Hon Mark McGowan MLA
Minister for the Environment;
Racing and Gaming

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Statement No. 000736

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

EXPANSION OF JURIEN GYPSUM MINING OPERATION ML70/1161
SHIRE OF DANDARAGAN

**Proposal:** The mining of a 53-hectare area and processing of approximately 1.3 million tonnes of gypsum recovered from Mining Lease 70/1161 using the facilities currently employed for operations in the adjacent Mining Lease 70/750.

The proposal involves dredging and will form a permanent hypersaline water body of approximately four metres maximum depth. Dredging operations are proposed to be undertaken every second year over a 2 to 4 week period to excavate approximately 100,000 tonnes of gypsum. The proposal is further documented in schedule 1 of this statement.

**Proponent:** CSR Gyprock Fibre Cement

**Proponent Address:** 21 Sheffield Road, WELSHPOOL WA 6106

**Assessment Number:** 1619

**Report of the Environmental Protection Authority:** Bulletin 1219

The proposal referred to in the report of the Environmental Protection Authority may be implemented, subject to the following conditions and procedures:

## 1 Proposal Description

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 Environmental Management Commitments

2-1 The proponent shall fulfil the environmental management commitments contained in schedule 2 of this statement.

Published on
27 SEP 2006

## 3 Proponent Nomination and Contact Details

3-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal.

3-2 The proponent shall notify the Chief Executive Officer of the Department of Environment and Conservation (CEO) of any change of the name and address for the serving of notices or other correspondence within 30 days of such change.

## 4 Time Limit of Authorisation

4-1 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 refers is not substantially commenced.

4-2 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.

## 5 Compliance Reporting

5-1 The proponent shall submit annually an audit compliance report, for the previous twelve-month period.

The audit compliance report shall:

1. be endorsed by the proponent's Managing Director or a person, approved in writing by the Department of Environment and Conservation, delegated to sign on the proponent's Managing Director's behalf;
2. include a statement as to whether the proponent has complied with the conditions, procedures, commitments and actions within the Environmental Management Plans;
3. identify all non-compliances and describe the related corrective and preventative actions taken;
4. review the effectiveness of all corrective and preventative actions taken;
5. provide verifiable evidence of compliance with the conditions, procedures and commitments;
6. describe the state of implementation of the proposal; and
7. be prepared in accordance with an audit program and in a format acceptable to the Department of Environment and Conservation.

5-2 The proponent shall make the audit compliance report publicly available in a manner approved by the Department of Environment and Conservation.

## 6 Performance Review

6-1 The proponent shall submit a Performance Review report every five years after the start of production to the CEO, which addresses:

1. the major environmental issues associated with implementing the project; the environmental objectives for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those objectives;
2. the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable;
3. significant improvements gained in environmental management, including the use of external peer reviews;
4. stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and
5. the proposed environmental objectives over the next five years, including improvements in technology and management processes.

## 7 Decommissioning

7-1 Prior to ground-disturbing activities, the proponent shall prepare a Preliminary Decommissioning Plan for approval by the Department of Environment and Conservation, which describes the framework to ensure that the site is left in an environmentally acceptable condition, and provides:

1. the rationale for the siting and design of plant and infrastructure as relevant to environmental protection;
2. a conceptual description of the final landform at closure;
3. a plan for a care and maintenance phase; and
4. initial plans for the management of noxious materials.

7-2 At least six months prior to the anticipated date of closure, or at a time agreed by the Environmental Protection Authority, the proponent shall submit a Final Decommissioning Plan, designed to ensure that the site is left in an environmentally acceptable condition and prepared on advice of the Environmental Protection Authority, for the approval of the Department of Environment and Conservation.

The Final Decommissioning Plan shall address:

1. removal or, if appropriate, retention of plant and infrastructure in consultation with relevant stakeholders;
2. rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s);
3. the stability and continual maintenance of all bund walls within and surrounding the resultant mine voids; and
4. identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities.

7-3 The proponent shall implement the Final Decommissioning Plan required by condition 7-2 until such time as the Minister for the Environment determines, on advice of the Department of Environment and Conservation, that the proponent's decommissioning responsibilities have been fulfilled.

7-4 The proponent shall make the Final Decommissioning Plan required by condition 7-2 publicly available in a manner approved by the Department of Environment and Conservation.

## 8 Approved Area

8-1 The implementation of the proposal is restricted to the 12.7 hectare area designated "X" within Mining Lease 70/1161, as shown in Figure 2, Schedule 1, which is contained within the following co-ordinates, in eastings and northings:

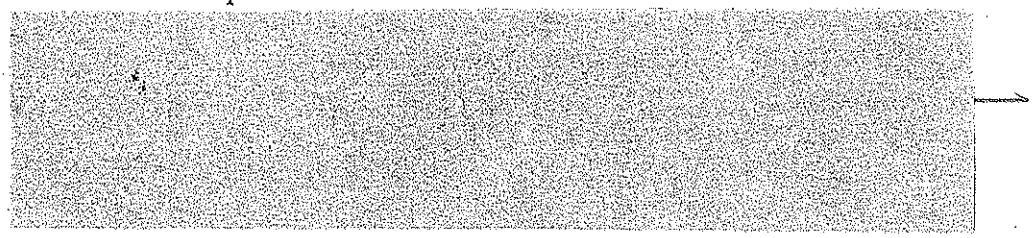
Point 0 (308548.210993000 Easting; 6657269.38807000 Northing)
Point 1 (308372.172229000 Easting; 6657296.58987000 Northing)
Point 2 (308346.964211000 Easting; 6657151.68618999 Northing)
Point 3 (308681.392212999 Easting; 6657107.23771999 Northing)
Point 4 (308772.409721000 Easting; 6657761.28646999 Northing)
Point 5 (308622.916848999 Easting; 6657780.59920000 Northing)

**Notes**

1. The CEO may seek the advice of the Environmental Protection Authority, government agencies and relevant parties, as necessary, for the preparation of written notice to the proponent.

2. The proponent shall relinquish the nomination following the procedure under section 38(6a) of the *Environmental Protection Act 1986*.

3. 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*.



**HON MARK McGOWAN MLA**
**MINISTER FOR THE ENVIRONMENT;**
**RACING AND GAMING**

27 SEP 2006

## Schedule 1

**The Proposal (Assessment No. 1619)**

The mining of a 53-hectare area and processing of approximately 1.3 million tonnes of gypsum recovered from Mining Lease 70/1161 using the facilities currently employed for operations in the adjacent Mining Lease 70/750.

The proposal involves dredging and will form a permanent hypersaline water body of approximately 4 metres maximum depth. Dredging operations are proposed to be undertaken every second year over a 2 to 4 week period to excavate approximately 100,000 tonnes of gypsum.

The proposal is located within a saline wetland in the Shire of Dandaragan, approximately 10 kilometres north of Jurien, as shown in Figure 1 (attached).

The plant includes:

- bucket-wheel dredge;
- dredge pump;
- tracked excavator;
- screen;
- 15-tonne haulage trucks;
- front-end loader;
- groundwater bores and bore pumps;
- 4.8 hectare all-weather works area;
- material handling plant; and
- stockpiles of gypsum.

The main characteristics of the proposal are summarised in Table 1 below.

## Table 1 - Key Proposal Characteristics (Assessment No. 1619)

| Characteristic | Description |
|---|---|
| Project Life | Estimated 25 years |
| Size of deposit in expansion area | 1.3 Mt |
| Depth of mine pit | 4 m within salt lake |
| Water table depth | 1–3 m (at bore sites) |
| Area of disturbance | 53 ha |
| Mine operation | Monday to Friday (sunrise to sunset)<br>Saturday – 6 a.m. to 4 p.m. |
| List of major components | *On site (during mining operation)*<br>• bucket-wheel dredge<br>• dredge pump<br>• sea-container<br>• tracked excavator<br>• screen<br>• 15t haulage trucks<br>*On site (at all times)*<br>• front-end loader<br>• groundwater bores and bore pumps<br>• work boat<br>• 4.8 ha all-weather works area<br>• material handling plant<br>• stockpiles of gypsum |
| Ore mining rate | 100,000 t every second year for 25 years |
| Solid waste materials | None |
| Water supply | Three existing shallow bores (<10 m) will extract groundwater within the limits of the current Water Abstraction Licence 111221 (<30,000 $m^3$/year). |
| Fuel storage capacity and quantity used | *During dredging (2–4 weeks every second year)*<br>• require 1,500 L of diesel per day delivered regularly to site by fuel tankers.<br>• storage on site in a 10,000-L fuel tank mounted in a fully self-contained, internally enclosed and bunded sea container designed to contain 120% of the contents of the fuel tank.<br>*Non-dredging periods*<br>• Fuel delivered to site only when required to refuel equipment (i.e. front-end loader etc). |

**Abbreviations:**

t - tonnes
Mt – Mega tonnes
m – metres
ha – hectares
L – litres

## Figures (attached)

1 Site location, Gypsum Lake area.
2 Site layout.

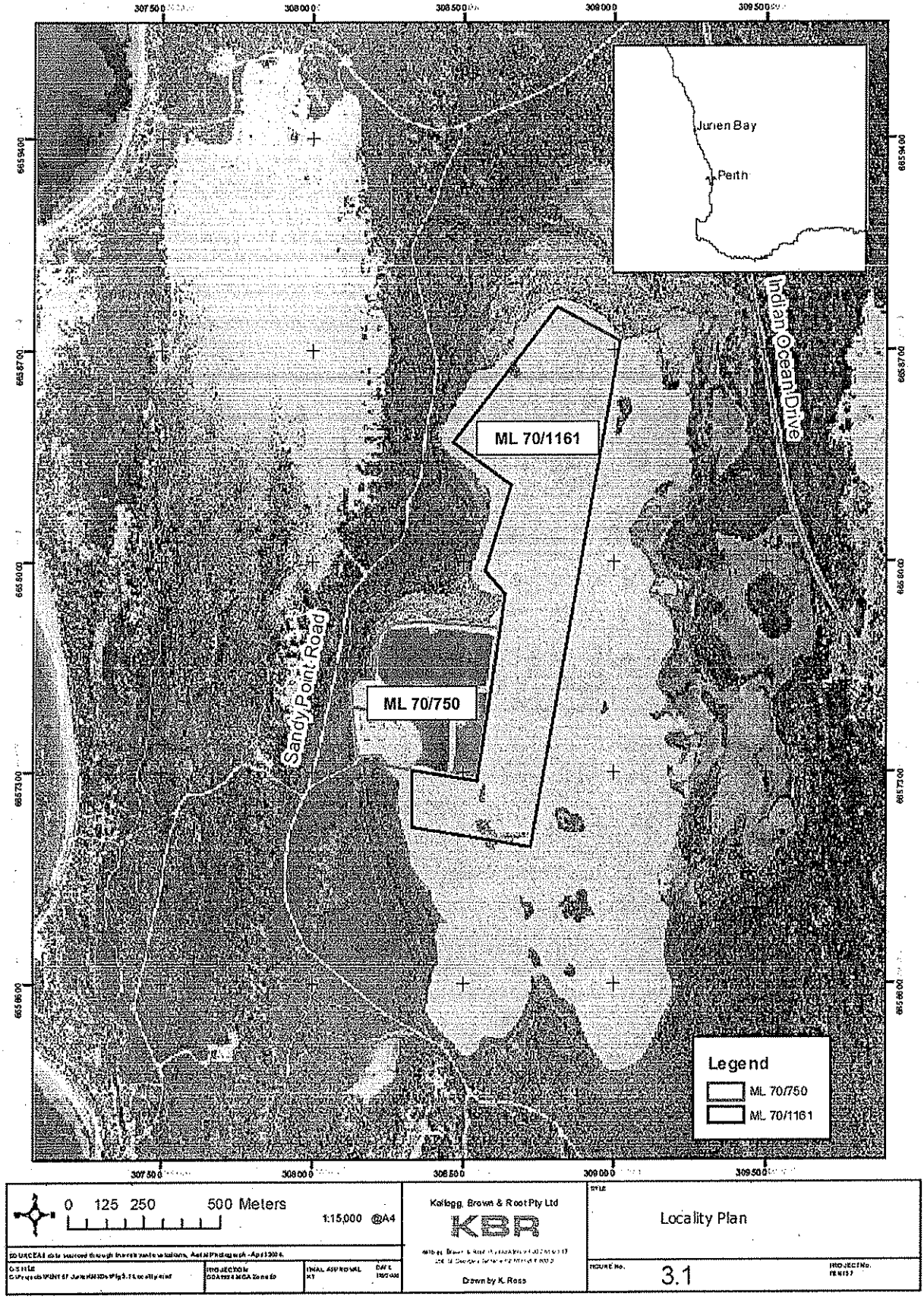



*Figure 1: Site location, Gypsum Lake area*

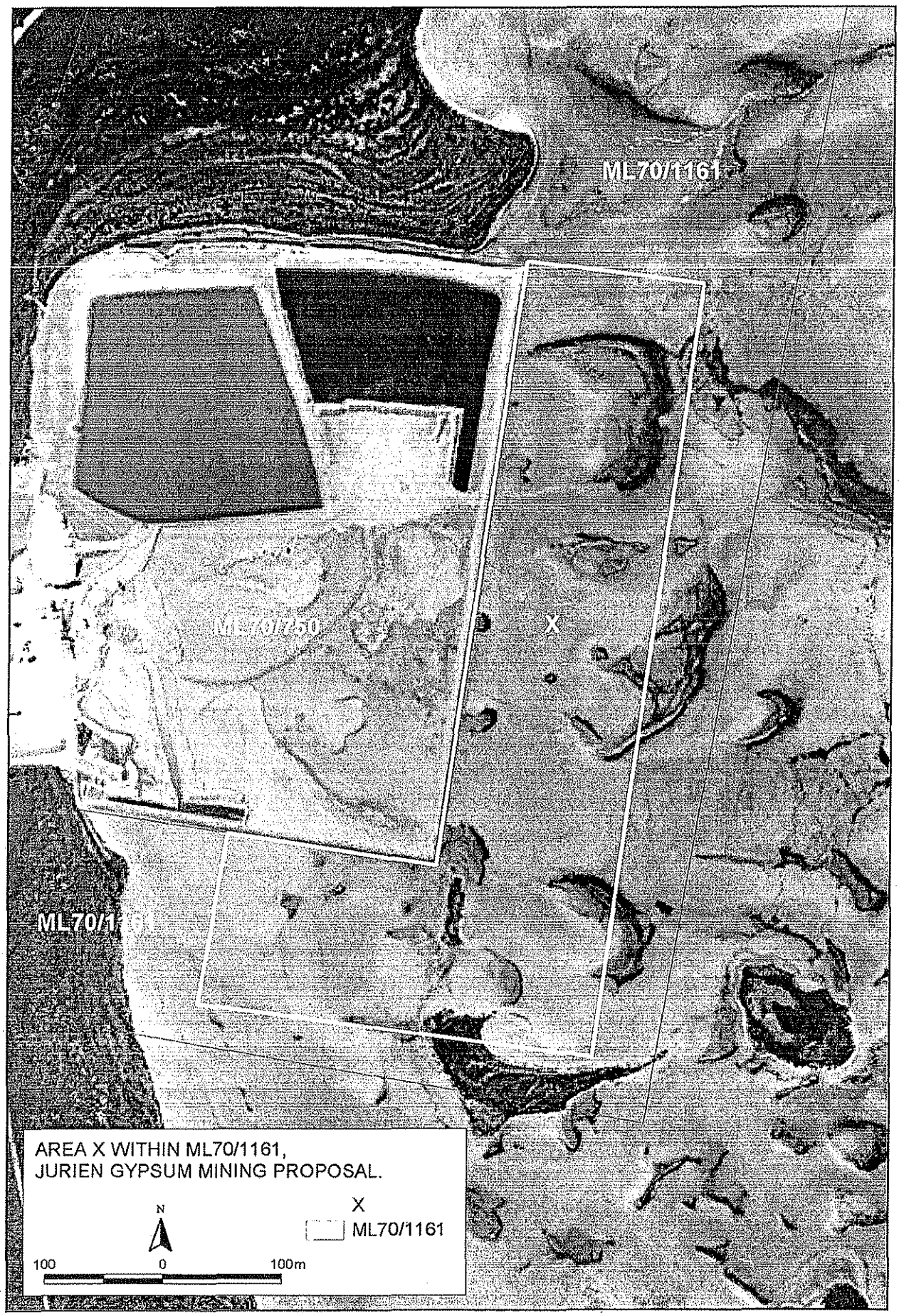



*Figure 2: Site layout*

**Schedule 2**

Proponent
Environmental Management Commitments

September 2006

# EXPANSION OF JURIEN GYPSUM MINING OPERATION ML70/1161 SHIRE OF DANDARAGAN

(Assessment No. 1619)

CSR GYPROCK FIBRE CEMENT

# EXPANSION OF JURIEN GYPSUM MINING OPERATION ML70/1161, SHIRE OF DANDARAGAN (Assessment No. 1619) - September 2006
## Proponent's Environmental Management Commitments

| No. | Topic | Actions | Objective(s) | Timing | Advice From |
|---|---|---|---|---|---|
| 1 | Flora | Develop and implement a **Flora Management Plan** to:<br>a. ensure that mining is only undertaken in the unvegetated portion of the lake.<br>b. maintain the 20 m – 30 m mine-to-vegetation gypsum buffer at all times.<br>c. use the existing hardstand area, access road, bores and water transfer pipelines for the proposed extension.<br>d. undertake rehabilitation using natural recruitment from brush gained from the appropriate vegetation unit for the location.<br>e. monitor the fringing vegetation and higher-slope vegetation through the use of photo points and permanent quadrats.<br>f. review monitoring data.<br>g. develop a plan to reduce groundwater pumping rates and investigate alternative options if detrimental effects on vegetation are observed.<br>h. maintain a record of the vehicle and equipment inspections and wash-downs undertaken for the duration of the mining activities to ensure vehicles are clean prior to entering site.<br>i. transport gypsum using dedicated trucks to minimise the risk of spread of Phytophthora dieback.<br>j. undertake a weed-control program for access road and other areas as required.<br>k. additional surveying of flora around Lake Gypsum to be completed in spring 2007. | Minimise native vegetation clearing.<br><br>Ensure existing level of biodiversity is maintained throughout mining operations and post-closure. | a. During operations<br>b. During operations and at closure<br>c. During operations<br>d. During operations<br>e. Annually<br>f. Annually<br>g. During mining operations<br>h. As required.<br><br><br><br><br><br><br>i. During operations.<br><br>j. During mining operations, at closure and post-closure if required.<br>k. Spring 2007 | a. NA<br>b. NA<br><br>c. NA<br>d. DEC<br>e. DEC<br>f. DEC<br>g. DEC<br><br>h. NA<br><br><br><br><br><br><br>i. NA<br>j. DEC / Shire of Dandaragan<br><br><br><br>k. DEC |
| 2 | Wetlands and Water (Surface) | Develop and implement a **Wetlands and Water (surface) Management Plan** to:<br>a. monitor and maintain the bund to ensure its stability.<br>b. direct process wash-water into the excavated pit and allow it to remain as a permanent water body. | Ensure that the hydrology of Lake Gypsum is not compromised and ensure no net loss of wetland functions and values. | a. Monthly during operations and after significant rainfall events post-closure.<br>b. During operations | a. NA |

| No. | Topic | Actions | Objective(s) | Timing | Advice From |
|---|---|---|---|---|---|
| | | c. monitor water chemistry.<br>d. monitor aquatic flora and macroinvertebrate fauna.<br>e. review monitoring results.<br>f. manage hydrocarbons and other hazardous substances in accordance with the existing CSR Gypsum Mine Operation Environmental Commitments. | | c. Monthly for first two years of operations, quarterly thereafter<br>d. Annually<br>e. Annually<br>f. During operations | b. DEC<br>c. DEC<br>d. DEC<br>e. DEC<br>f. NA |
| 3 | Fauna | Develop and implement a **Fauna Management Plan** which includes programs to:<br>a. operate the mine during daylight hours only to minimise light spill.<br>b. conduct a waterbird survey at the beginning of spring during operation of the mine to better understand bird usage and any potential impacts.<br>c. conduct annual aquatic invertebrate monitoring during the wet season.<br>d. monitor stygofauna (including review of existing stygofauna data and site stygofauna investigations as per EPA Guidance No. 54).<br>e. review monitoring results.<br>f. monitor the condition of the bund regularly and undertake appropriate action if deterioration is identified.<br>g. terrestrial invertebrate survey to be completed in spring 2007. | Minimise the impact on vertebrate and invertebrate fauna within the mine development area and surrounds. | a. During operations.<br>b. Annually<br>c. Annually<br>d. Within one year of commencement of operations<br>e. Annually<br>f. Monthly during operations and after significant rainfall events and closure.<br>g. Spring 2007. | a. NA<br>b. DEC<br>c. DEC<br>d. DEC/WA Museum<br>e. DEC/WA Museum<br>f. DEC/DoIR<br>g. DEC/WA Museum |
| 4 | Water (Ground) | Develop and implement a **Groundwater Management Plan** which includes programs to:<br>a. maintain compliance with current WRC groundwater abstraction licences. | Ensure the groundwater level and quality are appropriate for the intended land use and acceptable standards are maintained | a. During operations | a. NA |

| No. | Topic | Actions | Objective(s) | Timing | Advice From |
|---|---|---|---|---|---|
| | | b. monitor the depth and quality (pH and EC) of groundwater in the existing 20 pyrometers.<br>c. review monitoring results.<br>d. reduce pumping rates and investigate alternative options if detrimental effects on the groundwater are noted.<br>e. incorporate a residual gypsum 'barrier' along the western and northern margin of the proposed new mining area to maintain the current groundwater regime and groundwater quality outside the mining area. | | b. Monthly during operations and quarterly for first two years after closure<br>c. Annually<br>d. As required<br>e. As required | b. NA<br>c. DoW<br>d. DoW<br>e. DoW |
| 5 | Heritage | Develop and implement a **Heritage Management Plan** which includes programs to:<br>a. conduct an Aboriginal heritage survey as part of native title negotiations to confirm the presence or absence of significant sites.<br>b. conduct a European heritage survey. | Ensure that Aboriginal and European heritage sites are preserved. | a. Prior to operations commencing and during operations if applicable.<br>b. Prior to operations commencing and during operations if applicable. | a. DIA, NNTT<br>b. Environment Australia, Heritage Council of WA. |
| 6 | Post-mining Land Use & Closure | Develop and implement a **Closure Management Plan** which includes programs to:<br>a. develop and implement a mine closure plan including clear and achievable closure and rehabilitation criteria.<br>b. Ensure the closure plan complies with the requirements of the existing mine closure plan and rehabilitation criteria. | Ensure that the post-mining landscape is stable and self-sustaining and ecological functions are retained or reinstated where possible. | a. Prior to mining operations commencing and at and post-closure<br>b. During operations, at closure and post-closure | a. DEC, DoIR and other relevant stakeholders.<br>b. NA |
| 7 | Offsets | Implement the environmental offset package for the expansion of the Jurien Gypsum mining operation to the extent that funding is provided for research purposes within the Midwest Region. The funding will support a research program managed by DEC that will include the following key elements: | Obtain information to provide the basis for improving management of coastal wetlands in the Mid-West Region and to implement improved | $150,000 to be provided by the proponent to the Nature Conservation Trust Account prior to mining operations | DEC |

| No. | Topic | Actions | Objective(s) | Timing | Advice From |
|---|---|---|---|---|---|
| | | a. Detailed wetland mapping and characterisation;<br>b. Follow-up surveys of wetland flora and fauna of selected significant wetlands;<br>c. Initial analyses and review of the functioning and relative biodiversity significance of the wetlands in the Midwest Region; and<br>d. Identification of management issues (information gaps about wetland values, management targets, threats to wetland integrity, constraints on management). | management. The offsets from this proposal will assist through work focused on wetland classification, assessment and management priority setting in the Midwest Region including the Jurien area. The research program will report on the following outcomes:<br>a. A GIS-based classification of coastal wetlands in the Jurien area according to conservation value, using systems endorsed by the State Wetlands Coordinating Committee;<br>b. Incorporation of all wetland data collected into Western Australian Wetlands Database; and<br>c. Management guidelines for high-value wetlands that identify management targets and actions to be undertaken to ameliorate threats and maintain values. | commencing. | |

**Abbreviations**

DEC = Department of Conservation (Nature Conservation Division)
DIA = Department of Indigenous Affairs
DoIR = Department of Industry and Resources
DoW = Department of Water
NA = Not applicable
NNTT = National Native Title Tribunal

# Attachment 1 to Ministerial Statement 730

## Change to Proposal

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**Proposal:** Expansion of Jurien Gypsum Mining Operation ML70/1161, Shire of Dandaragan

The proposal involves excavation of Gypsum ore and overburden and will form a permanent hypersaline water body of approximately 4 metres maximum depth. Mining operations are proposed to be undertaken annually in the dry season, to excavate a maximum 130,000 tonnes of material (gypsum ore, water and overburden) per year. The proposal is further documented in Schedule 1 and Schedule 2 of this Statement.

**Proponent:** CSR Building Products Ltd (T/As CSR Gyprock Fibre Cement)

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**Change:** Change to mining method, increase to quantity of material mined per year.

**Key Characteristics Table:**

| Element | Description of proposal | Description of approved change to proposal |
|---|---|---|
| Project Life | 25 | 25 |
| Size of deposit in expansion area | 1.3 million tonnes | 1.3 million tonnes |
| Ore mining rate | 100,000 tonnes every 2nd year for 25 years | **Maximum 130,000 tonnes of material (gypsum, water and overburden) per year** |
| Mining method | Dredging | **Excavation** |
| Depth of mine pit | 4 metres within salt lake | 4 metres within salt lake |
| Water table depth | 1-3 metres (at bore sites) | 1-3 metres (at bore sites) |
| Area of disturbance | 53 hectares | 53 hectares **(restricted to 12.7 hectare area within mining lease 70/1161)** |
| Mine operation | Monday to Friday (sunrise to sunset); Saturday – 6am to 4pm | Monday to Friday (sunrise to sunset); Saturday – 6am to 4pm |
| List of major components | *On site (during mining operation)*<br>• Bucket-wheel dredge<br>• Dredge pump<br>• Sea-container<br>• Tracked excavator<br>• Screen<br>• 15 tonne haulage trucks<br><br>*On site (at all times)*<br>• Front end loader<br>• Groundwater bores and bore pumps<br>• Work boat<br>• 4.8 hectare all-weather | • Groundwater bores and bore pumps<br>• 4.8 hectare all-weather works area<br>• Material handling plant<br>• Stockpiles of gypsum |

| | | |
|---|---|---|
| | works area<br>• Material handling plant<br>• Stockpiles of gypsum | |
| Solid waste materials | None | **Removed as not a key characteristic relevant to the environment.** |
| Water supply | Three existing shallow bores (<10 metres) will extract groundwater within the limits of the current Water Abstraction Licence 111221 (<30,000 $m^3$/year) | **Removed as managed by Department of Water -Water Abstraction Licence** |
| Fuel storage capacity and quantity used | *During dredging (2-4 weeks every second year)*<br>• Require 1,500 litres of diesel per day delivered regularly to site by fuel tankers.<br>• Storage on site in a 10,000 litre fuel tank mounted in a fully self-contained, internally enclosed and bunded sea container designed to contain 120% of the contents of the fuel tank.<br>*Non-dredging periods*<br>• Fuel delivered to site only when required to refuel equipment (i.e. front-end loader etc). | **Removed as managed by other regulatory authorities** |

**Note:** Text in **bold** in the Key Characteristics Table, indicates change/s to the proposal.

**Dr Paul Vogel**
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: 12 March 2012