

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number: 8046/1

Duration of Permit: From 28 September 2019 to 27 September 2034

Permit Holder: Tronox Mining Australia Limited

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

ADVICE NOTE

Establish and maintain vegetation on land other than land cleared under the clearing permit in order to offset the loss of cleared vegetation (offset)

As part of approval 2014/7205 under the *Environment Protection and Biodiversity Conservation Act* 1999 the proponent provided an Offset Management Plan to the (federal) Department of Environment and Energy on 15 October 2018 to maintain and improve habitat for Western Ringtail Possum and black cockatoo in the Abba River Offset Area and Gwindinup Offset Area.

PART I - CLEARING AUTHORISED

1. Land on which clearing is to be done

Mining Lease 70/360 Mining Lease 70/569

2. Purpose for which clearing may be done

Clearing for the purpose of mineral sands mining and associated activities.

3. Area of Clearing

The Permit Holder must not clear more than 38.9 hectares of native vegetation. All clearing must be within the areas cross-hatched yellow on attached Plan 8046/1.

4. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 6 September 2024.

5. 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.

6. Staged Clearing

The Permit Holder shall not clear native vegetation unless the purpose for which the clearing is authorised begins within 3 months of the clearing being undertaken.

PART II - MANAGEMENT CONDITIONS

7. Avoid, minimise and reduce the impacts and extent of 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:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

8. 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*:

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

9. Fauna management

The Permit Holder must implement and adhere to the document "Threatened Fauna Environmental Management Plan, Wonnerup North Project" (Revision 2a, April 2019), as retained on Department of Mines, Industry Regulation and Safety File No. A0742/201801 as Doc ID 6776885, or future versions as approved by the CEO.

10. Offset - Revegetation and Rehabilitation

No later than 6 August 2026, the Permit Holder shall implement and adhere to the following revegetation commitments:

- (a) commence *revegetating* and *rehabilitating* the areas cross-hatched red on attached Plan 8046/1 by:
 - (i) undertaking an extensive weed control programme;
 - (ii) deliberately *revegetating* native vegetation that will provide suitable habitat for western ringtail possum (*Pseudocheirus occidentalis*) and *black cockatoos*; and
 - (iii) ensuring only *local provenance* seeds and propagating material are used to *revegetate* and *rehabilitate* the area.
- (b) establishing at least five 20 x 20 metre quadrat and five 20 metre transect monitoring sites within the *rehabilitated* areas:
- (c) fencing the *rehabilitated* areas to adequately exclude livestock;
- (d) achieve the following completion criteria after the five year monitoring period for the areas *revegetated* and *rehabilitated* under this Permit:

Proposed Completion criteria	Monitoring (method, frequency)	Timing	Remedial actions	Evidence to demonstrate completion (validation)
1. A density of tree species greater than 400 individuals per hectare achieved in revegetation prior to completion.	Spring survey 15, 27 & 39 months post planting and triennial thereafter.	By 5 years post planting.	Weed control and/or additional planting.	Third-party report by suitably qualified professional verifying completion criteria have been met.
2. Select, establish and maintain a minimum of 15 species that provide western ringtail possum and black cockatoo habitat in revegetation prior to completion, and include at least: - 5 species that provide foraging value - 5 species that provide	Spring survey 15, 27 & 39 months post planting and triennial thereafter	By 5 years post planting.	Weed control and/or additional planting.	Third-party report by suitably qualified professional verifying completion criteria have been met.

canopy value - 5 species that provide understorey value.				
3. There will be no area larger than 250 square metres without a developing native understory cover	Spring survey 15, 27 & 39 months post planting and triennial thereafter	By 2 years post planting	Weed control and/or additional planting.	Third-party report by suitably qualified professional verifying completion criteria have been met.
 4. Achieve native revegetation cover targets of: >10 percent native revegetation cover at 14 months (second growing season); >30 percent native revegetation cover at 39 months (fourth growing season); or Trend in monitoring data showing increasing native revegetation cover during the first five growing seasons, before stabilising within a narrow range >30 percent 	Spring survey 15, 27 & 39 months post planting and triennial thereafter	By 5 years post planting.	Weed control and/or additional planting.	Third-party report by suitably qualified professional verifying completion criteria have been met.

11. Offset - Conservation Covenant

No later than September 2032, the Permit Holder shall:

- (a) give a conservation covenant under section 30B of the *Soil and Land Conservation Act 1945* setting aside the areas cross-hatched red on attached Plan 8046/1 for the protection and management of vegetation in perpetuity; and
- (b) provide to the *CEO* a copy of the executed conservation covenant.

PART III - RECORD KEEPING AND REPORTING

12. 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:
 - 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) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with Condition 7 of this Permit;
- (c) actions taken to minimise the introduction and spread of *dieback* and *weeds* in accordance with Condition 8 of this Permit;
- (d) activities in relation to Condition 9 of this Permit;

- (e) in relation to the revegetation of areas pursuant to Condition 10 of this Permit:
 - (i) a description of the *revegetation* and *rehabilitation* activities undertaken;
 - (ii) the size of the area revegetated and rehabilitated (in hectares); and
 - (iii) the date that the area was revegetated and rehabilitated; and
- (f) actions taken to give a conservation covenant in accordance with Condition 11 of this Permit

13. Reporting

- (a) The Permit Holder shall provide a report to the General Manager Environmental Compliance, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety by 31 July each year for the life of this permit, demonstrating adherence to all conditions of this permit, and setting out the records required under Condition 12 of this permit in relation to clearing carried out between 1 July and 30 June of the previous financial year.
- (b) Prior to 27 September 2034, the Permit Holder must provide to the General Manager Environmental Compliance, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety a written report of records required under Condition 12 of this Permit where these records have not already been provided under Condition 13(a) of this Permit.

DEFINITIONS

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

black cockatoo/s means the fauna species Calyptorhynchus banksii naso (Forest Red-tailed Black Cockatoo), Calyptorhynchus baudinii (Baudin's Cockatoo) and Calyptorhynchus latirostris (Carnaby's Cockatoo).

CEO means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*, or an officer with delegated authority under Section 20 of the *Environmental Protection Act 1986*;

dieback means the effect of Phytophthora species on native vegetation;

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

local provenance means native vegetation seeds and propagating material from natural sources within 50 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared;

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;

regeneration means revegetation that can be established from in situ seed banks contained either within the topsoil or seed-bearing *mulch*;

rehabilitate/ed/ion/ing 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 Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

Tania Liaghati

Tania Liaghati Acting General Manager Environmental Compliance Resource and Environmental Compliance Division 05 September 2019

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