mining Act, 1971 of such an amount of the surety as determined from time to time by the Minister, to cover the full cost of rehabilitation liability assessed by an independent third party at any time.
71. The Minister may review the Bond from time to time, and in reviewing the Bond the Minister may request that written quotes from a third party are obtained by the Lessee for the cost of rehabilitating the site to the approved completion criteria.
72. The Lessee must meet all charges and costs in obtaining and maintaining the Bond.
73. The Bond will not be refunded until the Minister (in consultation with the EPA) is satisfied the completion criteria as stated in the current MARP have been met.
74. To enable consideration of whether or not the completion criteria have been met, the Lessee must provide an independent audit of the achievement of the completion criteria, to be carried out by an independent auditor approved by the Minister.
75. The Lessee must, prior to commencing operations under this lease and for the duration of the lease, maintain public liability insurance to

cover operations under the lease (including sudden and accidental pollution) in the name of the Lessee for a sum not less than \$50 million or such greater sum as specified by the Chief Inspector of Mines, and make such amendments to the terms and conditions of the insurance as the Chief Inspector of Mines may require.

76. A copy of the cover note or certificate of currency for the insurance must be provided to the Chief Inspector of Mines upon request.
77. In specifying the level of insurance required, the Chief Inspector of Mines accepts no liability for the completeness, adequacy of the sum insured, the limit of liability, the scoped coverage, the conditions or exclusions of the insurance in respect of how the Lessee may or may not respond to any loss, damage or liability.

Attachment A

Odour Dispersion Model Prediction of Odour Impact from TSF & Flotation Process

