



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

ELLENDALE 4 DIAMOND PROJECT, WEST KIMBERLEY  
SHIRE OF DERBY-WEST KIMBERLEY

**Proposal:** The construction and operation of a diamond mine, power station and processing plant within Mining Lease 04/372 in the West Kimberley area 140 kilometres east of Derby, to process approximately 4.4 million tonnes per annum of ore, as documented in schedule 1 of this statement.

**Proponent:** Kimberley Diamond Company NL

**Proponent Address:** 12 Walker Avenue, WEST PERTH WA 6005

**Assessment Number:** 1571

**Report of the Environmental Protection Authority:** Bulletin 1181

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

22 AUG 2005

### **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 application for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement to the Minister for the Environment, prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

- 1 the environmental factors of the proposal have not changed significantly;
- 2 new, significant, environmental issues have not arisen; and
- 3 all relevant government authorities have been consulted.

Note: The Minister for the Environment may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the proposal.

### **5 Compliance Audit and Performance Review**

- 5-1 The proponent shall prepare an audit program and submit compliance reports to the Department of Environment which address:

- 1 the status of implementation of the proposal as defined in schedule 1 of this statement;
- 2 evidence of compliance with the conditions and commitments; and
- 3 the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the *Environmental Protection Act 1986*, the Chief Executive Officer of the Department of Environment is empowered to monitor the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement.

5-2 The proponent shall submit a performance review report every three years after the start of operations, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, which addresses:

- 1 the major environmental issues associated with implementing the project; the targets for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those targets;
- 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 targets over the next three years, including improvements in technology and management processes.

5-3 The proponent may submit a report prepared by an independent auditor to the Chief Executive Officer of the Department of Environment on each condition/commitment of this statement which requires the preparation of a management plan, programme, strategy or system, stating whether the requirements of each condition/commitment have been fulfilled within the timeframe stated within each condition/commitment.

## **6 Groundwater Abstraction (Supply and Dewatering)**

6-1 Prior to the commencement of groundwater abstraction from the pit area or borefield, the proponent shall prepare and implement a Groundwater Level Monitoring Plan to monitor levels in the aquifers affected by groundwater abstraction and dewatering and in the adjacent springs in the Oscar Range, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

- 6-2 Prior to water abstraction activities, the proponent shall have in place contingency plans in the event that a significant change to the water levels of the Oscar Range springs is detected and which results from groundwater abstraction or dewatering by the proponent, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority
- 6-3 Prior to water abstraction activities, the proponent shall have in place contingency plans in the event that changes to water levels and flows in the Grant aquifer, likely to affect pastoral water supplies, are detected and which result from groundwater abstraction or dewatering by the proponent, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.
- 6-4 The proponent shall implement the contingency plans required by conditions 6-2 and 6-3 as necessary.

## **7 Fauna Management Plan for Pits and Trenches**

- 7-1 The proponent shall manage fauna to avoid or reduce fauna deaths in pits and trenches in accordance with a Fauna Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

The Plan shall address:

- 1 the length of trench open at any time;
- 2 procedures for inspection of pits and trenches;
- 3 frequency and timing of inspection of pits and trenches; and
- 4 a register of animal capture and deaths.

- 7-2 The proponent shall implement the Fauna Management Plan required by condition 7-1.
- 7-3 The proponent shall make the Fauna Management Plan required by condition 7-1 publicly available.

## **8 Geological Features**

- 8-1 Within three years following the formal authority issued to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, the proponent shall prepare a Geological Features Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This Plan shall include:

1. investigations into the location and number of diamond pipes features on mining leases held by the proponent;

2. identification of features to be protected from future mining operations; and
3. recording and reporting of the abovementioned features.

8-2 The proponent shall implement the Geological Features Management Plan required by condition 8-1.

8-3 The proponent shall make the Geological Features Management Plan required by condition 8-1 publicly available.

## **9 Decommissioning/Closure**

9-1 Prior to commencement of construction, the proponent shall prepare a Preliminary Decommissioning/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 Preliminary Decommissioning/Closure Plan shall address:

- 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 tailings storage facility, waste rock dumps and pit;
- 3 design of the pit and shoreline to ensure long-term stability and protection of fauna;
- 4 a conceptual rehabilitation plan for all disturbed areas, incorporating strategies for the stripping, stockpiling and re-use of topsoil, and a description of a process to agree on the end land use(s) with all stakeholders;
- 5 a conceptual plan for a care and maintenance phase; and
- 6 management of noxious materials to avoid the creation of contaminated areas.

9-2 At least 12 months prior to the anticipated date of decommissioning/closure, or at a time agreed with the Environmental Protection Authority, the proponent shall prepare a Final Decommissioning/Closure Plan designed 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 Final Decommissioning/Closure Plan shall address:

- 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 tailings storage facility, waste rock dumps and pit, including further groundwater modelling, to predict salinity changes in the resultant pit lake and adjoining aquifers for the cases where rainfall is -20% and +10% of the annual average over an extended period;
  - 3 long-term management of the pit lake, formed at the cessation of mining, including stability of the pit walls;
  - 4 rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s); and
  - 5 identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities.
- 9-3 The proponent shall implement the Final Decommissioning/Closure Plan required by condition 9-2 until such time as the Minister for the Environment determines, on advice of the Environmental Protection Authority, that the proponent's decommissioning / closure responsibilities have been fulfilled.
- 9-4 The proponent shall make the Final Decommissioning/Closure Plan required by condition 9-2 publicly available.

## **10 Phased Rehabilitation**

- 10-1 Within two years following the formal authority issued to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, the proponent shall prepare a Phased Rehabilitation Plan incorporating:
- 1 proposed final land use;
  - 2 rehabilitation objectives and completion criteria, including plant diversity as well as density;
  - 3 trials to determine which native species, including those found outside their known ranges, will grow on waste dumps for the purpose of replacing, as far as possible, fauna habitat and food sources and to create a self-sustaining ecosystem;
  - 4 timetable for phased rehabilitation of impacted areas;
  - 5 identification of species to be used in each area and plans for sourcing of seed;
  - 6 control and management of the spread of non-indigenous plants and animals; and
  - 7 consultation with stakeholders,
- to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In the preparation of advice to the Minister for the Environment, the Environmental Protection Authority expects that the advice of the Departments of Conservation and Land Management and Industry and Resources will be obtained.

10-2 The proponent shall make the Phased Rehabilitation Plan required by condition 10-1 publicly available.

10-3 The proponent shall implement the Phased Rehabilitation Plan required by condition 10-1.

10-4 The proponent shall review and revise the Phased Rehabilitation Plan required by condition 10-1 at intervals of not exceeding two years.

### **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 Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.
3. Within this statement, to “have in place” means to “prepare, document, implement and maintain for the duration of the proposal”.

## Schedule 1

### The Proposal (Assessment No. 1571)

The proposal is to mine diamonds on Mining Lease M04/372, approximately 140 kilometres east of Derby in the West Kimberley region. The coordinates of the project area are:

	Latitude	Longitude
North West	-17° 39' 44"	124° 54' 25"
North East	-17° 40' 00"	124° 55' 40"
South East	-17° 41' 26"	124° 56' 20"
South West	-17° 41' 15"	124° 54' 52"

The proposal involves the development of a deep open-cut mine and construction of a processing plant at the Ellendale 4 site. Mining will take place below the groundwater table and dewatering of the pit will be required. Table 1 lists the key characteristics of the proposal. Figures 2 and 3 show the location of the key components of the proposal.

Dimensions of major components of the proposal are:

- Approximately 514 hectares of vegetation disturbance;
- Open pit to 110 metres below ground surface, and area of approximately 68 hectares (including bunds);
- Waste dumps of approximately 68 hectares;
- Coarse tailings dump of approximately 33 hectares;
- Tailings storage facility for fine tailings of approximately 180 hectares to hold approximately 20.4 million tonnes of tailings; and
- Water collection pond of approximately 34.5 hectares.

**Table 1 - Key Proposal Characteristics**

Element	Description
Life of project (mine production)	Approximately 6 years (continual operation)
Size of orebody: <ul style="list-style-type: none"> <li>• Inferred (this proposal)</li> <li>• Defined</li> <li>• Waste</li> </ul>	<p>Approximately 25.5 Million tonnes</p> <p>Approximately 15 Million tonnes</p> <p>Approximately 11.5 Million tonnes</p>
Depth of mine pit	Approximately 110 metres below ground surface
Area of disturbance (including pit, associated infrastructure and access)	Approximately 514 hectares
Mine operation	24 hours per day, 7 days per week

Element	Description
<p><i>Major components:</i></p> <ul style="list-style-type: none"> <li>• Open cut pit</li> <li>• Run-of-Mine pad</li> <li>• Topsoil, low grade, oversize and lights stockpiles</li> <li>• Two waste dumps (approximately 11.5 million tonnes)</li> <li>• Coarse tailings waste dump</li> <li>• Processing plant with crushing, washing and screening circuits</li> <li>• Power station and fuel farm</li> <li>• Process and raw water ponds</li> <li>• Tailings Storage Facility for thickened fine tailings</li> <li>• Water collection pond (tailings water and runoff)</li> <li>• Production borefield adjacent to the southern mining lease boundary</li> <li>• Dewatering and monitoring bores</li> <li>• Haul roads and other access roads</li> <li>• Laydown areas</li> <li>• Mine administration offices and contractor's workshops</li> <li>• Recovery room for X-ray sorting</li> <li>• Cattle exclusion fences around the entire operation</li> <li>• Borrow pits for construction materials</li> </ul>	<p>Refer to Figures 2 (mine layout) and 3 (processing plant layout).</p>
<p><i>Processing:</i></p> <ul style="list-style-type: none"> <li>• Design rate</li> <li>• Annual rate</li> <li>• Dense Medium Separation</li> <li>• Process circuit water requirement</li> <li>• Make-up water requirement</li> </ul>	<p>600 tonnes per hour  Approximately 4.4 Million tonnes per annum  Ferrosilicon medium  1,950 kilolitres of water (at any given time)  306 to 380 kilolitres per hour</p>
<p><i>Tailings:</i></p> <ul style="list-style-type: none"> <li>• Fine (less than 1.6mm)</li> <li>• Coarse (1.6 to 14mm)</li> <li>• Primary recovery rejects.</li> </ul>	<p>Disposed in central thickened Tailings Storage Facility 20.4 million tonnes (13.6 million cubic metres) design capacity  Disposed in waste dump approximately 6.88 million tonnes (4.7 million cubic metres)  44,000 tonnes per annum - may be reprocessed.</p>

Element	Description
<p><i>Waste rock dumps:</i></p> <ul style="list-style-type: none"> <li>• North Dump</li> <li>• South Dump</li> </ul> <p>Height</p> <p>Slope batters</p> <p>Lifts</p>	<p>Approximately 2.9 million loose cubic metres (19 hectares footprint)</p> <p>Approximately 4.9 million loose cubic metres (49 hectares footprint)</p> <p>Maximum 30 metres, or as required by Department of Industry and Resources.</p> <p>15° , or as required by Department of Industry and Resources.</p> <p>10 metres, or as required by Department of Industry and Resources.</p>
<p><i>Water supply:</i></p> <ul style="list-style-type: none"> <li>• Source</li> <li>• Annual requirement</li> </ul>	<p>Grant aquifer, 8 production bores</p> <p>3.3 Gigalitres per annum</p>
<p><i>Pit dewatering (of Ellendale 4 lamproite aquifer):</i></p> <ul style="list-style-type: none"> <li>• Method</li> <li>• First year of dewatering</li> <li>• Ongoing (after first 21 months)</li> </ul>	<p>4 dewatering bores and in-pit sumps</p> <p>600,000 kilolitres</p> <p>150,000 kilolitres per annum</p>
<p><i>Power supply:</i></p> <ul style="list-style-type: none"> <li>• Power station</li> <li>• Borefield</li> </ul>	<p>6 x 1 Megawatt diesel-powered generating sets (11 kilovolt power supply at each transformer)</p> <p>Stand-alone diesel generators at each bore site</p>
<p>Fuel quantity used</p>	<p>Estimated 11 million litres per annum</p>

### Figures (attached)

Figure 1 – Project locality map

Figure 2 – Project site layout

Figure 3 – Processing plant layout

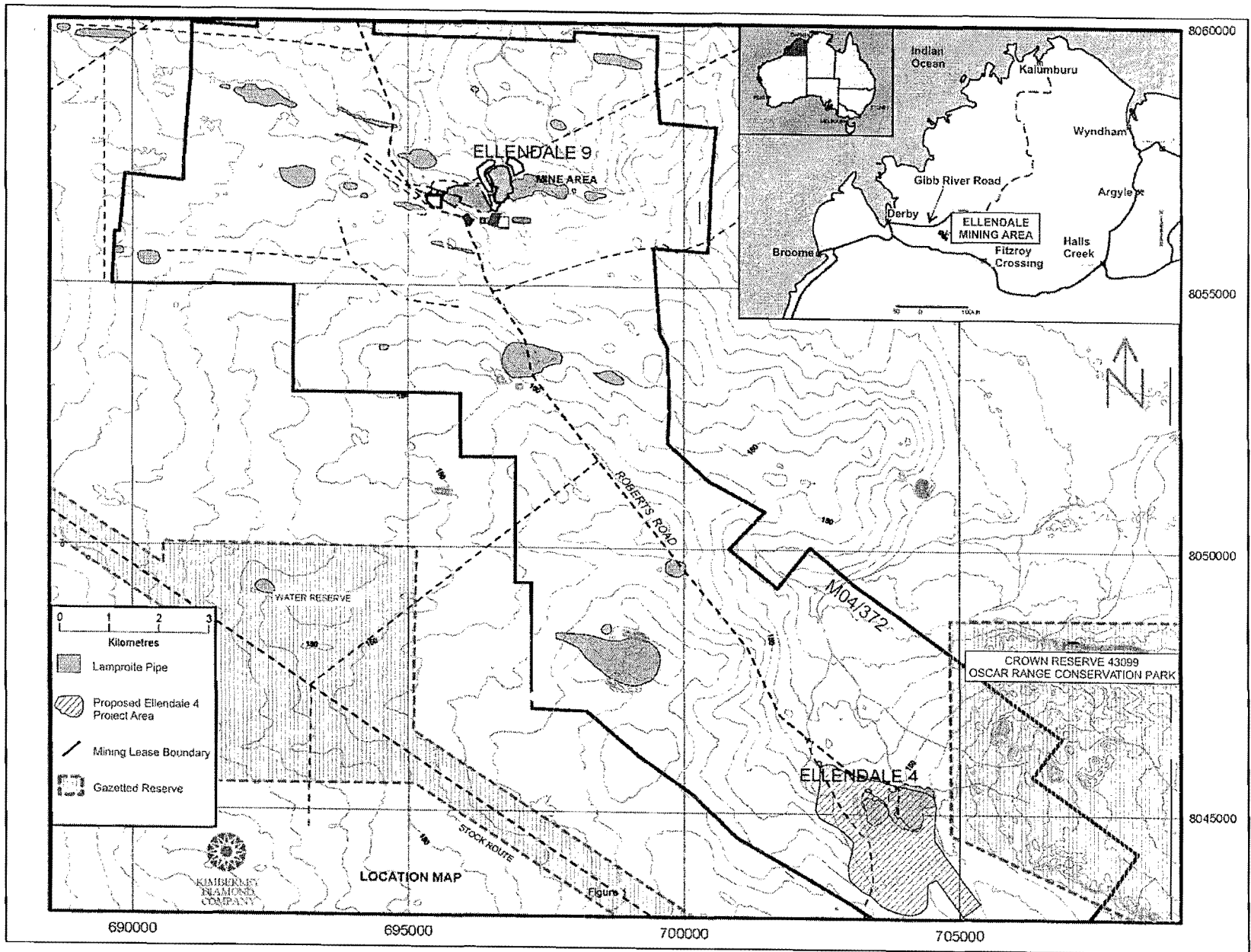


Figure 1: Project locality map

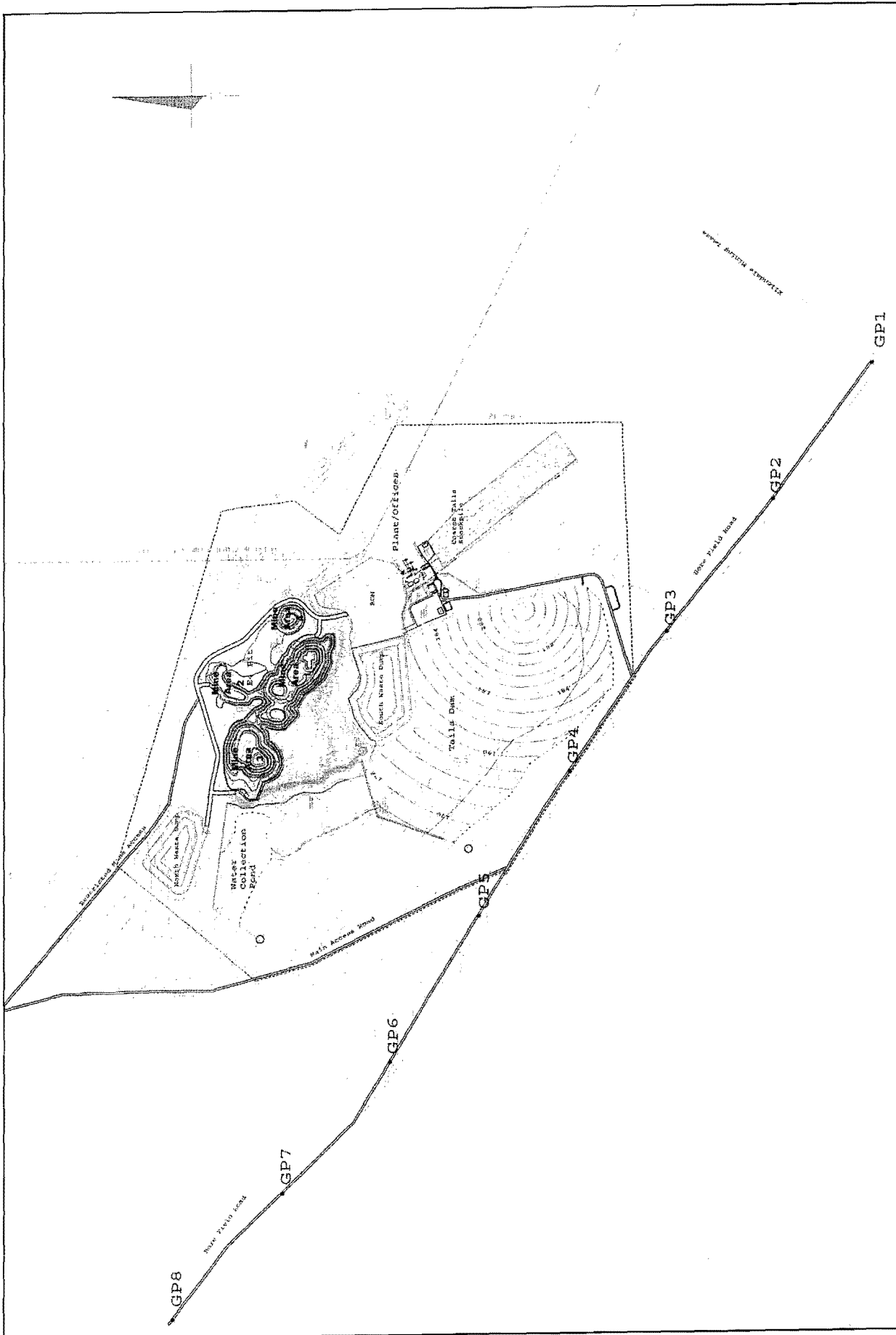


Figure 2: Project site layout

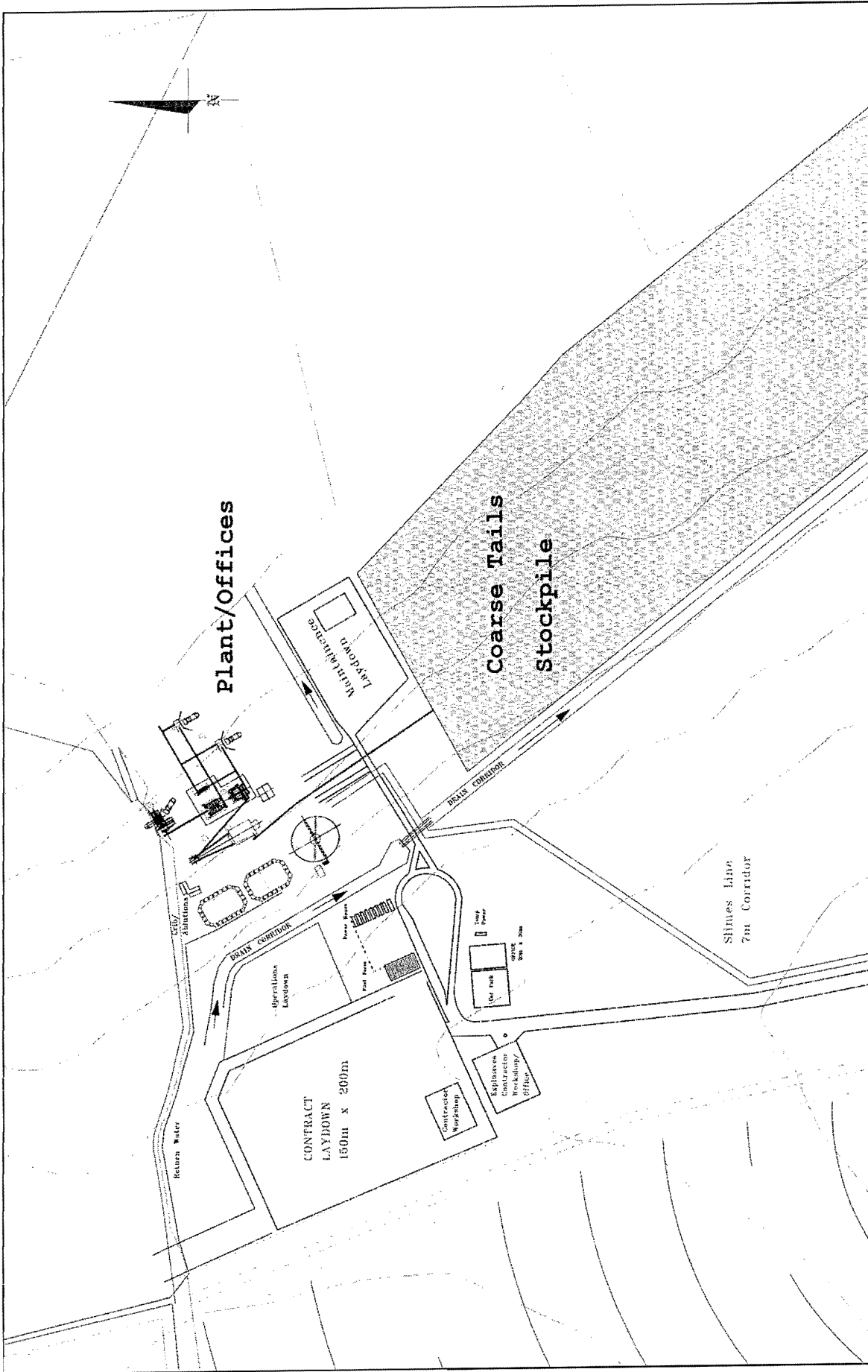


Figure 3: Processing plant layout

**Proponent's Environmental Management Commitments**

August 2005

Ellendale 4 Diamond Project  
West Kimberley  
Shire of Derby-West Kimberley

(Assessment No. 1571)

Kimberley Diamond Company NL

## Proponent's Environmental Management Commitments – August 2005

### ELLENDALE 4 DIAMOND PROJECT, WEST KIMBERLEY, SHIRE OF DERBY-WEST KIMBERLEY (Assessment No. 1571)

**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.

No.	Topic	Objective	Action	Timing	Advice
1	Environmental Management (Construction)	To avoid, minimise or mitigate impact on the environment	<p>Amend existing Project Management Plan to include operational procedures for the <i>construction</i> of the project.</p> <p>The procedures will address the management or avoidance of impacts on the environment, such as impacts on:</p> <ol style="list-style-type: none"> <li>1 Groundwater quantity and quality</li> <li>2 Surface water</li> <li>3 Vegetation and flora,</li> <li>4 Fauna,</li> <li>5 Conservation areas,</li> <li>6 Air, including dust impact,</li> <li>7 Heritage,</li> <li>8 Surrounding land use, with the construction of cattle exclusion fencing,</li> </ol>	Prior to Construction	<p>DOIR</p> <p>CALM</p> <p>FESA</p>

			<p>and the management of:</p> <ol style="list-style-type: none"> <li>9 Weeds,</li> <li>10 Fire, including preparation of a Bush Fire Management Plan,</li> <li>11 Noise,</li> <li>12 Waste,</li> <li>13 Dangerous and hazardous substances, and</li> <li>14 Hazards, including preparation of an Emergency Response Plan.</li> </ol>		
2	Environmental Management	To avoid, minimise or mitigate impact on the environment	The above operational procedures will be reviewed by an independent auditor.	Prior to Construction	
3	Environmental Management	To avoid, minimise or mitigate impact on the environment	The above Project Management Plan will be implemented.	During Construction	
4	Environmental Management	To avoid, minimise or mitigate impact on the environment	Environmental performance achieved as a result of the Project Management Plan will be audited, and procedures reviewed as necessary.	During Construction	
5	Environmental Management (Operation)	To avoid, minimise or mitigate impact on the environment	<p>Amend existing Project Management Plan to include operational procedures for the <i>operation</i> of the project.</p> <p>The procedures will address the management or avoidance of operational impacts on the environment, such as impacts on:</p> <ol style="list-style-type: none"> <li>1 Groundwater quantity and quality,</li> <li>2 Surface water,</li> <li>3 Vegetation and flora,</li> <li>4 Fauna,</li> <li>5 Conservation areas,</li> </ol>	Prior to Operation	<p>DOIR</p> <p>CALM</p> <p>DOCEP</p> <p>FESA</p>

			6 Air, including dust impact, 7 Heritage, 8 Surrounding land use, and the management of: 9 Weeds, 10 Fire, including preparation of a Bush Fire Management Plan, 11 Noise, 12 Waste, 13 Dangerous and hazardous operational substances, and 14 Hazards, including preparation of an Emergency Response Plan.		
6	Environmental Management	To avoid, minimise or mitigate impact on the environment	The above operational procedures will be reviewed by an independent auditor.	Prior to Operation	
7	Environmental Management	To avoid, minimise or mitigate impact on the environment	The above Project Management Plan will be implemented.	During Operation	
8	Environmental Management	To avoid, minimise or mitigate impact on the environment	Environmental performance achieved as a result of the Project Management Plan will be audited, and procedures reviewed as necessary.	During Operation	

**Abbreviations:**

CALM Department of Conservation & Land Management  
 DOCEP Department of Consumer & Employment Protection  
 DOIR Department of Industry & Resources  
 FESA Fire & Emergency Services Authority

## Attachment 1 to Statement 684

### Change to Proposal

**Proposal:** Ellendale 4 Diamond Mine

**Proponent:** Kimberley Diamond Company

**Change:** Increase in throughput of ore to 6Mtpa; increase in height of the coarse tailings stockpile and batter wall angles; modification of the South Plant; increased dewatering; and modification to the South Waste dump and addition of a new northern waste dump.

**Components of original Proposal as implemented:**

Component	Quantities/Description
<i>Processing:</i> <ul style="list-style-type: none"> <li>• Design rate</li> <li>• Annual rate</li> </ul>	<p>600 tonnes per hour</p> <p>Approximately 4.4 million tonnes per annum</p>
<i>Tailings:</i> <ul style="list-style-type: none"> <li>• Coarse (1.6 to 14mm)</li> </ul>	<p>Disposed in waste dumps approximately 6.88 million tonnes (4.7 million cubic metres)</p>
<i>Waste rock dumps:</i> <ul style="list-style-type: none"> <li>• North Dump</li> <li>• South Dump</li> </ul>	<p>Approximately 2.9 million loose cubic metres (19 hectares footprint)</p> <p>Approximately 4.9 million loose cubic metres (49 hectares footprint)</p>
Height	Maximum of 30 metres
Slope batters	15°
<i>Pit dewatering:</i> <ul style="list-style-type: none"> <li>• Method</li> <li>• Ongoing (after first 21 months)</li> </ul>	<p>4 dewatering bores and in-pit sumps</p> <p>150,000 kilolitres per annum</p>

**Components of changed Proposal:**

<b>Component</b>	<b>Quantities/Description</b>
<i>Processing:</i> <ul style="list-style-type: none"><li>• Design rate</li><li>• Annual rate</li></ul>	800 tonnes per hour  Approximately 6.0 million tonnes per annum
<i>Tailings:</i> <ul style="list-style-type: none"><li>• Coarse (1.2 to 60mm)</li></ul>	Disposed in waste dumps approximately 6.88 million tonnes (4.7 million cubic metres)
<i>Coarse tailings stockpile:</i> Height  Slope batters  Area	Maximum 50 metres  10 – 15°  Approximately 20 hectares
<i>Waste rock dumps:</i> <ul style="list-style-type: none"><li>• North Dump 1</li><li>• North Dump 2</li><li>• South Dump</li></ul> Height  Slope batters	Approximately 2.9 million loose cubic metres (19 hectares footprint)  Approximately 1.5 million loose cubic metres (12 hectares footprint)  Approximately 3.2 million loose cubic metres (35 hectares footprint)  Maximum of 30 metres  15°
<i>Pit dewatering:</i> <ul style="list-style-type: none"><li>• Method</li><li>• Ongoing (from year 2)</li></ul>	7 dewatering bores and in-pit sumps (to be used as process water in plant)  1 gigalitre per annum

**Approved under delegation  
from Minister for the Environment:**

Approval Date: 11-6-08

## Attachment 2 to Ministerial Statement 684

### Change to proposal approved under s45C of the *Environmental Protection Act 1986*

#### **This attachment replaces Schedule 1 and Attachment 1 of Ministerial Statement 684**

**Proposal:** Ellendale 4 Diamond Mine, West Kimberley Shire of Derby-West Kimberley

**Proponent:** Kimberley Diamond Company NL

**Change:**

- Increase the clearing area;
- Add a defined 'Proposal footprint' and 'Development envelope' to the proposal; and
- Remove elements that are not key proposal characteristics, concluded or managed under other legislation.

**Table 1: Summary of proposal**

Proposal title	Ellendale 4 Diamond Mine, West Kimberley Shire of Derby-West Kimberley
Short description	<b>The proposal is to mine diamonds on Mining Lease M04/372, approximately 140 kilometres east of Derby in the West Kimberley region as indicated in Figure 1. The proposal involves an open cut diamond mine and processing operation. Mining below the groundwater table will take place and dewatering of the pit is required. Elements of the mine operation are indicated in Table 2 and the development envelope in Figure 2 and Table 4.</b>

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

<b>Element</b>	<b>Previously authorised extent</b>	<b>Authorised extent / location</b>
Life of project (mine production)	Approximately 6 years (continual operation)	<b>Removed as not a key proposal characteristic</b>
Size of orebody: <ul style="list-style-type: none"> <li>• Inferred (this proposal)</li> <li>• Defined</li> <li>• Waste</li> </ul>	<ul style="list-style-type: none"> <li>Approximately 25.5 Million tonnes</li> <li>Approximately 15 Million tonnes</li> <li>Approximately 11.5 Million tonnes</li> </ul>	<ul style="list-style-type: none"> <li><b>Removed as not a key proposal characteristic</b></li> <li><b>Removed as not a key proposal characteristic</b></li> <li><b>Removed as not a key proposal characteristic</b></li> </ul>
Depth of mine pit	Approximately 110 metres below ground surface	Approximately 110 metres below ground surface
Area of disturbance (including pit, associated infrastructure and access)	Approximately 514 hectares	<b>Removed and incorporated in the proposal footprint within the mine development envelope</b>
<b>Mine development envelope</b>		<b>Clearing of a proposal footprint of no more than 514 ha within the mine development</b>

Element	Previously authorised extent	Authorised extent / location
<b>Open cut mine, stockpiles, waste rock dumps, tailings storage facility, return water dam and ponds, processing plant, infrastructure and access roads</b>		envelope of 939.83 ha indicated in Figure 2 and coordinates in Table 4
Mine operation	24 hours per day, 7 days per week	<b>Removed as not a key proposal characteristic</b>
<i>Major components:</i> <ul style="list-style-type: none"> <li>• Open cut mine</li> <li>• Run-of-Mine pad</li> <li>• Topsoil, low grade, oversize and lights stockpiles</li> <li>• Two waste dumps (approximately 11.5 million tonnes)</li> <li>• Coarse tailings waste dump</li> <li>• Processing plant with crushing, washing and screening circuits</li> <li>• Power station and fuel farm</li> <li>• Process and raw water ponds</li> <li>• Tailings Storage Facility for thickened fine tailings</li> <li>• Water collection pond (tailings water and runoff)</li> <li>• Production borefield adjacent to the southern mining lease boundary</li> <li>• Dewatering and monitoring bores</li> <li>• Haul roads and other access roads</li> <li>• Laydown areas</li> <li>• Mine administration offices and contractor's workshops</li> <li>• Recovery room for X-ray sorting</li> <li>• Cattle exclusion fences around the</li> </ul>	Refer to Figure 2 (Ellendale 4 Diamond Mine proposal footprint within the development envelope)	<b>The 'Major components' are deleted as they are either not key proposal characteristics or described elsewhere in Table 2 and included in the proposal footprint</b>

Element	Previously authorised extent	Authorised extent / location
entire operation <ul style="list-style-type: none"> <li>Borrow pits for construction materials</li> </ul>		
Processing: <ul style="list-style-type: none"> <li>Design rate</li> <li>Annual rate</li> <li>Dense Medium Separation</li> <li>Process circuit water requirement</li> <li>Make-up water requirement</li> </ul>	800 tonnes per hour  Approximately 6.0 million tonnes per annum Ferrosilicon medium  1,950 kilolitres of water (at any given time) 306 to 380 kilolitres per hour	<b>Removed as not a key proposal characteristic</b> Approximately 6.0 million tonnes per annum <b>Removed as not a key proposal characteristic</b> 1,950 kilolitres of water (at any given time) 306 to 380 kilolitres per hour
Tailings: <ul style="list-style-type: none"> <li>Fine (less than 1.6 mm)</li> <li>Coarse (1.2 to 60 mm)</li> <li>Primary recovery rejects</li> </ul>	Disposed in central thickened Tailings Storage Facility 20.4 million tonnes (13.6 million cubic metres) design capacity Disposed in waste dumps approximately 6.88 million tonnes (4.7 million cubic metres)  44,000 tonnes per annum – may be reprocessed.	<b>Removed and included in the proposal footprint</b> <b>Removed as regulated by the Department of Mines and Petroleum</b>  <b>Removed as not a key proposal characteristic</b>  <b>Removed as not a key proposal characteristic</b>
Coarse tailings stockpile:  Height  Slope batters  Area	Maximum 50 metres  10 - 15°  Approximately 20 hectares	<b>Removed and included in the proposal footprint</b> <b>Removed as regulated by the Department of Mines and Petroleum</b> <b>Removed as regulated by the Department of Mines and Petroleum</b> <b>Removed and included in the proposal footprint</b>
Waste rock dumps: <ul style="list-style-type: none"> <li>North Dump 1</li> <li>North Dump 2</li> <li>South Dump</li> </ul> Height  Slope batters	Approximately 2.9 million loose cubic metres (19 hectares footprint) Approximately 1.5 million loose cubic metres (12 hectares footprint) Approximately 3.2 million loose cubic metres (35 hectares footprint) Maximum of 30 metres  15°	<b>Removed and included in the proposal footprint</b> <b>Removed and included in the proposal footprint</b>  <b>Removed and included in the proposal footprint</b>  <b>Removed and included in the proposal footprint</b>  <b>Removed as regulated by the Department of Mines and Petroleum</b> <b>Removed as regulated by the Department of Mines and</b>

Element	Previously authorised extent	Authorised extent / location
		<b>Petroleum</b>
<i>Water supply:</i> <ul style="list-style-type: none"> <li>• Source</li> <li>• Annual requirement</li> </ul>	Grant aquifer, 8 production bores 3.3 Gigalitres per annum	Grant aquifer, 8 production bores 3.3 Gigalitres per annum
<i>Pit dewatering:</i> <ul style="list-style-type: none"> <li>• Method</li> <li>• First year of dewatering</li> <li>• Ongoing (from year 2)</li> </ul>	7 dewatering bores and in-pit sumps (to be used as process water in plant) 600,000 kilolitres 1 gigalitre per annum	7 dewatering bores and in-pit sumps (to be used as process water in plant) <b>Removed as concluded in first year of dewatering</b> 1 <b>Gigalitre</b> per annum
<i>Power supply:</i> <ul style="list-style-type: none"> <li>• Power station</li> <li>• Borefield</li> </ul>	6 x 1 Megawatt diesel-powered generating sets (11 kilovolt power supply at each transformer) Stand-alone diesel generators at each bore site	<b>Removed as regulated under Part V of the <i>Environmental Protection Act 1986</i></b> <b>Removed as not a key proposal characteristic</b>
Fuel quantity used	Estimated 11 million litres per annum	<b>Removed as regulated under Part V of the <i>Environmental Protection Act 1986</i></b>

Note: Text in **bold** in Table 2, indicates changes to the proposal.

**Table 3: Abbreviations**

Abbreviation	Term
ha	hectare

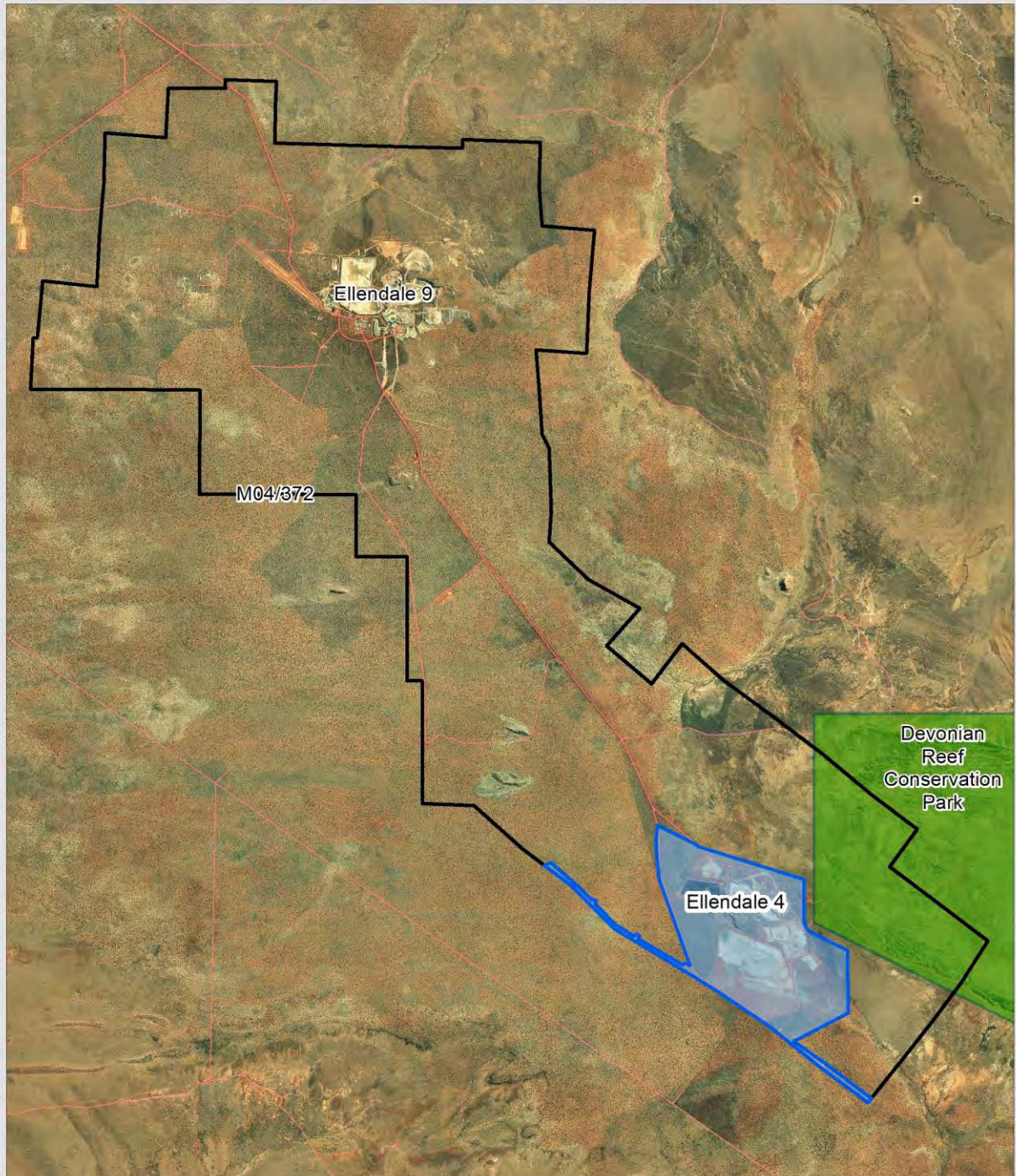
**Table 4: Project Co-ordinates for Figure 2, Location of the development envelope for the Ellendale 4 Diamond Mine (appended)**

**List of Replacement Figures – all previous Figures are replaced by the following:**

- Figure 1: Regional location of the Ellendale 4 Diamond Mine  
 Figure 2: Location of the development envelope for the Ellendale 4 Diamond Mine.

[Signed 9 February 2015]

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




**Legend**

- Development Envelope
- Tenements
- Roads
- DPaW Tenure**
- Conservation Park


**SOURCE DATA**  
 Proponent: Development Envelope (2015)  
 DMP: Tenements (2014)  
 Landgate: Roads (2013)  
 DPaW: Tenure (2014)  
 SLIP Imagery: Ellendale 3862 Aug 2007 Mosaic

Ministerial Statement: 684  
 Location Path: \Post Assessment\2014\201  
 Ellendale\_4\_Diamond\_Mine\_ms\_684\_s45c


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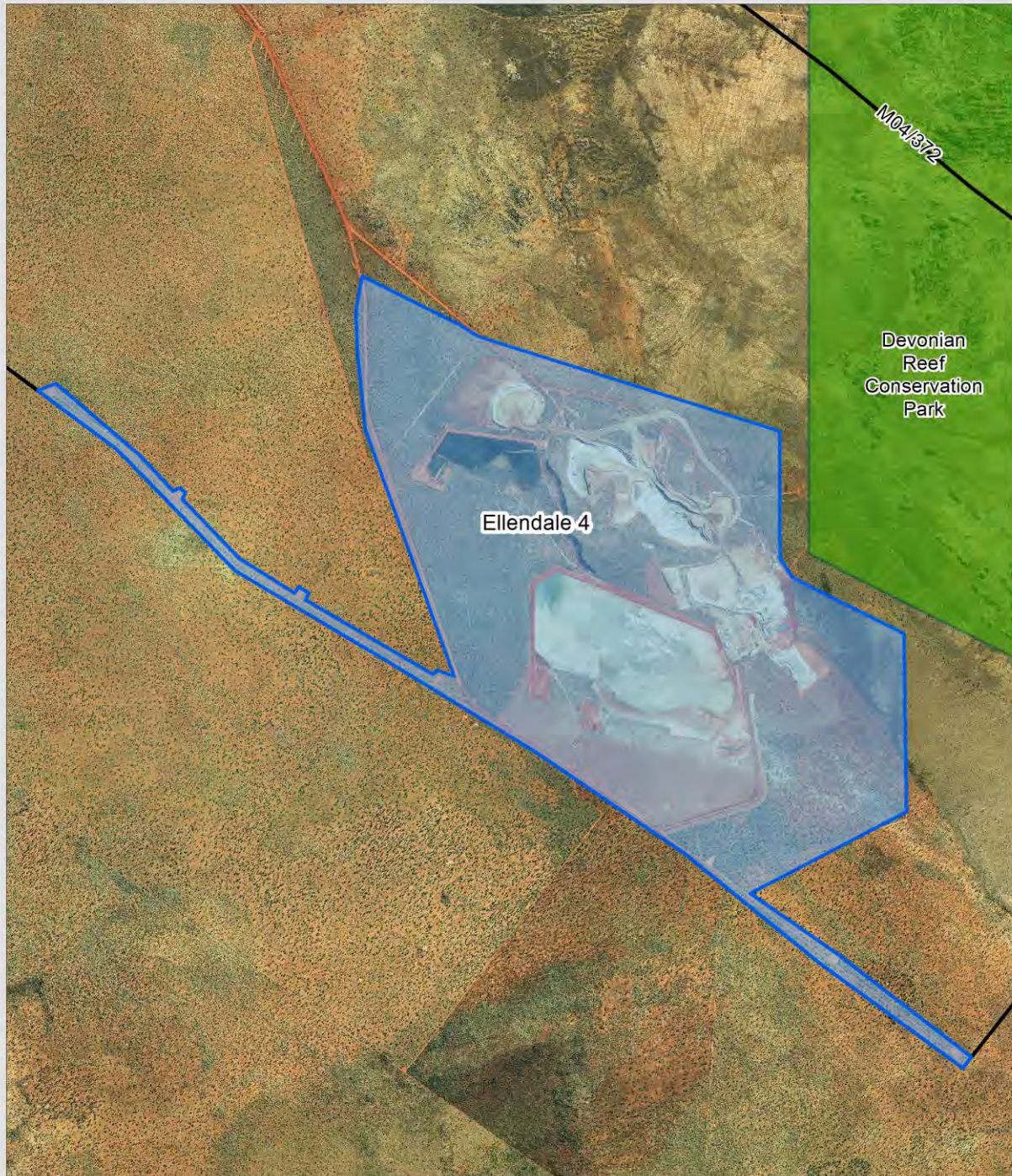


0 1,250 2,500 5,000  
 Metres

Projection: Map Grid of Australia Zone 51  
 Datum: Geocentric Datum of Australia, 1994  
 Scale: 1:100,000



**Figure 1: Regional location of the Ellendale 4 Diamond Mine**

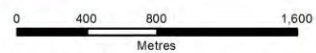


**Legend**

-  Development Envelope
-  Tenements
- DPaW Tenure**
-  Conservation Park

**SOURCE DATA**  
Proponent: Development Envelope (2015)  
DMP: Tenements (2014)  
DPaW: Tenure (2014)  
SLIP Imagery: Ellendale 3862 Aug 2007 Mosaic  
  
Ministerial Statement: 684  
Location Path: \\.\PostAssessment\2014\201  
\_Ellendale\_4\_Diamond\_Mine\_ms\_684\_s45c

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Projection: Map Grid of Australia Zone 51  
Datum: Geocentric Datum of Australia, 1994  
Scale: 1:35,000

**LOCALITY MAP**



**Figure 2: Location of the development envelope for the Ellendale 4 Diamond Mine**

**Table 4: Project Co-ordinates for Figure 2, Location of the development envelope for the Ellendale 4 Diamond Mine**

<b>Eastings</b>	<b>Northings</b>	<b>Coord_No</b>
704136.26	8042769.96	0
703132.44	8043456.90	1
702110.22	8044080.24	2
701087.20	8044689.53	3
700288.11	8045509.16	4
699746.13	8045912.28	5
699870.01	8045960.05	6
700436.17	8045475.34	7
700668.34	8045230.95	8
700713.15	8045251.31	9
700749.81	8045218.73	10
700729.45	8045173.92	11
701116.41	8044770.67	12
701491.13	8044538.50	13
701519.64	8044579.24	14
701588.89	8044538.50	15
701568.53	8044489.63	16
702432.05	8043984.55	17
702464.63	8044013.06	18
702574.61	8043972.32	19
701971.77	8045650.48	20
701916.79	8046180.00	21
701908.64	8046456.98	22
701949.38	8046689.15	23
702622.89	8046352.92	24
702744.81	8046276.47	25
704785.53	8045637.86	26
704789.47	8044773.52	27
704876.30	8044639.95	28
705630.07	8044262.77	29
705648.47	8043051.82	30
704586.77	8042497.83	31
705179.42	8042086.44	32
706090.75	8041388.26	33
706030.46	8041311.54	34
705058.14	8042022.95	35
704136.26	8042769.96	36

All coordinates are in metres, listed in Map Grid of Australia Zone 51 (MGA Zone 51), Geocentric Datum of Australia 1994 (GDA94).