



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	2362/3
Duration of Permit:	From 17 May 2008 to 17 May 2018
Permit Holder:	Iluka Resources Limited

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I - CLEARING AUTHORISED

1. Land on which clearing is to be done

Mineral Sands (Eneabba) Agreement Act 1975, Mineral Lease 267SA

2. Purpose for which clearing may be done

Clearing for the purpose of mineral production.

3. Area of Clearing

The Permit Holder must not clear more than 39 hectares of native vegetation. All clearing must be within the area cross-hatched yellow on attached Plan 2362/3/3.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

PART II - ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

5. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (i) avoid the clearing of native vegetation;
- (ii) minimise the amount of native vegetation to be cleared; and
- (iii) reduce the impact of clearing on any environmental value.

6. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (ii) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

7. Retain and spread vegetative material and topsoil

- (a) Within 24 months of undertaking clearing authorised under this Permit, the Permit Holder shall *revegetate* and *rehabilitate* the cleared area by:
- (i) ripping the ground on the contour to remove soil compaction;
 - (ii) deliberately laying vegetative material and topsoil that have comparable vegetation types, comparable soil types and comparable *soil disease status* to pre-clearing vegetation types within the Permit area;
 - (iii) deliberately *planting* and *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area; and
 - (iv) ensuring only *local provenance* seeds and propagating material are used to *revegetate* and *rehabilitate* the area.
- (b) Within 24 months of undertaking *revegetation* and *rehabilitation* in accordance with Condition 7(a) of this Permit, the Permit Holder must:
- (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
 - (ii) where, in the opinion of an *environmental specialist*, the composition, structure and density determined under Condition 7(b)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *revegetate* the area by deliberately *planting* and/or *direct seeding* native vegetation that will result in similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area and enduring only *local provenance* seeds and propagating material are used.
- (c) Where additional *planting* or *direct seeding* of native vegetation is undertaken in accordance with Condition 8(b)(ii) of this Permit, the Permit Holder shall repeat Condition 7(b)(i) and 7(b)(ii) within 24 months of undertaking the additional *planting* or *direct seeding* of native vegetation.
- (d) Where a determination by an *environmental specialist* that the composition, structure and density within the areas *revegetated* and *rehabilitated* will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, as determined in Condition 7(b)(i) and 7(b)(ii) of this Permit, that determination shall be submitted for the *CEO's* consideration. If the *CEO* does not agree with the determination made under Condition 7(b)(ii), the *CEO* may require the Permit Holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under Condition 7(b)(ii).

PART III - RECORD KEEPING AND REPORTING

8. Records to be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit,
- (i) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) the date that the area was cleared;
 - (iii) the size of the area cleared (in hectares); and
 - (iv) purpose for which clearing was undertaken.
- (b) In relation to the *revegetation* and *rehabilitation* of areas pursuant to Condition 7 of this Permit:
- (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken; and
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares).

9. Reporting

- (a) The Permit Holder shall provide a report to the Executive Director, Environment, Department of Mines and Petroleum by 15 March each year for the life of this permit, demonstrating adherence to all conditions of this permit, and setting out the records required under Condition 8 of this permit in relation to clearing carried out between 1 January and 31 December of the previous calendar year.
- (b) Prior to 17 May 2018, the Permit Holder must provide to the Executive Director, Environment, Department of Mines and Petroleum a written report of records required under Condition 8 of this Permit where these records have not already been provided under Condition 9(a) of this Permit.

DEFINITIONS

The following meanings are given to terms used in this Permit:

dieback means the effect of *Phytophthora* species on native vegetation;

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

environmental specialist means a person who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit, or who is approved by the CEO as a suitable environmental specialist;

fill means material used to increase the ground level, or fill a hollow;

local provenance means native vegetation seeds and propagating material that is collected:

- within the Lesueur Sandplain IBRA 7 (Interim Biogeographic Regionalisation for Australia version 7) Subregion;
- between the 500-600 millimetre isohyets, approximately; and
- encompassing both coastal sandplain (not calcareous) soils and lateritic (including sandplain over laterite) soils.

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



Marnie Leybourne | Director Operations
Operations, Environment
08 September 2016

Officer with delegated authority under Section 20
of the Environmental Protection Act 1986