

ENVIRONMENTAL PROTECTION AUTHORITY
REPORT AND RECOMMENDATIONS TO THE MINISTER FOR
ENVIRONMENT

**CATABY MINERAL SANDS PROJECT, CATABY, SHIRE OF
DANDARAGAN - INQUIRY UNDER SECTION 46 OF THE
ENVIRONMENTAL PROTECTION ACT 1986 TO AMEND MINISTERIAL
STATEMENT 720**

The Minister for Environment has requested that the Environmental Protection Authority (EPA) inquire into and report on the matter of changing the implementation conditions relating to the Cataby Mineral Sands proposal.

The following is the EPA's Report and Recommendations (No. 1555) to the Minister pursuant to section 46(6) of the *Environmental Protection Act 1986*.

Background

The Cataby Mineral Sands proposal is to mine a series of open pits over approximately 25 kilometres (km), within the Cataby Mineral Sands Project located approximately 150 km north of Perth. The EPA assessed the proposal at the level of Environmental Protection Statement (EPS) and considered the following key environmental factors relevant to the proposal required detailed evaluation in its report and recommendations to the Minister:

- Carnaby's Black Cockatoo;
- Vegetation; and
- Noise.

Considering the new Environmental Assessment Guideline for *Environmental Principles, Factors and Objectives* (EAG 8) these factors are now represented by:

- Terrestrial Fauna;
- Flora and Vegetation;
- Amenity; and
- Offsets.

The EPA concluded that it was likely the EPA's objectives would be achieved, provided there was satisfactory implementation by the proponent of the EPA's recommended conditions.

The Minister for Environment approved the proposal for implementation, subject to the implementation conditions of Ministerial Statement 720 (18 April 2006).

Requested changes to conditions

The proponent for the proposal, Iluka Resources Limited, has requested the following changes to the implementation conditions and proponent commitments of Ministerial Statement 720:

- Extension of timeframe for a further three years to enable substantial commencement of the Cataby Mineral Sands proposal.
- Contemprise and consolidate implementation conditions and proponent commitments.

Assessment of the requested change to conditions

A summary (Tables 1 and 2) of the section 46 assessment is attached to this Report.

EPA conclusions and recommendations

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment:

1. That while retaining the environmental requirements of the original conditions, it is appropriate to:
 - delete implementation conditions 1 to 15 and proponent commitments 1 to 4;
 - extend the Time Limit for Proposal Implementation for a further five years, to 18 April 2021;
 - replace Ministerial Statement 720 with a new Ministerial Statement;and
2. That after complying with section 46(8) of the *Environmental Protection Act 1986*, the Minister issues a statement of decision to delete implementation conditions 1 to 15 and proponent commitments 1 to 4 of Ministerial Statement 720 in the manner provided in the attached recommended statement.

Table 1: Cataby Mineral Sands Project – Proposed changes to implementation conditions of Ministerial Statement 720 under section 46 of the EP Act

Ministerial Statement Component/ Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
Proposal Description	Revise to match the “proposal description” in Attachment 1 of Ministerial Statement 720 (Schedule 1 of the New Statement).	The “proposal description” is revised as follows: To mine a series of open pits over approximately 25 kilometres, within the Cataby Mineral Sands Project located approximately 150 km north of Perth.
1 Implementation	Delete condition and replace with a consolidated contemporary style condition.	This amendment is consistent with “Standard Administrative Procedures” which have been developed by the Office of the Environmental Protection Authority (OEPA) to streamline the Administrative Implementation Conditions in Ministerial Statements. Condition 1 is deleted and replaced with a more contemporary condition 1: 1 Proposal implementation 1-1 When implementing the proposal, the proponent shall not exceed the authorised extent of the proposal as defined in Table 2 in Schedule 1, unless amendments to the proposal and authorised extent of the proposal have been approved under the <i>Environmental Protection Act 1986</i> .
2 Proponent Commitments	Delete condition.	Condition 2 relates to proponent commitments documented in Schedule 2 of Statement 720. The EPA has reviewed each proponent commitment and considers that they can be managed through Ministerial Conditions in the proposed new Statement. For the full details of this assessment see Table 2 of this report. The EPA considers that all proponent commitments can be deleted.
3 Proponent Nomination and Contact Details	Delete condition and replace with a consolidated contemporary style condition.	This condition is still relevant and shall be retained; however, it has been updated to reflect contemporary wording and format without changing the intent. Conditions 3-1 to 3-3 are deleted and replaced with condition 2-1. 2 Contact Details 2-1 The proponent shall notify the Chief Executive Officer (CEO) of any change of its

Ministerial Statement Component/ Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
		name, physical address or postal address for the serving of notices or other correspondence within twenty eight (28) days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.
4 Commencement and Time Limit of Approval	Extension of three (3) years for substantial commencement of the proposal.	<p>As a consequence of current and forecast market conditions, substantial commencement of the Cataby proposal may not be undertaken within the current approval time frame.</p> <p>The EPA considers that the environmental factors of the proposal have not changed significantly from those presented in the Environmental Protection Statement (EPS), as assessed by the EPA in Report 1212 (December 2005), and no significant environmental factors have arisen since the EPA's assessment of the proposal. The EPA concludes that its objectives would not be compromised through amendment to condition 4 to extend the 'Time Limit of Authorisation' by five years to 18 April 2021¹.</p> <p>This condition is re-numbered and re-worded as below:</p> <p>3 Time Limit for Proposal Implementation</p> <p>3-1 The proponent shall not commence implementation of the proposal after 18 April 2021, and any commencement, prior to this date, must be substantial.</p> <p>3-2 Any commencement of implementation of the proposal, on or before 18 April 2021, must be demonstrated as substantial by providing the CEO with written evidence, on or before 18 April 2021.</p>
5 Compliance Reporting	Delete condition and replace with a consolidated contemporary style condition.	<p>This condition is still relevant and shall be retained; however, it has been updated to reflect contemporary wording and format without changing the intent.</p> <p>4 Compliance Reporting</p> <p>4-1 The proponent shall prepare, submit and maintain a Compliance Assessment Plan to the satisfaction of the CEO at least six (6) months prior to the Compliance</p>

¹ An extension for the substantial commencement of the project to 18 April 2016 was previously granted by the Minister for Environment on 15 September 2010.

Ministerial Statement Component/ Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
		<p>Assessment Report required by condition 4-6.</p> <p>4-2 The Compliance Assessment Plan shall indicate:</p> <ol style="list-style-type: none"> (1) the frequency of compliance reporting; (2) the approach and timing of compliance assessments; (3) the retention of compliance assessments; (4) the method of reporting of potential non-compliances and corrective actions taken; (5) the table of contents of Compliance Assessment Reports; and (6) public availability of Compliance Assessment Reports. <p>4-3 After receiving notice in writing from the CEO that the Compliance Assessment Plan satisfies the requirements of condition 4-2 the proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by condition 4-1.</p> <p>4-4 The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 4-1 and shall make those reports available when requested by the CEO.</p> <p>4-5 The proponent shall advise the CEO of any potential non-compliance within seven (7) days of that non-compliance being known.</p> <p>4-6 The proponent shall submit to the CEO the first Compliance Assessment Report fifteen (15) months from the date of issue of this Statement addressing the twelve (12) months period from the date of issue of this Statement and then annually from the date of submission of the first Compliance Assessment Report, or as agreed in writing by the CEO.</p> <p>The Compliance Assessment Report shall:</p> <ol style="list-style-type: none"> (1) be endorsed by the proponent's Chief Executive Officer or a person delegated to sign on the Chief Executive Officer's behalf; (2) include a statement as to whether the proponent has complied with the conditions; (3) identify all potential non-compliances and describe corrective and preventative actions taken;

Ministerial Statement Component/ Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
		<p>(4) be made publicly available in accordance with the approved Compliance Assessment Plan; and</p> <p>(5) indicate any proposed changes to the Compliance Assessment Plan required by condition 4-1.</p>
<p>New condition 5</p> <p>5 Public Availability of Plans and Reports</p>	<p>Add new condition</p>	<p>This condition is added to the new Ministerial Statement in accordance with “Standard Administrative Procedures” developed by the OEPA to streamline the Administrative Implementation Conditions in Ministerial Statements.</p> <p>5 Public Availability of Plans and Reports</p> <p>5-1 Subject to condition 5-2, within a reasonable time period approved by the CEO of the issue of this Statement and for the remainder of the life of the proposal, the proponent shall make publicly available, in a manner approved by the CEO, all environmental plans and reports required under this Statement.</p> <p>5-2 If any data parts of the plans or reports, referred to in condition 5-1 contains particulars of:</p> <ul style="list-style-type: none"> (1) a secret formula or process; or (2) confidential commercially sensitive information; <p>the proponent may submit a request for approval from the CEO to not make those parts of the plans or reports publicly available. In making such a request the proponent shall provide the CEO with an explanation and reasons why those parts of the plans or reports should not be made publicly available.</p> <p>Condition 5 is added to the new Ministerial Statement.</p>
<p>6 Performance Review</p>	<p>Delete condition</p>	<p>Condition 6 is deleted and replaced by contemporary Compliance Reporting conditions 4-1 to 4-6 which have been developed by the Office of the Environmental Protection Authority to streamline the Administrative Implementation Conditions in Ministerial Statements.</p>
<p>7 Oliver Remnants</p>	<p>Update condition</p>	<p>This condition is still relevant and shall be retained; however, it has been updated in accordance with the OEPA’s Environmental Assessment Guideline for Recommending</p>

Ministerial Statement Component/ Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
		<p>Environmental Conditions (EAG 11) to reflect contemporary wording and format without changing the intent.</p> <p>6 Oliver Remnants</p> <p>6-1 The proponent shall ensure that the proposal is implemented in a manner that the 62 hectares of Oliver Remnants defined as an area of ‘No Mining’ in Figure 1 of Schedule 1 is excluded from mining activities.</p> <p>6-2 The proponent shall place a conservation covenant over the rehabilitated Oliver Remnants area once rehabilitation has been completed.</p>
8 Carnaby’s Cockatoo Management	Update condition	<p>This condition is still relevant and shall be retained; however, it has been updated in accordance with EAG 11 to reflect contemporary wording and format without changing the intent.</p> <p>The updated condition 7 includes the agreed offset requirements from commitment 3 of Statement 720.</p> <p>7 Carnaby’s Cockatoo Management</p> <p>7-1 The objective of the Carnaby’s Cockatoo Management Plan is to ensure the proposal is implemented in such a manner that the habitat and population of Carnaby’s Cockatoos are maintained as far as practicable.</p> <p>7-2 Prior to ground-disturbing activities, the proponent shall update the Carnaby’s Cockatoo Management Plan, in consultation with the Department of Parks and Wildlife, to the satisfaction of the CEO to demonstrate the requirements of condition 7-1 have been met.</p> <p>The Plan shall identify and detail:</p> <ol style="list-style-type: none"> (1) an area of at least 180 hectares of parkland cleared area to be restored to include native understorey species; (2) a 20 kilometre roadside tree belt to be revegetated with local native species; (3) a vegetation corridor between the proposal and Enemunga Nature Reserve to be revegetated with local native species; (4) the area of Cataby Brook to be subject to an in-perpetuity Conservation Covenant, including any management actions to be undertaken prior to the

Ministerial Statement Component/ Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
		<p>Conservation Covenant being entered into;</p> <p>(5) the targets to be achieved; including management actions and timeframes for completion for each of the mining areas;</p> <p>(6) the on-ground offset activities to be undertaken in each of the areas identified to meet the targets, including details of the provision of additional Black Cockatoo nesting hollows through repairing hollows, providing artificial hollows, and removing competitor species from hollows;</p> <p>(7) the funding arrangements and timing of funding for offset activities;</p> <p>(8) the monitoring requirements for offset activities; and</p> <p>(9) the role of the proponent and any agreements with third parties.</p> <p>7-3 The area identified as satisfying condition 7-2 (4) in the approved Plan shall be placed under a Conservation Covenant, to the satisfaction of the CEO.</p> <p>7-4 The proponent shall implement the latest approved Carnaby's Cockatoo Management Plan and continue implementation until otherwise agreed by the CEO.</p> <p>7-4 Revisions to the Carnaby's Cockatoo Management Plan may be approved by the CEO.</p> <p>7-5 The proponent shall implement the most recent approved revisions of the Carnaby's Cockatoo Management Plan required by condition 7-1.</p>
9 Groundwater-dependent Ecosystem Management	Update condition	<p>This condition is still relevant and shall be retained; however, it has been updated in accordance with EAG 11 to reflect contemporary wording and format without changing the intent.</p> <p>8 Groundwater-dependant Ecosystem Management</p> <p>8-1 Prior to ground-disturbing activities, the proponent shall review and revise the Groundwater-dependant Ecosystem Management Plan presented in the <i>Cataby Mineral Sands Project, Environmental Protection Statement (November 2005)</i> in consultation with the Department of Water to the requirements of the CEO to demonstrate that condition 8-2 has been met.</p> <p>8-2 The objective of the Groundwater-dependant Ecosystem Management Plan is to</p>

Ministerial Statement Component/ Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
		<p>ensure the proposal is implemented in a manner that the impact of groundwater drawdown on vegetation is avoided as far as practicable.</p> <p>8-3 The proponent shall implement the latest approved Groundwater-dependant Ecosystem Management Plan and continue implementation until otherwise agreed by the CEO.</p> <p>8-4 The Groundwater-dependant Ecosystem Management Plan required by condition 8-1 shall include:</p> <ol style="list-style-type: none"> (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 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 impacts; 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. <p>8-5 Within six (6) months of utilisation of artificial recharge systems, the proponent shall report to the CEO on the outcomes of the implementation of artificial recharge systems in the project. The report to the CEO shall include:</p> <ol style="list-style-type: none"> (1) the recharge options utilised for each area of mining; (2) outcomes of vegetation health monitoring conducted near mining operations; (3) an evaluation of the performance of the artificial recharge system, with explanatory notes to substantiate the performance achieved; and (4) proposed changes to the artificial recharge systems to ensure compliance with the objective required by condition 8-2. <p>8-6 Revisions to the Groundwater-dependant Ecosystem Management Plan may be</p>

Ministerial Statement Component/ Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
		<p>approved by the CEO.</p> <p>8-7 The proponent shall implement the most recent approved revisions of the Groundwater-dependant Ecosystem Management Plan required by condition 8-1.</p>
10 Noise Management	Update condition	<p>This condition is still relevant and will be retained but expressed in contemporary wording and format without changing the intent.</p> <p>9 Noise Management</p> <p>9-1 Prior to ground-disturbing activities, the proponent shall prepare a Noise Management Plan in consultation with the Department of Environment Regulation to the requirements of the CEO to demonstrate condition 9-2 has been met.</p> <p>9-2 The objective of the Noise Management Plan is to ensure the proposal is implemented in a manner that the impacts to amenity are reduced as low as reasonably practicable.</p> <p>9-3 The proponent shall implement the latest approved Noise Management Plan and continue implementation until otherwise agreed by the CEO.</p> <p>9-4 The Noise Management Plan required by condition 9-1 shall include detailed description of:</p> <ol style="list-style-type: none"> (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. <p>9-5 Revisions to the Noise Management Plan may be approved by the CEO.</p> <p>9-6 The proponent shall implement the most recent approved revisions of the Noise Management Plan required by condition 9-1.</p>
11 Vegetation and Flora	Update condition	<p>This condition is still relevant and will be retained but expressed in contemporary wording and format without changing the intent.</p> <p>10 Vegetation and Flora Management</p> <p>10-1 Prior to ground-disturbing activities, the proponent shall implement the Vegetation and Flora Management Plan approved by the CEO and prepared on</p>

Ministerial Statement Component/ Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
		<p>advice from the Department of Parks and Wildlife to the requirements of the CEO to demonstrate condition 10-2 has been met.</p> <p>10-2 The objective of the Vegetation and Flora Management Plan is to ensure the proposal is implemented in a manner that impacts on identified rare and priority flora species are avoided as far as practicable.</p> <p>10-3 The proponent shall implement the latest approved Vegetation and Flora Management Plan and continue implementation until otherwise agreed by the CEO.</p> <p>10-4 Revisions to the Vegetation and Flora Management Plan may be approved by the CEO.</p> <p>10-5 The proponent shall implement the most recent approved revisions of the Vegetation and Flora Management Plan required by condition 10-1.</p>
12 Surface Water	Update condition	<p>This condition is still relevant and will be retained but expressed in contemporary wording and format without changing the intent.</p> <p>11 Surface Water</p> <p>11-1 Prior to ground-disturbing activities, the proponent shall prepare a Surface Water Management Plan in consultation with the Department of Water to the requirements of the CEO to demonstrate condition 11-2 has been met.</p> <p>11-2 The objective of the Surface Water Management Plan is to ensure the proposal is implemented in a manner that the integrity of surface water ecosystems (flow regimes, water quality and ecosystem health) is maintained.</p> <p>11-3 The proponent shall implement the latest approved Surface Water Management Plan and continue implementation until otherwise agreed by the CEO.</p> <p>11-4 The Surface Water Management Plan required by condition 11-1 shall include detailed descriptions of:</p> <ol style="list-style-type: none"> (1) existing surface flow regimes; (2) significant surface water dependant ecological systems which may be impacted by changes to existing surface water regimes; (3) stormwater management; (4) aquatic fauna and riparian monitoring program;

Ministerial Statement Component/ Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
		<p>(5) the trigger criteria framework that will trigger the implementation of contingency actions to ensure the integrity of flow paths and water quantities are maintained and surface water dependant ecosystems are protected;</p> <p>(6) contingency actions to be implemented in the event that the trigger criteria developed within the framework required by condition 11-4(5) have been exceeded;</p> <p>(7) the monitoring and reporting process to document and report any changes in surface water flow regimes caused by implementation of the proposal, and impacts on surface water dependant ecological systems.</p> <p>11-5 Revisions to the Surface Water Management Plan may be approved by the CEO.</p> <p>11-6 The proponent shall implement the most recent approved revisions of the Surface Water Management Plan required by condition 11-1.</p>
13 Dieback Management		<p>This condition is still relevant and will be retained but expressed in contemporary wording and format without changing the intent.</p> <p>12 Dieback Management</p> <p>12-1 Prior to ground-disturbing activities, the proponent shall implement the Dieback Management Plan approved by the CEO and prepared in consultation with the Department of Parks and Wildlife to the requirements of the CEO to demonstrate condition 12-2 has been met.</p> <p>12-2 The objective of the Dieback Management Plan is to ensure the proposal is implemented in a manner that prevents the introduction and/ or spread of Phytophthora within the proposal area.</p> <p>12-3 The proponent shall implement the latest approved Dieback Management Plan and continue implementation until otherwise agreed by the CEO.</p> <p>12-4 Revisions to the Dieback Management Plan may be approved by the CEO.</p> <p>12-5 The proponent shall implement the most recent approved revisions of the Dieback Management Plan required by condition 12-1.</p>
14 Rehabilitation 15 Decommissioning/	Delete conditions.	<p>Conditions 14 and 15 can be deleted due to the following reasons:</p> <ul style="list-style-type: none"> - At the time of original assessment of this proposal (April 2006), rehabilitation

Ministerial Statement Component/ Condition	Proposed Change	Assessment and Evaluation of Proposed Changes
Closure Plans		<p>and decommissioning was not a key integrating factor;</p> <ul style="list-style-type: none"> - This mining project is subject to the <i>Mining Act 1978</i>; and - The Department of Mines and Petroleum (DMP) agreed that they are able to regulate Rehabilitation and Decommissioning. DMP has indicated that <i>“conditions 14 and 15 are covered by the requirements of a Mining Proposal and Mine Closure Plan (MCP) on mining leases granted under the Mining Act 1978”, and “The MCP must be prepared in accordance with the Guidelines for Preparing Mine Closure Plans (June 2011) and this will ensure rehabilitation minimises the environmental impacts resulting from permeant change to ecosystems, fulfilling the EPA’s objective”.</i> <p>Conditions 14 and 15 are deleted from the Statement.</p>

Table 2 Cataby Mineral Sands Project – proposed changes to proponent commitments of Ministerial Statement 720 under section 46 of the EP Act

Proponent Commitment	Proposed Change	Assessment and Evaluation of Proposed Changes
1. Landform and Soil	Delete	<p>This commitment can be deleted as the 'Landform and Soil' element can be addressed via the Soil Management Plan required for obtaining a Works Approval for the construction and commissioning of the mine and licence to operate a prescribed premises under Part V of the EP Act.</p> <p>The Soil Management Plan is also a supporting document for the "Cataby Mine Rehabilitation and Closure Plan" and "Mine Proposal", both of which are required under the <i>Mining Act 1978</i>.</p>
2. Dust	Delete	<p>This commitment can be deleted as 'dust' can be managed via the Dust Management Plan required for obtaining a Works Approval for the construction and commissioning of the mine and licence to operate a prescribed premises under Part V of the EP Act.</p>
3. Carnaby's Cockatoo	Delete	<p>This commitment can be deleted as it is addressed in the Carnaby's Cockatoo Management Plan (May 2014) required by new proposed condition 7.</p>
4. Oliver Remnant	Delete	<p>This commitment can be deleted as it is addressed by new proposed condition 6.</p>