MINISTER FOR THE ENVIRONMENT; CLIMATE CHANGE; DISABILITY SERVICES

Statement No.

000736

# STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT 1986)

CLOVERDALE MINERAL SANDS MINING & PROCESSING SHIRES OF CAPEL & BUSSELTON

Proposal:

To mine and process approximately 3.5 million tonnes of heavy mineral resource from Mining Leases 70/1107 and 70/1167, using the screening and processing facilities currently employed for operations in the adjacent Mining Leases 70/401, 70/1052 and 70/672.

The proposal involves progressive dewatering, mining and backfilling. The expected life of the mine is two years, with an additional three years of active rehabilitation. The proposal is further documented in schedule 1 of this statement.

Proponent:

Huka Resources Limited

**Proponent Address:** 

Level 23, 140 St George's Terrace, PERTH WA 6000

Assessment Number:

1658

Report of the Environmental Protection Authority: Bulletin 1233

The proposal referred to in the above report of the Environmental Protection Authority may be implemented. The implementation of that proposal is subject to the following conditions and procedures:

### 1 Proposal Implementation

1-1 The proponent shall implement the proposal as documented and described in schedule 1 of this statement subject to the conditions and procedures of this statement.

## 2 Proponent Nomination and Contact Details

2-1 The proponent for the time being nominated by the Minister for the Environment under sections 38(6) or 38(7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal.

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2-2 The proponent shall notify the Chief Executive Officer of the Department of Environment and Conservation (CEO) of any change of the name and address of the proponent for the serving of a notice or other correspondence within 30 days of such change.

## 3 Time Limit of Authorisation

- 3-1 The authorisation to implement the proposal provided for in this statement shall lapse and be void within five years after the date of this statement if the proposal to which this statement relates is not substantially commenced.
- 3-2 The proponent shall provide the CEO with written evidence which demonstrates that the proposal has substantially commenced on or before the expiration of five years from the date of this statement.

# 4 Compliance Reporting

- 4-1 The proponent shall submit to the CEO environmental compliance reports annually reporting on the previous twelve-month period, unless required by the CEO to report more frequently.
- 4-2 The environmental compliance reports shall address each element of an audit program approved by the CEO and shall be prepared and submitted in a format acceptable to the CEO.

## 4-3 The environmental compliance reports shall:

- 1. be endorsed by signature of the proponent's Chief Executive Officer or a person, approved in writing by the CEO, delegated to sign on behalf of the proponent's Chief Executive Officer;
- 2. state whether the proponent has complied with each condition and procedure contained in this statement;
- 3. provide verifiable evidence of compliance with each condition and procedure contained in this statement;
- 4. state whether the proponent has complied with each key action contained in any environmental management plan or program required by this statement;
- 5. provide verifiable evidence of conformance with each key action contained in any environmental management plan or program required by this statement;
- identify all non-compliances and non-conformances and describe the corrective and preventative actions taken in relation to each non-compliance or nonconformance;

- 7. provide an assessment of the effectiveness of all corrective and preventative actions taken; and
- 8. describe the state of implementation of the proposal.
- 4-4 The proponent shall make the environmental compliance reports required by condition 4-1 publicly available in a manner approved by the CEO.

# 5 Groundwater Management

5-1 Prior to ground-disturbing activities, the proponent shall prepare a whole-of-site Groundwater Management Plan in consultation with the Department of Water.

The objective of this Plan is to maintain the quantity and quality of groundwater so that existing and potential uses, including ecosystem maintenance, are protected.

This Plan shall address:

- 1. monitoring and reporting of groundwater levels within the piezometer network;
- 2. measurement and recording of water abstraction and usage;
- 3. seasonal variation in groundwater levels;
- 4. frequency of monitoring and reporting of results; and
- 5. triggers for actions and management measures.
- 5-2 The proponent shall implement the Groundwater Management Plan required by condition 5-1.
- 5-3 The proponent shall make the Groundwater Management Plan required by condition 5-1 publicly available in a manner approved by the CEO.

## 6 Dewatering

- 6-1 Prior to ground-disturbing activities, the proponent shall install sufficient soil moisture monitoring probes and/or alternative devices, at appropriate intervals in the vicinity of the area of vegetation on Lot 2015 and monitor to determine variations in soil moisture and groundwater levels. Where alternative devices are required they should be of a type and in locations that are acceptable to the CEO.
- 6-2 Prior to ground-disturbing activities, the proponent shall complete at least one summer of soil moisture and groundwater level monitoring required by condition 6-1.

- 6-3 Based on the soil moisture and groundwater level monitoring required by conditions 6-1 and 6-2, the proponent shall establish "management criteria" in consultation with the Department of Environment and Conservation with the objective of ensuring that the health of the vegetation on Lot 2015 is maintained during mining of South Pit 1 and South Pit 2.
- 6-4 During mining of South Pit 1 and South Pit 2, the proponent shall monitor soil moisture and groundwater levels required by condition 6-1 at least once every seven days.
- 6-5 The proponent shall not commence ground-disturbing activities for the two pits south of the Ludlow River unless and until the "management criteria" required by condition 6-3 have been endorsed by the CEO.
- 6-6 Prior to ground-disturbing activities for South Pit 1 and South Pit 2, the proponent shall prepare a Dewatering Management Plan setting out management actions to be implemented if monitoring indicates that soil moisture or groundwater levels do not meet the "management criteria" required by condition 6-3.
- 6-7 In the event that soil moisture or groundwater levels do not meet the "management criteria" required by condition 6-3, the proponent shall;
  - 1. notify the Department of Environment and Conservation immediately;
  - 2. implement management measures, set out in the Dewatering Management Plan required by condition 6-6; and
  - 3. report the outcome of management measures taken to the Department of Environment and Conservation.

### 7 Acid Sulfate Soils

7-1 Prior to ground-disturbing activities and in consultation with the Department of Environment and Conservation, the proponent shall revise the Draft Acid Sulfate Soil Management Plan (August 2006) included in the documents submitted to the Environmental Protection Authority during the assessment of the proposal.

The objective of this Plan is to ensure that dewatering and/or other ground-disturbing activities which may disturb acid sulfate soils are planned and managed to ensure that existing and potential environmental values, including ecosystem maintenance, are protected.

### The Plan shall address:

- 1. potential on-site and off-site effects of the disturbance of the acid sulfate soils and/or groundwater levels;
- 2. how drainage, dewatering or soil extraction will be undertaken to minimise environmental impacts;

- 3. how any acid leachate generated as a result of ground-disturbing activities will be managed;
- 4. management of areas, both on and off-site, used to store or treat extracted soil;
- 5. comprehensive surface and ground water quality monitoring both on and off-site;
- 6. management hierarchy detailing trigger levels for action and management responses; and
- 7. contingency to cease extraction and mining due to acid sulphate soil impacts.
- 7.2 The proponent shall implement the revised Acid Sulfate Soil Management Plan required by condition 7-1.
- 7-3 The proponent shall make the revised Acid Sulfate Soil Management Plan required by condition 7-1 publicly available in a manner approved by the CEO.

### 8 Surface Water

- 8-1 Prior to ground-disturbing activities, and in consultation with the Department of Water and the Department of Environment and Conservation, the proponent shall demonstrate that practicable stormwater and surface water management and any construction along the Ludlow River has been designed to prevent significant off-site impacts, including:
  - 1. impact on conservation category wetlands or vegetation downgradient of the mine site;
  - 2. reduction of the quality or quantity of water of the Capel River and seasonally inundated sections of the Ludlow River;
  - 3. erosion of drainage lines or flooding of vegetation; and
  - 4. significant fuel and process chemical contamination of soil or groundwater downgradient of the mine site.
- 8-2 Prior to ground-disturbing activities, and in consultation with the Department of Water and the Department of Environment and Conservation, the proponent shall prepare a Surface Water Management Plan.

The objective of this Plan is:

• to maintain the integrity, functions and environmental values of rivers and wetlands within and adjacent to the proposal area.

### This Plan shall address:

- 1. monitoring to establish baseline conditions for water quality and vegetation condition;
- 2. monitoring the quality of surface water leaving the site;
- 3. the need for bunding and re-direction of flow;
- 4. each of the 4 items included within condition 8-1 above; and
- 5. fencing and demarcation of the buffer zone near the Ludlow River during the operation of the mine.
- 8-3 The proponent shall implement the Surface Water Management Plan required by condition 8-2.
- 8-4 The proponent shall make the Surface Water Management Plan required by condition 8-2 publicly available in a manner approved by the CEO.

# 9 Vegetation and Caladenia huegelii Monitoring and Management Plan

9-1 Prior to ground-disturbing activities, the proponent shall prepare, in consultation with the Department of Environment and Conservation, a Vegetation and Caladenia huegelii Monitoring and Management Plan.

# The objectives of this Plan are to:

- establish the baseline health condition of vegetation and Caladenia huegelii;
- monitor and assess any changes in the health of vegetation and the *Caladenia huegelii* population after mining and/or dewatering commences; and
- protect significant vegetation and flora.

## This Plan shall address:

- 1. the location of appropriate Caladenia huegelii monitoring sites located on Lot 2015;
- 2. the number of Caladenia huegelii plants and locations of those plants on Lot 2015;
- 3. protocols and procedures for monitoring *Caladenia huegelii* using appropriate *Caladenia huegelii* monitoring surveys at all monitoring sites on Lot 2015;
- 4. protection of Priority Flora, Declared Rare Flora and other significant vegetation;
- 5. contingency plans in the event of detrimental effects on vegetation and flora;
- 6. reporting requirements; and

- 7. community consultation and involvement.
- 9-2 The proponent shall implement the Vegetation and *Caladenia huegelii* Monitoring and Management Plan required by condition 9-1.
- 9-3 The proponent shall make the Vegetation and *Caladenia huegelii* Monitoring and Management Plan required by condition 9-1 publicly available in a manner approved by the CEO.

## 10 Rehabilitation (Progressive and Final)

10-1 Within three months following commencement of ground-disturbing activities within the disturbance area and in consultation with the Department of Environment and Conservation, the proponent shall prepare a Progressive Rehabilitation Plan.

The objectives of this Plan are:

- to restore vegetation within areas with local native species which will contribute towards maintenance and enhancement of the ecological linkages within the central portion of Lot 1188, south-east of the disturbance area, if practicable;
- to achieve progressive rehabilitation and restoration of vegetative cover in the mined-out areas as soon as practicable; and
- to ensure that the site is left in an environmentally acceptable condition at the conclusion of mining, or as soon as reasonably practicable thereafter.

#### This Plan shall address:

- 1. progressive rehabilitation of disturbed areas;
- 2. establishment of completion criteria;
- 3. a rehabilitation schedule, including timing;
- 4. restoration and revegetation requirements;
- 5. management measures, including weed management;
- 6. monitoring and maintenance of rehabilitated areas for at least three years following completion unless the Minister, on the advice of the CEO, agrees to extend the monitoring and maintenance for up to an additional 2 years;
- 7. measures to achieve progressive rehabilitation and restoration of vegetative cover in the mined-out areas as soon as practicable;
- 8. measures to revegetate areas which will contribute towards maintenance and enhancement of the ecological linkage within the disturbance area;
- 9. remedial actions;

- · 10. community involvement and consultation; and
  - 11. management of tree hollows.
- 10-2 The proponent shall implement the Progressive Rehabilitation Plan required by condition 10-1.
- 10-3 The proponent shall make the Progressive Rehabilitation Plan required by condition 10-1 publicly available in a manner approved by the CEO.
- 10-4 At least six months prior to the anticipated date of closure, or at a time approved by the Environmental Protection Authority, the proponent shall submit a Final Decommissioning Plan designed to ensure that the site is suitable for future land uses, prepared on advice of the Environmental Protection Authority, for approval of the CEO.

The Final Decommissioning Plan shall address and set out procedures and measures for:

- 1. restoration and revegetation requirements;
- 2. monitoring and maintenance of rehabilitated areas;
- 3. removal or, if appropriate, retention of plant and infrastructure agreed in consultation with relevant stakeholders;
- 4. rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s);
- identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities; and
- 6. completion of matters addressed within the Progressive Rehabilitation Plan (See condition 10-1, items 1 to 11 above).
- 10-5 The proponent shall implement the Final Decommissioning Plan required by condition 10-4 until such time as the Minister for the Environment determines, on advice of the CEO, that the proponent's decommissioning responsibilities have been fulfilled.
- 10-6 The proponent shall make the Final Decommissioning Plan required by condition 10-4 publicly available in a manner approved by the CEO.

### Notes

1. Where a condition states "on advice of the Environmental Protection Authority", the Environmental Protection Authority will provide that advice to the Department of Environment and Conservation for the preparation of written notice to the proponent.

- 2. The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment and Conservation.
- 3. The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment and Conservation over the fulfilment of the requirements of the conditions.
- 4. The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.
- 5. As a mineral sands operation, the proponent may have requirements to be met under the *Radiation Safety Act 1975*, and for the Radiation Council.
- 6. The Forests Products Commission (FPC) advises that any vegetation to be cleared on Government land may be salvageable and the proponent should contact the FPC to arrange for the timber to be salvaged.

HON TONY MCRAE MLA MINISTER FOR THE ENVIRONMENT; CLIMATE CHANGE; DISABILITY SERVICES

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# The Proposal (Assessment No. 1658)

# **General Description**

The proposal is to construct and operate a mineral sands mine within mining leases M70/1107 and M70/1167, and to screen and process ore within adjacent mining leases M70/401, M70/1052 and M70/672. The proposal involves the progressive mining of ore bodies for titanium minerals and zircon using dry mining techniques. The proposal area lies parallel and adjacent to the existing Yoganup West and Yoganup mine sites.

The major components of the proposed include:

- 350 hectare disturbance area;
- four new mine pits;
- · settling dam for stormwater management; and
- associated mine infrastructure.

# **Summary Description**

A summary of the key proposal characteristics is presented in Table 1.

Table 1: Summary of the Key Proposal Characteristics

Description
Approximately 2 years
Approximately 3.5 Mt
Not more than 350 ha
Not more than 4 ha
450,000 t/a (0.450 Mt/a)

#### Abbreviations:

ha – hectare
Mt – mega tonnes
Mt/a – mega tonnes per annum
t/a – tonnes per annum

## Figure (attached)

Figure 1 - Site Layout Plan.

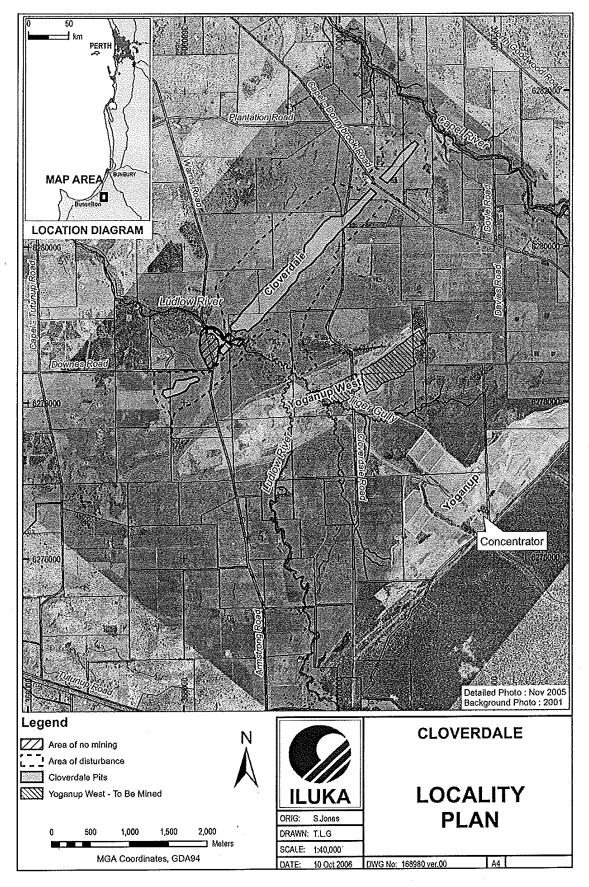


Figure 1: Site Layout Plan