

Appendix A

Environmental Impact Statement Guidelines



**GUIDELINES FOR THE CONTENT OF A DRAFT
ENVIRONMENTAL IMPACT STATEMENT**

Balranald Mineral Sands Project

***Environment Protection and Biodiversity Conservation Act
1999***

(Reference: 2012/6509)

GUIDELINES FOR A DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR

Balranald Mineral Sands Project, Iluka Resources Limited

PREAMBLE

Iluka Resources Limited proposes to construct, operate and rehabilitate a mineral sands mine at Balranald, New South Wales, and associated infrastructure and activities, including in Victoria.

The proposal was referred under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) to the Minister for the Environment and Heritage on 16 August 2012. The Minister determined on 25 October 2012 that approval is required as the action has the potential to have a significant impact on the following matters of national environmental significance (NES) that are protected under Part 3 of the EPBC Act:

- World Heritage properties (sections 12 and 15A)
- National Heritage places (sections 15B and 15C)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A)

Following the provision of EPBC Act referral documentation, the delegate of the Minister determined on 25 October 2012 that the proposed activity be assessed by an Environmental Impact Statement (EIS).

Information about the action and its relevant impacts, as outlined below, is to be provided in the EIS. This information should be sufficient to allow the Minister to make an informed decision on whether or not to approve, under Part 9 of the EPBC Act, the taking of the action for the purposes of each controlling provision.

GENERAL ADVICE ON GUIDELINES

1 GENERAL CONTENT

The EIS should be a stand-alone document that primarily focuses on the matters of NES listed above. It should contain sufficient information to avoid the need to search out previous or supplementary reports. The EIS should take into consideration the EPBC Act Significant Impact Guidelines that can be downloaded from the following web site: <http://www.environment.gov.au/epbc/guidelines-policies.html>.

The EIS should enable interested stakeholders and the Minister to understand the environmental consequences of the proposed development. Information provided in the EIS should be objective, clear, and succinct and, where appropriate, be supported by maps, plans, diagrams or other descriptive detail. The body of the EIS is to be written in a clear and concise style that is easily understood by the general reader. Technical jargon should be avoided wherever possible. Cross-referencing should be used to avoid unnecessary duplication of text.

Detailed technical information, studies or investigations necessary to support the main text should be included as appendices to the EIS. It is recommended that any additional supporting documentation and studies, reports or literature not normally available to the public from which information has been extracted be made available at appropriate locations during the period of public display of the EIS.

After receiving the Ministers approval to publish the report, the Proponent is required to make the draft EIS available for a period of public comment. Specific instructions regarding publication requirements will be provided as part of the Minister's direction to publish.

If it is necessary to make use of material that is considered to be of a confidential nature, the Proponent should consult with the Department on the preferred presentation of that material, before submitting it to the Minister for approval for publication.

The level of analysis and detail in the EIS should reflect the level of significance of the expected impacts on the environment. Any and all unknown variables or assumptions made in the assessment must be clearly stated and discussed. The extent to which the limitations, if any, of available information may influence the conclusions of the environmental assessment should be discussed.

The Proponent should ensure that the EIS assesses compliance of the action with principles of Ecological Sustainable Development (ESD) as set out in the EPBC Act, and the *Objects and Principles of the Environment Protection and Biodiversity Conservation Act 1999 Sections 3 and 3A* at Attachment 1. A copy of Schedule 4 of the EPBC Regulations, *Matters that must be addressed in a PER and EIS*, is at Attachment 2.

2 FORMAT AND STYLE

The EIS should comprise three elements, namely:

- the executive summary;
- the main text of the document, and
- appendices containing detailed technical information and other information that can be made publicly available.

The guidelines have been set out in a manner that may be adopted as the format for the EIS. This format need not be followed where the required information can be more effectively presented in an alternative way. However, each of the elements must be addressed to meet the requirements of the EPBC Act and Regulations.

The EIS should be written so that any conclusions reached can be independently assessed. To this end all sources must be appropriately referenced using the Harvard standard. The reference list should include the address of any Internet “web” pages used as data sources.

The main text of the EIS should include a list of abbreviations, a glossary of terms and appendices containing:

- a copy of these guidelines;
- a list of persons and agencies consulted during the EIS;
- contact details for the Proponent; and
- the names of the persons involved in preparing the EIS and work done by each of these persons.

Maps, diagrams and other illustrative material should be included in the EIS. Maps should be at an appropriate scale and contain a title, legend, scale bar and orientation marker. The EIS should be produced on A4 size paper capable of being photocopied, with maps and diagrams on A4 or A3 size and in colour where possible.

The Proponent should consider the format and style of the document appropriate for publication on the Internet. The capacity of the website to store data and display the material may have some bearing on how the document is constructed.

KEY ASSESSMENT REQUIREMENTS

- (1) Impacts on threatened species and ecological communities listed under Sections 18 and 18A of the *Environment Protection and Biodiversity Conservation Act 1999*;
- (2) Impacts on migratory species listed under Section 20 and 20A of the *Environment Protection and Biodiversity Conservation Act 1999*;
- (3) Impacts on the world heritage values of a declared World Heritage property listed under Sections 12 and 15A of the *Environment Protection and Biodiversity Conservation Act 1999*;
- (4) Impacts on the national heritage values of a National Heritage place listed under section 15B and 15C of the *Environment Protection and Biodiversity Conservation Act 1999*;
- (5) Any relevant Commonwealth and State Government technical and policy guidelines;
- (6) Matters outlined in Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulation 2000*, included in the requirements below; and
- (7) The requirements outlined below:

SPECIFIC CONTENT

1 GENERAL INFORMATION

This should provide the background and context of the action including:

- (a) the title of the action;
- (b) the full name and postal address of the designated Proponent;
- (c) a clear outline of the objective/s of the action;
- (d) the locations in which the components of the action will take place;
- (e) the background to the development of the action;
- (f) how the action relates to any other actions (of which the Proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action;
- (g) the current status of the action; and
- (h) the consequences of not proceeding with the action.

2 DESCRIPTION OF THE ACTION

A description of the action, including:

- a) all the components of the action, including construction, operation, decommissioning and rehabilitation components;
- b) the precise location of the preferred option for any works to be undertaken, structures to be built and elements of the action that may have relevant impacts; and
- c) how the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts;

3 FEASIBLE ALTERNATIVES

A description of any feasible alternatives to the action, to the extent reasonably practicable, including:

- (a) if relevant, the alternative of taking no action;
- (b) a comparative description of the impacts of each alternative on the NES matters protected by controlling provisions of Part 3 of the EPBC Act for the action; and
- (c) sufficient detail to make clear why any alternative is preferred to another.

Short, medium and long-term advantages and disadvantages of the options should be discussed.

4 DESCRIPTION OF THE ENVIRONMENT

A description of the existing environment of the proposal site and surrounding areas that may be directly or indirectly affected by the action, including:

- a) quantification and description of, and maps showing, the location, nature, extent and where relevant, the condition, of all vegetation types occurring on and adjacent to the vegetation on site;
- b) quantification and description of, and maps showing, the distribution and abundance of EPBC Act listed threatened species and ecological communities within the site and in surrounding areas that may be impacted by the proposal. This should include, *but not be limited to*, up-to-date survey results for the Malleefowl, South-eastern Long-eared Bat, Regent Parrot, Winged Peppercreep, Cobar Greenhood Orchid, Yellow Swainson-pea, Murray Swainson-pea, Mossgiel Daisy, *Austrostipa metatoris*, *Austrostipa wakoolica*, Western Water-starwort, Striated Spike-sedge, Chariot Wheels, River Swamp Wallaby-grass and Menindee Nightshade (and any other relevant listed species and ecological communities);

- c) quantification and description of, and maps showing, the nature, location and extent of habitat for EPBC Act listed threatened species and ecological communities within the site and in surrounding areas that may be impacted by the proposal;
- d) a detailed description of the scope, methodology, timing, effort and results of all targeted surveys undertaken for all relevant EPBC Act matters and associated habitat, how the methodologies compare with any relevant guidelines or policies and a description of any limitations and constraints of the surveys undertaken and a justification of their adequacy;
- e) a description of the quality, quantity, location and connectivity and/or hydrological flow regimes of surface and groundwater – including seasonal dynamics (e.g. volume, timing, duration and frequency of flows) within and adjacent to areas likely to be directly or indirectly impacted by the action;
- f) a description of the World Heritage values and National Heritage values of any relevant World Heritage properties or National Heritage places which may be directly or indirectly impacted by the action, including but not limited to the Willandra Lakes Region World Heritage property (National Heritage place);
- g) a description of the research methodology used to assess impacts to World Heritage and National Heritage values and, if fieldwork was undertaken, details including: the dates the fieldwork was undertaken, the area covered, who undertook the fieldwork and the methods employed;
- h) identification of the relevant Indigenous people with rights or interests in the Willandra Lakes Region, and how these people were determined as the relevant Indigenous people; and
- i) a description of the consultation process undertaken to seek active involvement from the relevant Indigenous people with rights or interests. The department strongly encourages the use of the *Ask First* principles and the principle of free prior informed consent when engaging with Indigenous communities.

5 RELEVANT IMPACTS

An assessment of the relevant impacts of the action including:

- a) a detailed description and assessment of the nature and extent of all relevant impacts, including direct, indirect, facilitated and cumulative impacts at all stages of the action that the action will have or is likely to have in the short-term and long-term on:
 - i. threatened species and ecological communities listed under sections 18 and 18A of the EPBC Act;

- ii. migratory species listed under sections 20 and 20A of the EPBC Act;
 - iii. the World Heritage values of a declared World Heritage property listed under Sections 12 and 15A of the EPBC Act; and
 - iv. the National Heritage values of a National Heritage place listed under section 15B and 15C of the EPBC Act;
- b) a statement of whether any relevant impacts are likely to be unknown, unpredictable or irreversible;
- c) any cumulative impacts, where potential project impacts are in addition to existing impacts of other activities (including known potential future expansions or developments by the proponent and other proponents in the region and vicinity), and the potential cumulative impact of the proposal on ecosystem resilience. The cumulative effects of climate change impacts on the environment must also be considered in the assessment of ecosystem resilience. Where relevant to the potential impact, a risk assessment should be conducted and documented.
- d) any technical data and other information used to assess impacts including:
 - i. any modelling undertaken on changes to surface and groundwater hydrology; and
 - ii. details of any by-products that may be disposed of (including in the mine void), including the chemical composition of the materials, radio-activity levels, proposed method of disposal (including the final depth of disposed materials), the potential for materials or their constituents to become re-mobilised, and the potential for the materials to cause short-term or long-term harm to the environment, including to matters of NES;
- e) a description of the research methodology used to assess impacts on World Heritage and National Heritage values, including full details of any fieldwork undertaken;
- f) results and conclusions of research undertaken to assess the impacts of the action on the World Heritage and National Heritage values of the Willandra Lakes Region, including details of consultation with the relevant Indigenous people with rights or interests in the Willandra Lakes Region;
- g) a letter from any relevant Indigenous people who have been involved in a particular study, have asserted a particular view or have provided information that has influenced the findings of the assessment, confirming that they understand what has been written in the relevant parts of the EIS and agree that this is an accurate reflection of their view and/or involvement; and

- h) evidence that any advice from relevant Indigenous people has been taken into consideration. If you decide not to follow advice given in the interests of the protection of Indigenous heritage values, a robust justification must be provided.

Please note that the department's consideration of impacts to relevant Indigenous World and National Heritage values will be guided by the *Ask First* principle that Indigenous people are the primary informants on the value of their heritage and how it is best preserved. The department strongly encourages that the methodologies used in the assessment process are consistent with the *Ask First* principle.

6 PROPOSED AVOIDANCE, MITIGATION AND OFFSET MEASURES

The EIS must provide information on proposed avoidance, mitigation and offset measures to deal with the relevant impacts of the action. Specific and detailed descriptions of proposed measures must be provided and substantiated, based on best available practices and must include the following elements:

- (a) a description of how the action has been designed to avoid impacts to migratory species, threatened species and ecological communities, World Heritage values and National Heritage values;
- (b) a consolidated list of mitigation measures proposed to be undertaken to prevent or minimise the relevant impacts of the action, before, during and after construction, during operation, decommissioning and rehabilitation;
- (c) the cost of the proposed mitigation measures;
- (d) for proposed avoidance and mitigation measures relevant to Indigenous heritage values, evidence of consultation with relevant Indigenous people with rights or interest;
- (e) a description and an assessment of the expected or predicted effectiveness of the mitigation measures, including a justification of the location and design of mitigation measures to be implemented to ensure their effectiveness. This analysis should be based on best available knowledge and baseline data for the relevant areas;
- (f) a detailed outline of an Environmental Management Plan (EMP) that sets out the framework for management, mitigation and monitoring of relevant impacts of all stages of the action, including any provisions for independent environmental auditing. The EMP must state the environmental objectives, performance criteria, monitoring, reporting, corrective action, responsibility and timing for each environmental issue. The EMP should also describe contingencies for events such as failure of sewerage systems, heavy or prolonged rainfall, or saltwater intrusion into ground water.
- (g) any statutory or policy basis for the mitigation measures;

- (h) the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program; and
- (i) in the event that impacts cannot be avoided or mitigated, a description of any offsets to compensate for any predicted or potential residual impacts on matters of NES. This should be in accordance with the EPBC Act *Environmental Offsets Policy* and include:
 - a. an assessment of how any proposed offset compensates for the residual impacts on matters of NES likely to remain following avoidance and mitigation measures to be implemented;
 - b. the location of any proposed offset;
 - c. the timing of the delivery of any offset; and
 - d. how the offset will be secured and managed in perpetuity.

7 OTHER APPROVALS AND CONDITIONS

The EIS must include information on any other requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action. This must include:

- (a) details of any local or State Government planning scheme, or plan or policy under any local or State Government planning system that deals with the proposed action, including:
 - what environmental assessment of the proposed action has been, or is being, carried out under the scheme, plan or policy; and
 - how the scheme provides for the prevention, minimisation and management of any relevant impacts;
- (b) a description of any approval that has been obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the Act), including any conditions that apply to the action;
- (c) a statement identifying any additional approval that is required; and
- (d) a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action.

8 CONSULTATION

Details of any consultation undertaken in relation to the action, including:

- a) any consultation that has already taken place;

- b) proposed consultation about relevant impacts of the action;
- c) if there has been consultation about the proposed action, any documented response to, or result of, the consultation; and
- d) identification of affected parties, including a statement mentioning any communities that may be affected and describing their views; and
- e) methodology and results of consultation with the relevant Indigenous people with rights or interests (as discussed above in sections 4 and 5).

9 ENVIRONMENTAL RECORD OF PERSON(S) PROPOSING TO TAKE THE ACTION

Description of the environmental record of the person taking the action. The information provided must include details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:

- (a) the person proposing to take the action; and
- (b) for an action for which a person has applied for a permit, the person making the application.

If the person proposing to take the action is a corporation, details of the corporation's environmental policy and planning framework must also be included.

10 ECONOMIC AND SOCIAL MATTERS

The short-term and long-term economic and social impacts of the action, both positive and negative, must be analysed and described. Matters of interest should include, but not be limited to:

- a) details of any public consultation activities undertaken, and their outcomes;
- b) projected economic costs and benefits of the project, including the basis for their estimation through cost/benefit analysis or similar studies; and
- c) employment opportunities expected to be generated by the project (including construction and operational phases).

11 INFORMATION SOURCES PROVIDED IN THE EIS

For information given in the EIS, the EIS must state:

- (a) the sources of the information;
- (b) how recent the information is;
- (c) how the reliability of the information was tested; and

(d) what uncertainties (if any) are in the information.

12 CONCLUSION

An overall conclusion as to the environmental acceptability of the proposal should be provided, including discussion on compliance with principles of ESD and the objects and requirements of the EPBC Act. Reasons justifying undertaking the proposal in the manner proposed should also be outlined.

Measures proposed or required by way of offset for any unavoidable impacts on NES matters, and the relative degree of compensation, should be restated here.

ATTACHMENT 1

THE OBJECTS AND PRINCIPLES OF THE ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999 SECTIONS 3 AND 3A

3 Objects of the Act

- (a) to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance;
- (b) to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources;
- (c) to promote the conservation of biodiversity;
- (d) to promote a co-operative approach to the protection and management of the environment involving governments, the community, land-holders and indigenous peoples;
- (e) to assist in the co-operative implementation of Australia's international environmental responsibilities;
- (f) to recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity; and
- (g) to promote the use of indigenous peoples' knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.

3A Principles of Ecologically Sustainable Development

The following principles are principles of ecologically sustainable development.

- (a) Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations.
- (b) If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
- (c) The principle of inter-generational equity – that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

- (d) The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.
- (e) Improved valuation, pricing and incentive mechanisms should be promoted.

ATTACHMENT 2

MATTERS THAT MUST BE ADDRESSED IN A PER AND EIS (SCHEDULE 4 OF THE EPBC REGULATIONS 2000)

1 General information

1.01 The background of the action including:

- (a) the title of the action;
- (b) the full name and postal address of the designated Proponent;
- (c) a clear outline of the objective of the action;
- (d) the location of the action;
- (e) the background to the development of the action;
- (f) how the action relates to any other actions (of which the Proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action;
- (g) the current status of the action; and
- (h) the consequences of not proceeding with the action.

2 Description

2.01 A description of the action, including:

- (a) all the components of the action;
- (b) the precise location of any works to be undertaken, structures to be built or elements of the action that may have relevant impacts;
- (c) how the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts;
- (d) relevant impacts of the action;
- (e) proposed safeguards and mitigation measures to deal with relevant impacts of the action;
- (f) any other requirements for approval or conditions that apply, or that the Proponent reasonably believes are likely to apply, to the proposed action;

(g) to the extent reasonably practicable, any feasible alternatives to the action, including:

- (i) if relevant, the alternative of taking no action;
- (ii) a comparative description of the impacts of each alternative on the matters protected by the controlling provisions for the action; and
- (iii) sufficient detail to make clear why any alternative is preferred to another;

(h) any consultation about the action, including:

- (i) any consultation that has already taken place;
- (ii) proposed consultation about relevant impacts of the action; and
- (iii) if there has been consultation about the proposed action — any documented response to, or result of, the consultation; and

(i) identification of affected parties, including a statement mentioning any communities that may be affected and describing their views.

3 Relevant impacts

3.01 Information given under paragraph 2.01(d) must include

- (a) a description of the relevant impacts of the action;
- (b) a detailed assessment of the nature and extent of the likely short term and long term relevant impacts;
- (c) a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;
- (d) analysis of the significance of the relevant impacts; and
- (e) any technical data and other information used or needed to make a detailed assessment of the relevant impacts.

4 Proposed safeguards and mitigation measures

4.01 Information given under paragraph 2.01(e) must include:

- (a) a description, and an assessment of the expected or predicted effectiveness of, the mitigation measures;
- (b) any statutory or policy basis for the mitigation measures;
- (c) the cost of the mitigation measures;

- (d) an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action, including any provisions for independent environmental auditing;
- (e) the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program; and
- (f) a consolidated list of mitigation measures proposed to be undertaken to prevent, minimise or compensate for the relevant impacts of the action, including mitigation measures proposed to be taken by State governments, local governments or the Proponent.

5 Other Approvals and Conditions

5.01 Information given under paragraph 2.01(f) must include:

- (a) details of any local or State government planning scheme, or plan or policy under any local or State government planning system that deals with the proposed action, including:
 - (i) what environmental assessment of the proposed action has been, or is being carried out under the scheme, plan or policy; and
 - (ii) how the scheme provides for the prevention, minimisation and management of any relevant impacts;
- (b) a description of any approval that has been obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the Act), including any conditions that apply to the action;
- (c) a statement identifying any additional approval that is required; and
- (d) a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action.

6 Environmental record of person proposing to take the action

6.01 Details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:

- (a) the person proposing to take the action; and
- (b) for an action for which a person has applied for a permit, the person making the application.

6.02 If the person proposing to take the action is a corporation — details of the corporation's environmental policy and planning framework.

7 Information sources

7.01 For information given the EIS must state:

- (a) the source of the information; and
- (b) how recent the information is; and
- (c) how the reliability of the information was tested; and
- (d) what uncertainties (if any) are in the information.