



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

Statement No.

000720

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

**CATABY MINERAL SANDS PROJECT
CATABY, SHIRE OF DANDARAGAN**

Proposal: To construct a mineral sands mine at Cataby, approximately 150 kilometres north of Perth. The project will consist of a series of 13 open pits over approximately 25 kilometres, which will be progressively mined by dry mining techniques. The proposal will produce approximately 760 to 780 kilotonnes of Heavy Mineral Concentrate per annum. The proposal is further documented in schedule 1 of this statement.

Proponent: Iluka Resources Limited

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

Assessment Number: 1612

Report of the Environmental Protection Authority: Bulletin 1212

The proposal referred to above may be implemented by the proponent subject to the following conditions and procedures:

1 Implementation

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

2 Proponent Commitments

- 2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement

Published on

18 APR 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) or (7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.
- 3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.
- 3-3 The nominated proponent shall notify the Department of Environment of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

- 4-1 The proponent shall substantially commence the proposal within five years of the date of this statement or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment will determine any dispute as to whether the proposal has been substantially commenced.

- 4-2 The proponent shall make an application for any extension of approval for the substantial commencement of the proposal to the Minister for the Environment prior to the expiration date of this statement, which shall demonstrate that:
1. the environmental factors of the proposal reported in Environmental Protection Authority Bulletin 1212 have not changed significantly;
 2. new, significant, environmental factors have not arisen; and
 3. all relevant government authorities and stakeholders have been consulted.

5 Compliance Reporting

- 5-1 The proponent shall submit compliance reports in accordance with a schedule approved by the Department of Environment and with the compliance monitoring guidelines, and shall:
1. describe, or update, the state of implementation of the proposal;
 2. provide verifiable evidence of compliance with the conditions, procedures and commitments;
 3. review the effectiveness of corrective and preventative actions contained in the environmental management plans and programs;
 4. provide verifiable evidence of the fulfilment of requirements specified in the environmental management plans and programs;

5. identify all confirmed non-conformities and non-compliances and describe the related corrective and preventative actions taken; and
6. identify potential non-conformities and non-compliances and provide evidence of how these are being assessed for corrective action.

6 Performance Review

- 6-1 The proponent shall submit a Performance Review Report every two years after the start of production to the Environmental Protection Authority, 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

7 Oliver Remnants

- 7-1 The proponent shall not mine in the 62 hectare area of Oliver Remnants defined as an area of 'No Mining' in Figure 2, Schedule 1.
- 7-2 The proponent shall place a conservation covenant over the rehabilitated Oliver Remnants area once rehabilitation has been completed.

8 Carnaby's Cockatoo Management

- 8-1 Prior to ground-disturbing activities, the proponent shall implement and comply with the Carnaby's Cockatoo Management Plan presented in the *Cataby Mineral Sands Project, Environmental Protection Statement* (November 2005).

Note: if necessary this management plan may be reviewed and updated on advice of the Department of Conservation and Land Management.

9 Groundwater-dependant Ecosystem Management

- 9-1 Prior to ground-disturbing activities, the proponent shall review and revise the Groundwater-dependant Ecosystem Management Plan presented in the *Cataby Mineral Sands Project, Environmental Protection Statement* (November 2005) to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The revised Plan shall include:

1. a map showing the locations of any priority or declared rare fauna species in potential groundwater-dependant ecosystem areas;
2. a map showing the locations of weekly vegetation health monitoring;
3. an assessment of the types of artificial recharge options to be used which will include identifying the best option for each site;
4. contingency measures for the prevention of vegetation impacts in potential groundwater-dependant ecosystem areas;
5. actions to be taken in the event that detrimental effects to vegetation health are observed, which includes consultation with a qualified botanist, within five days, to assess the cause of the impact; and
6. measures to mitigate impacts on vegetation in the event that the artificial recharge system does not perform. This will include the review and modification to the artificial recharge system to prevent further impacts on vegetation sites.

9-2 Following the utilisation of artificial recharge systems in the project, the proponent shall submit a report to the Department of Environment detailing:

1. the recharge options utilised for each area of mining;
2. outcomes of vegetation health monitoring conducted near mining operations; and
3. an evaluation of the performance of the artificial recharge system, with explanatory notes to substantiate the performance achieved.

9-3 The proponent shall implement the revised Groundwater-dependant Ecosystem Management Plan required by condition 9-1.

9-4 The proponent shall make the revised Groundwater-dependant Ecosystem Management Plan required by condition 9-1 publicly available.

10 Noise Management

10-1 Prior to ground-disturbing activities, the proponent shall prepare a Noise Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The objectives of the Plan are:

- to ensure that the amenity, health, welfare and comfort of residents in surrounding areas are protected; and
- to ensure compliance with the *Environmental Protection (Noise) Regulations 1997*.

10-2 The Noise Management Plan required by condition 10-1 shall include detailed descriptions of:

1. the acoustical model of the mining operations;
2. measures to minimise noise emissions;

3. operating procedures to be adopted for particular routine activities to minimise noise impacts on amenity at recreational areas;
4. the noise monitoring programme; and
5. the complaint management procedure.

10-3 The proponent shall implement the Noise Management Plan required by condition 10-1.

10-4 The proponent shall make the Noise Management Plan required by condition 10-1 publicly available.

11 Vegetation and Flora

11-1 Prior to ground-disturbing activities, the proponent shall prepare a Vegetation and Flora Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The objectives of this Plan are:

- to minimise disturbance to vegetation communities and significant flora; and
- to identify rare and priority flora species and ensure that they are protected during mining operations.

11-2 The Vegetation and Flora Management Plan required by condition 11-1 shall:

1. identify any priority or declared rare flora in or surrounding the proposal area;
2. include the management, monitoring and reporting of impacts on the defined vegetation communities and any identified declared rare flora and priority flora species within the proposal area;
3. plan clearing to ensure that no vegetation unit is completely removed;
4. include management and mitigation measures for dieback and weed management;
5. avoid all unnecessary impacts on vegetation and flora from mine operations; and
6. include any management or mitigation actions required, including modification to the mine layout to provide for retention of significant flora.

11-3 The proponent shall implement the Vegetation and Flora Management Plan required by condition 11-1.

11-4 The proponent shall make the Vegetation and Flora Management Plan required by condition 11-1 publicly available.

12 Surface Water

12-1 Prior to ground-disturbing activities, the proponent shall prepare a Surface Water Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

12-2 The Surface Water Management Plan required by condition 12-1 shall include detailed descriptions of:

1. existing surface flow regimes;
2. significant surface water dependant ecological systems which may be impacted by changes to existing surface water regimes;
3. a stream diversion plan;
4. stormwater management; and
5. aquatic fauna and riparian monitoring program;

and shall set out measures for:

6. maintaining the integrity of flow paths and water quantities to protect surface water dependent ecological systems; and
7. monitoring and reporting of any changes in surface water flow regimes caused by implementation of the proposal, and impacts on surface water dependant ecological systems.

12-3 The proponent shall implement the Surface Water Management Plan required by condition 12-1.

12-4 The proponent shall make the Surface Water Management Plan required by condition 12-1 publicly available.

12-5 In the event that adverse impacts on surface water dependent ecosystems are identified, the proponent shall develop and implement appropriate contingencies.

13 Dieback Management

13-1 Prior to ground-disturbing activities, the proponent shall prepare a site Dieback Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

13-2 The Dieback Management Plan required by condition 13-1 shall address:

1. product transport vehicles to and from the mine site;
2. passenger vehicles to and from the mine site;
3. earth moving and other machinery vehicles to and from the mine site;
4. regular monitoring for the site to detect the introduction of dieback;
5. contingency arrangements in the event of an occurrence of dieback; and
6. reporting to the Department of Environment in the event of an occurrence of dieback.

13-3 The proponent shall implement the Dieback Management Plan required by condition 13-1.

13-4 The proponent shall make the Dieback Management Plan required by condition 13-1 publicly available.

14 Rehabilitation

- 14-1 Prior to commencement of ground-disturbing activities, the proponent shall prepare, in consultation with the Department of Conservation and Land Management, a Rehabilitation Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority. The Plan shall provide the framework to ensure that the site is left in an environmentally acceptable condition.

The objectives of the Plan are to:

- revegetate the areas of vegetation which have been cleared during construction; and
- ensure that rehabilitation is carried out in a coordinated, progressive manner and is integrated with development planning, consistent with the Australian and New Zealand Minerals and Energy Council / Minerals Council of Australia *Strategic Framework for Mine Closure*, current best practice, and the agreed end land use(s).

- 14-2 The Rehabilitation Plan required by condition 14-1 shall include:

1. rehabilitation of all disturbed areas with local native species;
2. completion criteria;
3. a rehabilitation schedule including timing;
4. rehabilitation and revegetation requirements;
5. management measures (such as weed management);
6. monitoring and maintenance of rehabilitated areas for at least five years following completion; and
7. remedial actions.

- 14-3 The proponent shall implement the Rehabilitation Plan required by condition 14-1 until such time as the Minister for the Environment determines, on advice of the Environmental Protection Authority, that the proponent's rehabilitation responsibilities have been fulfilled.

- 14-4 The proponent shall make the Rehabilitation Plan required by condition 14-1 publicly available.

15 Decommissioning/Closure Plans

- 15-1 Prior to construction, the proponent shall prepare a Preliminary Decommissioning and Closure Plan, which provides the framework to ensure that the site is left in an environmentally acceptable condition, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The objective of the Plan is:

- To ensure that closure planning is carried out in a coordinated, progressive manner and is integrated with development planning, consistent with the Australian and New Zealand Minerals and Energy Council / Minerals Council of Australia

Strategic Framework for Mine Closure, current best practice, and the agreed end land use(s).

15-2 The Preliminary Decommissioning and Closure Plan required by condition 15-1 shall include:

1. rationale for the siting and design of plant and infrastructure as relevant to environmental protection, and conceptual plans for the removal or, if appropriate, retention of plant and infrastructure;
2. long-term management of ground and surface water systems affected by the mining operations, including groundwater drawdown and diversion;
3. a conceptual rehabilitation plan for all disturbed areas and a description of a process to agree on the end land use(s) with all stakeholders (see also rehabilitation requirements of condition 14-1); and
4. a conceptual plan for a care and maintenance phase.

15-3 At least 18 months prior to the anticipated date of decommissioning and closure, or at a time agreed with the Environmental Protection Authority, the proponent shall prepare a Final Decommissioning and Closure Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

15-4 The Final Decommissioning/Closure Plan required by condition 15-3 shall include:

1. removal or, if appropriate, retention of plant and infrastructure in consultation with relevant stakeholders;
2. long-term management of ground and surface water systems affected by the mining operations including groundwater drawdown and diversion;
3. rehabilitation to a standard suitable for the agreed new land use(s) (see also rehabilitation requirements of condition 14-1); and
4. identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities.

15-5 The proponent shall implement the Final Decommissioning and Closure Plan required by condition 15-3 until such time as the Minister for the Environment determines, on advice of the Environmental Protection Authority, that the proponent's decommissioning and closure responsibilities have been fulfilled.

15-6 The proponent shall make the Final Decommissioning and Closure Plan required by condition 15-3 publicly available.

Procedures

1. Where a condition states "to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority", the Environmental Protection Authority will provide that advice to the Department of Environment 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.
3. Where a condition lists advisory bodies, it is expected that the proponent will obtain the advice of those listed as part of its compliance reporting to the Department of Environment.

Notes

1. The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment over the fulfilment of the requirements of the conditions.
2. The proponent is required to apply for a Works Approval and Industry Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.
3. The proponent is required to apply for the appropriate Licences / Permits for this project under the provisions of the *Rights in Water and Irrigation Act 1914* as well as *Rights in Water and Irrigation Regulations 2000*.
4. The proponent is required to apply for registration under the *Radiation Safety Act 1975*.

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

18 APR 2006

Schedule 1

The Proposal (Assessment No. 1612)

The mineral sands project will consist of a series of 13 open pits over approximately 25 kilometres, ranging in size from 9 hectares to 110 hectares with a range in depth from 17 to 60 metres.

The pits will be progressively mined by dry mining techniques using combinations of mining equipment. The overburden will initially be stockpiled, but once operations begin it will be placed directly into the mine voids.

The concentrator will be located centrally in the operations and will operate at 1100 tonnes per hour throughput, producing 760 to 780 kilotonnes of Heavy Mineral Concentrate per annum.

Mining will commence in the middle section of the deposit, heading north from the concentrator and then south from the concentrator. Mining of each pit will take between 1 to 12 months.

The life of the mine is approximately five years with decommissioning beginning in 2010. Decommissioning and final rehabilitation will take approximately three years. The pits will be mined, backfilled and rehabilitated sequentially.

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

Table 1 – Key Proposal Characteristics

Element	Description
Project Life	5 years (continual operation)
Construction (approximate)	9 months
Mining (approximate)	5 years
Closure (approximate)	3 years
Rehabilitation	Ongoing throughout mine life, and completed by 2013
Land Tenure	Iluka Resources Limited (majority holder) and private land owners.
Mine Tenements	M70/194; M70/195; M70/196; M70/517; M70/518; M70/696; M70/760; M70/791; M70/867; M70/868; M70/869; M70/1017; M70/1018; M70/1086
Ore Volume	40 Million tonnes
Overburden Volume	150 Million tonnes
Rate of Extraction (overburden and ore)	40 to 60 Million tonnes per year
Processing Rate	800 to 1100 tonnes per hour
Extraction Method	Dry Mining
Number of Mine Pits	13
Size of Mine Pits	9 to 110 hectares
Depth of Mine Pit	Ranging from 17 to 60 metres.
Area of Disturbance	650 hectares
Area of Vegetation Disturbance	115 hectares

Element	Description
Water Supply Source	Superficial formations – pit dewatering and production bores.
Groundwater Abstraction Rates	2 to 50 Megalitres per day
Maximum Process Water Requirements	6600 Megalitres per year

Figures (attached)

Figure 1 – Cataby Mineral Sands Project Location.

Figure 2 – Cataby Mineral Sands Mine Layout including area of 'No Mining'.

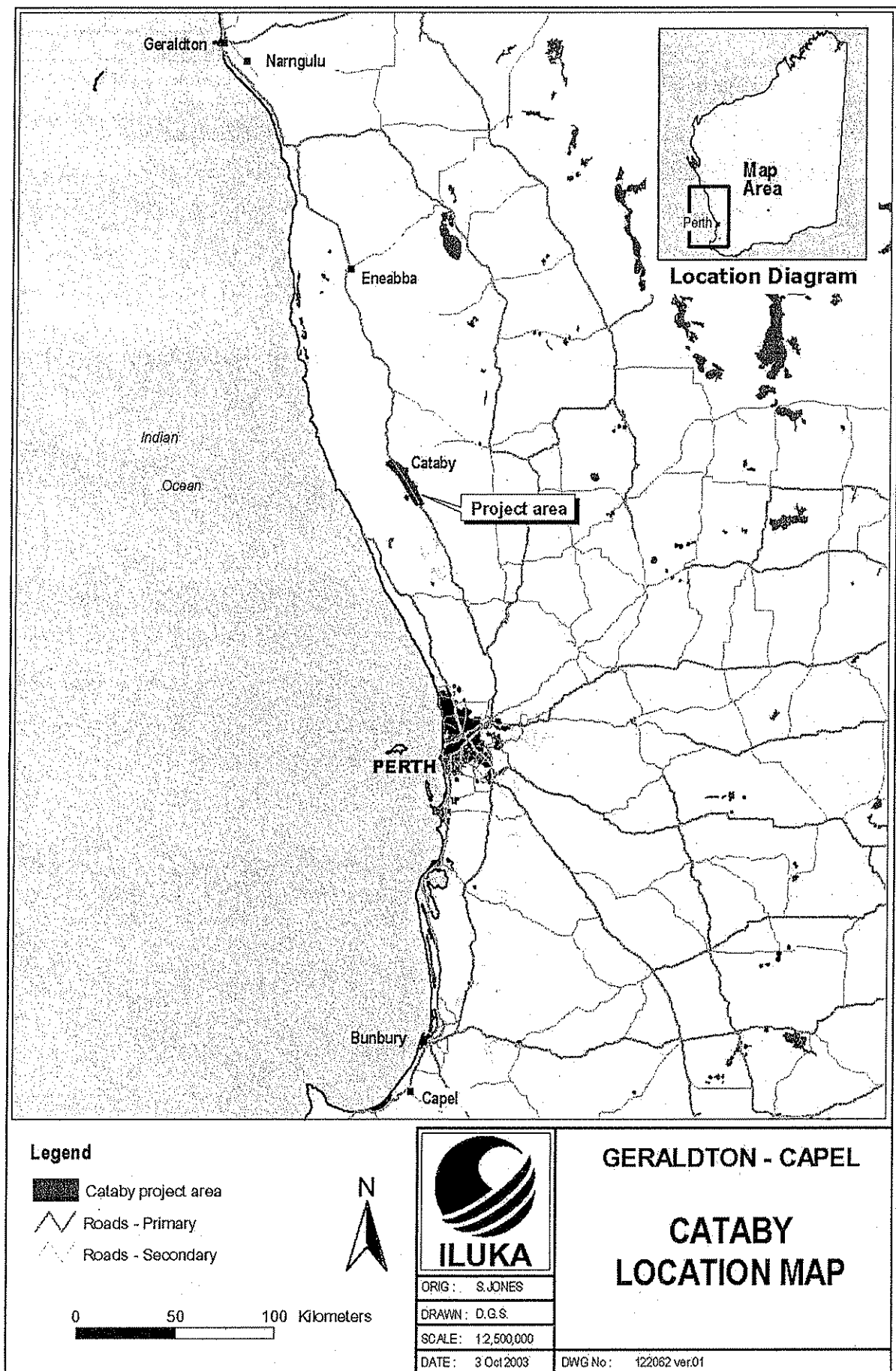


Figure 1: Cataby Mineral Sands Project Location

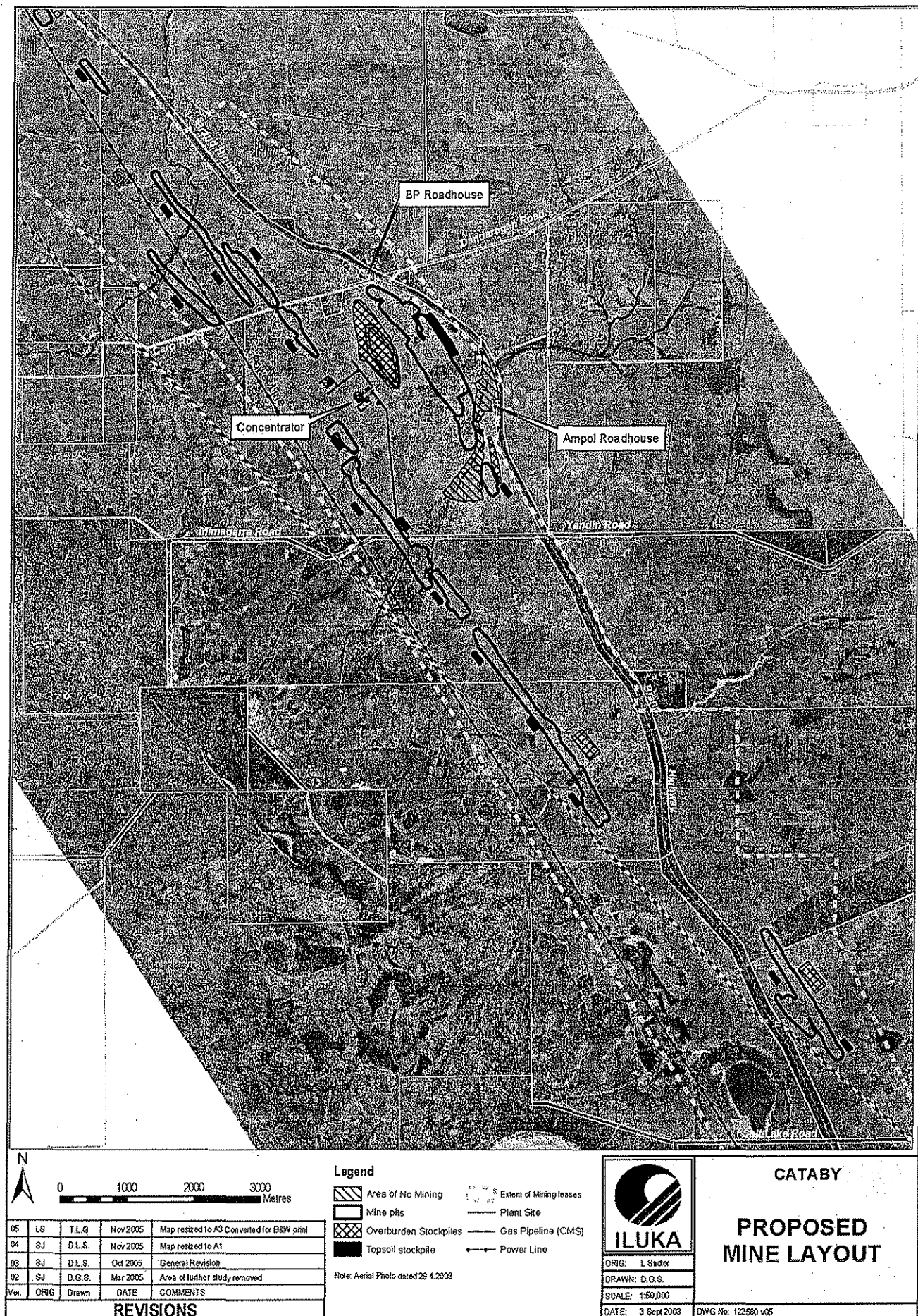


Figure 2: Cataby Mineral Sands Mine Layout including area of 'No Mining'.

Proponent's Environmental Management Commitments

9 December 2005

**CATABY MINERAL SANDS PROJECT
CATABY, SHIRE OF DANDARAGAN**

(Assessment No. 1612)

Iluka Resources Limited

Proponent's Environmental Management Commitments – December 2005

CATABY MINERAL SANDS PROJECT, CATABY, SHIRE OF DANDARAGAN (Assessment No. 1612)

Note: The term “commitment” as used in this schedule includes the entire row of the table and its six separate parts as follows:

- a commitment number;
- a commitment topic;
- the objective of the commitment;
- the 'action' to be undertaken by the proponent;
- the timing requirements of the commitment; and
- the body/agency to provide technical advice to the Department of Environment.

[illegible]

No.	Topic	Objective	Action	Timing	Advice
3.	Carnaby's Cockatoo	<p>To maintain and enhance the habitat of Carnaby's Cockatoos to promote the recovery of the population of this species consistent with the <i>Carnaby's Black-Cockatoo Recovery Plan</i> (Cale, 2003).</p> <p>To protect endangered species consistent with the provisions of the <i>Western Australian Wildlife Conservation Act 1950</i> and the <i>Environment Protection and Biodiversity Conservation Act 1999</i>.</p>	1. Implement offsets specified in the Carnaby's Cockatoo Management Plan presented in Appendix A of the <i>Cataby Mineral Sands Project, Environmental Protection Statement</i> (November 2005).	Ongoing	CALM
4.	Oliver Remnants	<p>To maintain the abundance, species diversity, geographic distribution and productivity of vegetation communities.</p> <p>To maintain terrestrial ecological integrity and biodiversity and ensure that impacts on vegetation communities are avoided.</p>	<p>1. Collect seed from the York Gums before clearing.</p> <p>2. Fence and clear non-native debris in the area of 'No Mining' shown in figure 2.</p>	<p>Prior to construction</p> <p>During construction / ongoing</p>	CALM

Abbreviations:

CALM = Department of Conservation & Land Management.

Attachment 1 to Ministerial Statement 720

Change to proposal approved under section 45C of the *Environmental Protection Act 1986*

This Attachment replaces Schedule 1 in Ministerial Statement 720

Proposal: Cataby Mineral Sands Project, Cataby, Shire of Dandaragan

Proponent: Iluka Resources Limited

Changes:

- Revise “Proposal Description”;
- Remove reference to “Elements” which are not relevant to the environment; or managed by other regulatory processes;
- Add a defined “Development Envelope” to the proposal;
- Increase “Area of Disturbance”;
- Amend “Size of Mine Pits”; and
- Update Figures in Schedule 1.

Table 1: Summary of the Proposal

Proposal Title	Cataby Mineral Sands Project, Cataby, Shire of Dandaragan
Short Description	The proposal is to mine a series of open pits over approximately 25 kilometres, within the Cataby Heavy Mineral Sands Project located approximately 150 km north of Perth.

Table 2: Location and authorised extent of physical and operational elements

Element	Location	Previously Authorised Extent	Authorised Extent
Project Life	N/A	5 years (continual operation)	Removed as not a significant Key Characteristic relevant to the environment.
Construction (approximate)	N/A	9 months	Removed as not a significant Key Characteristic relevant to the environment.
Mining (approximate)	N/A	5 years	Removed as not a significant Key Characteristic relevant to the environment.
Closure (approximate)	N/A	3 years	Removed as “Decommissioning and Closure” is addressed by Condition 15 of Statement 720.
Rehabilitation	N/A	Ongoing throughout mine life, and completed by 2013.	Ongoing throughout mine life
Land Tenure	N/A	Iluka Resources Limited (majority holder) and private land owners.	Removed as not a significant Key Characteristic relevant to the environment.

Element	Location	Previously Authorised Extent	Authorised Extent
Mine Tenements	N/A	M70/194; M70/195; M70/196; M70/517; M70/518; M70/696; M70/760; M70/791; M70/867; M70/868; M70/869; M70/1017; M70/1018; M70/1086.	Removed as regulated under the <i>Mining Act 1978</i>.
Ore Volume	N/A	40 Mt	Removed as not a significant Key Characteristic relevant to the environment.
Overburden Volume	N/A	150 Mt	164 Mt
Rate of Extraction (Overburden and Ore)	N/A	40 to 60 Mt/d	Removed as not a significant Key Characteristic relevant to the environment.
Processing Rate	N/A	800 to 1100 t/d	Removed as not a significant Key Characteristic relevant to the environment.
Extraction Method	N/A	Dry Mining	Dry Mining
Number of Mine Pits	Located within the development envelope as shown in Figure 1	13	Removed as not a significant Key Characteristic relevant to the environment.
Size of Mine Pits	N/A	9 to 110 ha	6 to 119 ha
Depth of Mine Pit	N/A	Ranging from 17 to 60 m	Ranging from 17 to 60 m
Development Envelope	Located within the development envelope as shown in Figure 1	Total Area	No more than 2514 ha
Area of Disturbance		650 ha	No more than 1942 ha
Area of Native Vegetation Disturbance		115 ha	No more than 156 ha
Water Supply Source	N/A	Superficial formations – pit dewatering and production bores.	Removed as regulated under the <i>Rights in Water and Irrigation Act (1914)</i>
Groundwater Abstraction Rates	N/A	2 to 50 ML/d	Removed as regulated under the <i>Rights in Water and Irrigation Act (1914)</i>
Maximum Process Water Requirements	N/A	6600 ML/y	Removed as regulated under the <i>Rights in Water and Irrigation Act (1914)</i>

Note: Text in **bold** in Table 2 indicates a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
Mt	Million tonnes
Mt/d	Million tonnes per day
t/d	tonnes per day
ha	hectare
m	metre
km	kilometre
ML/d	Megalitres per day
ML/y	Megalitres per year

List of Figures: Figure 1 replaces all Figures in Schedule 1.

Figure 1 – Cataby Heavy Mineral Sands Project Development Envelope

[Signed 30 December 2014]

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

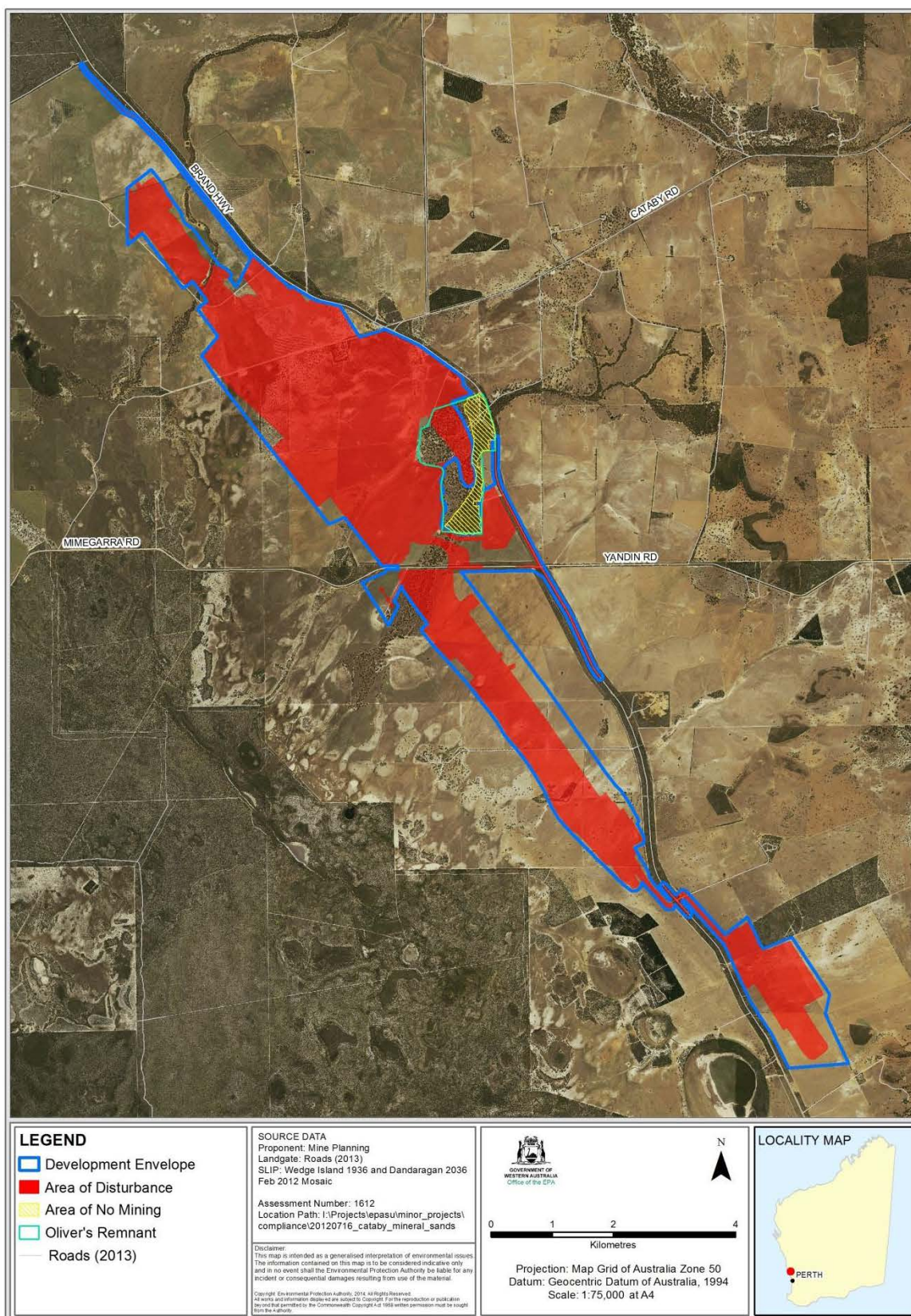


Figure 1 – Cataby Heavy Mineral Sands Project Development Envelope