



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6916/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Rio Tinto Exploration Pty Ltd

1.3. Property details

Property: Iron Ore (Mt Bruce) Agreement Act 1972, Mineral Lease 252SA (AML70/252)
Local Government Area: Shire of Asburton
Colloquial name: Turee Syncline Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10		Mechanical Removal	Drill sites, access tracks and camp

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 2 June 2016

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Beard vegetation associations have been mapped for the whole of Western Australia. Two Beard vegetation associations have been mapped within the application area (GIS Database):

Beard vegetation association 82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*; and
Beard vegetation association 567: Hummock grasslands, shrub steppe; mulga & kanji over soft spinifex & *Triodia basedowii*.

Previous surveys in the area by GHD (2009a; 2009b) and Mattiske (2011) have identified sixteen vegetation assemblages within the application area:

Flowlines

MF (Minor Flowlines) - Low Open Woodland to High Open Shrubland of *Acacia aneura*, *A. pruinocarpa*, *A. pyriformis*, *Senna artemisioides* subsp. *oligophylla*, over Open Shrubland of *S. glutinosa* x *luerssenii*, *S. stricta*, *Corchorus lasiocarpus* over, Low Open Shrubland of *Ptilotus obovatus*, *Indigofera monophylla*, *Rhynchosia minima* over Open Tussock Grassland of *Aristida inaequiglumis*, *Themeda* sp. Mt Barricade, *Cymbopogon* sp., *Enneapogon caeruleus* with Open Hummock Grassland of *Triodia wiseana* with *Triodia* spp.

LW1 + HG3 (Low Woodland 1, Shrubland, Hummock Grassland 2) - Low Woodland of *Acacia aneura*, *A. pruinocarpa*, *A. citrinoviridis* over Open Shrubland of *Senna stricta*, *Senna artemisioides* subsp. *oligophylla*, *Eremophila forrestii*, over Low Open Shrubland of *Senna* spp., *Sida* spp., *Marieana* spp. over Very Open Hummock Grassland of *Triodia wiseana* with Very Open Tussock Grassland of *Enneapogon caeruleus*, *Paspalidium basicladum*.

LW2 + HG1 (Low Woodland 2, Shrubland, Hummock Grassland 1) - Low Woodland of *Acacia citrinoviridis*, *A. aneura*, *A. hamersleyensis*, over Open Shrubland of *Senna* spp., *Eremophila latrobei*, *Dodonaea pachyneura*, *Corchorus lasiocarpus*, over Low Open Shrubland of *Dipteracanthus australasicus*, *Lepidium pedicellosum*, over Open Hummock Grassland of *Triodia epactia* with Open Tussock Grassland of *Cymbopogon ambiguus*, *Enneapogon caeruleus*, *Aristida* spp.

W (Woodland, Shrubland, Hummock Grassland) - Low Woodland to Low Open Forest of *Eucalyptus victrix*, *Corymbia ferritcola*, *Acacia citrinoviridis*, *A. pruinocarpa*, *A. ayersiana* over Scattered Tall Shrubs of *Rhagodia eremaea*, *Gossypium robinsonii*, over Open Shrubland of *Senna* spp., *Jasminum didymum* subsp. *lineare*, over Low Shrubland of *Dipteracanthus australasicus*, *Diocladanthera forrestii*, *Harniera kempeana*, *Corchorus lasiocarpus*, over Very Open Hummock Grassland of *Triodia epactia*, *T. longiceps*, with Very Open Tussock Grassland of *Cenchrus ciliaris*, *Themeda* sp. Mt Barricade, *Cymbopogon ambiguus*, *Enneapogon caeruleus*.

Hills

HG1 (Hummock Grassland 1) - Hummock Grassland of *Triodia epactia* with emergent Scattered Low Trees (variable) of *Eucalyptus leucophloia*, *Acacia pruinocarpa*, *Grevillea berryana*, *Hakea chordophylla*, *Codonocarpus cotonifolia*, with emergent scattered Tall Shrubs to Shrubs (variable) of *Petalostylis labicheioides*, *Acacia*

maitlandii, *A. pyrifolia*, *A. inaequilatera*, *Senna* spp., *Eremophila phyllopoda*, *E. jucunda*, with Low Scattered Shrubs of *Ptilotus calostachyus*, *Goodenia stobbsiana*, *Lepidium pedicellosum*, *Solanum lasiophyllum*.

HG2 (Hummock Grassland 2) - Hummock Grassland of *Triodia longiceps*, *T. epactia* with emergent Scattered Low Trees of *Acacia pruinocarpa*, with emergent Scattered Shrubs to Low Shrubs of *Eremophila cuneifolia*, *E. latrobei*, *Senna* spp., *Sida* spp., *Stylobasium spathulatum*, *Triumfetta leptacantha*, *Lepidium pedicellosum*.

HG3 (Hummock Grassland 3) - Closed Hummock Grassland to Hummock Grassland of *Triodia wiseana*, with emergent Scattered Low Trees of *Acacia pruinocarpa*, *A. inaequilatera*, with emergent Scattered Shrubs to Low Shrubs of *A. arida*, *A. bivenosa*, *A. synchronicia*, *A. tetragonophylla*, *Senna* spp., *Tribulus suberosus*, *Eremophila cuneifolia*, *E. jucunda*, *E. fraseri*.

HG1 + S1 (Hummock Grassland 1, Shrubland 1) - Open Scrub to High Open Shrubland of *Acacia maitlandii* with scattered *Senna* spp., *Eremophila* spp., *Petalostylis labicheoides*, *Tribulus suberosus*, *Goodenia stobbsiana*, *Ptilotus* spp., with emergent Scattered Low Trees of *Eucalyptus leucophloia*, *E. gamophylla*, *E. kingsmillii*, *Acacia pruinocarpa*, *A. pyrifolia*, over Closed Hummock Grassland to Hummock Grassland of *Triodia epactica* with occasional *Triodia pungens*, with Very Open to Scattered Tussock Grassland of *Amphipogon* spp., *Eriachne* spp.

HG1 + S2 (Hummock Grassland 1, Shrubland 2) - High Shrubland to High Open Shrubland of *Petalostylis labicheoides* with scattered *Senna* spp., *Eremophila* spp., *Acacia maitlandii*, *Tribulus suberosus*, *Goodenia stobbsiana*, *Ptilotus* spp., *Solanum lasiophyllum*, *Corchorus lasiocarpus*, with emergent Scattered Low Trees of *Acacia pruinocarpa*, *A. pyrifolia*, *A. aneura*, over Hummock Grassland to Open Hummock Grassland of *Triodia epactica*.

HG1 + S3 (Hummock Grassland 1, Shrubland 3) - High Shrubland to High Open Shrubland of *Acacia maitlandii*, *Petalostylis labicheoides* with scattered *Senna* spp., *Eremophila* spp., *Tribulus suberosus*, *Goodenia stobbsiana*, *Ptilotus* spp., with emergent Scattered Low Trees of *Eucalyptus leucophloia*, *Corymbia ferritcola*, *A. pyrifolia*, *Hakea chordophylla*, over Closed Hummock Grassland to Hummock Grassland of *Triodia epactica* with occasional *Triodia pungens*, with Very Open to Scattered Tussock Grassland of *Enneapogon caerulescens*.

HG1 + S4 (Hummock Grassland 1, Shrubland 4) - High Shrubland of Mixed *Acacia* spp. (typically: *Acacia pruinocarpa*, *A. pyrifolia*, *A. sibirica*, *A. inaequilatera*, *A. bivenosa*, etc.) over Shrubland to Open Shrubland of *Senna* spp., *Eremophila* spp., *Petalostylis labicheoides* scattered *Goodenia stobbsiana*, *Solanum lasiophyllum*, *Ptilotus* spp., with emergent Scattered Low Trees of *Eucalyptus leucophloia*, over Hummock Grassland of *Triodia epactica* Very Open Tussock Grassland of *Eriachne* spp., *Themeda* sp. Mt Barricade, *Cymbopogon ambiguus*.

HG3 + S4 (Hummock Grassland 2, Shrubland 4) - High Shrubland of Mixed *Acacia* spp. (typically: *Acacia pruinocarpa*, *A. pyrifolia*, *A. bivenosa*, *A. adsurgens*, *A. synchronicia*, etc.) over Shrubland to Open Shrubland of *Senna* spp., *Eremophila* spp., *Petalostylis labicheoides* over Hummock Grassland of *Triodia wiseana*.

HG1 + LW1 (Hummock Grassland 1 + Low Open Woodland 1) - Low Open Forest to Low Woodland of *Acacia aneura* with *A. ayersiana*, *A. hamersleyensis* over High Shrubland of *Acacia tetragonophylla*, *A. synchronicia*, *A. pruinocarpa*, *Psyrax latifolia* over Shrubland to Open Shrubland of *Senna* spp., *Eremophila* spp., over Low Shrubland to Low Open Shrubland of *Senna stricta*, *Maireana melanocoma*, *Enchylaena tomentosa*, *Sclerolaena* spp., over Hummock Grassland to Open Hummock Grassland of *Triodia epactia* with scattered *T. wiseana*, *T. longiceps*, with Open Tussock Grassland of *Eriachne* spp., *Aristida* spp., *Enneapogon* spp.

HG1 + LW2 (Hummock Grassland 1, Low Open Woodland 3) - Low Open Woodland to Very Open Tree Mallee of *Eucalyptus gamophylla*, *E. kingsmillii*, *E. leucophloia*, *E. trivalva* over High Open Shrubland of *Acacia pyrifolia*, *A. tumida*, *A. pruinocarpa*, *A. hamersleyensis* with *Petalostylis labicheoides* over Open Shrubland to Low Open Shrubland of *Eremophila* spp., *Senna glutinosa*, *Psyrax latifolia*, *Tribulus suberosus* over Hummock Grassland of *Triodia epactia* with Scattered Tussock Grasses of *Eriachne* spp., *Cymbopogon ambiguus*.

LW1 + HG1 (Low Woodland 1, Hummock Grassland 1) - Low Open Forest to Low Woodland of *Acacia aneura* with *A. ayersiana*, *A. hamersleyensis* over High Shrubland of *Acacia tetragonophylla*, *A. synchronicia*, *A. pruinocarpa*, *Psyrax latifolia* over Shrubland to Open Shrubland of *Senna* spp., *Eremophila* spp., over Low Shrubland to Low Open Shrubland of *Senna stricta*, *Maireana melanocoma*, *Enchylaena tomentosa*, *Sclerolaena* spp., over Hummock Grassland to Open Hummock Grassland of *Triodia epactia* with scattered *T. wiseana*, *T. longiceps*, with Open Tussock Grassland of *Eriachne* spp., *Aristida* spp., *Enneapogon* spp.

LW1 + HG2 (Low Woodland 1, Hummock Grassland 2) - Low Woodland of *Acacia aneura*, *A. pruinocarpa* over High Open Shrubland of *Acacia tetragonophylla*, *Santalum lanceolatum* over Open Heath to Shrubland of *Senna* spp., *Eremophila* spp., over Low Open Shrubland of *Ptilotus* spp. And mixed chenopods, over Very Open Hummock Grassland of *Triodia longiceps*.

Plains

HG5 + S4 (Hummock Grassland 5, Shrubland 4) - High Shrubland of *Acacia tetragonophylla* with *A. aneura*, *A. hamersleyensis* over Shrubland of *Ptilotus obovatus*, *Eremophila cuneifolia* with *Senna* spp., *Chenopodium auricomum* over Open Shrubland of *Corchorus lasiocarpus*, *Enchylaena tomentosa*, *Tribulus suberosus*, *Ptilotus* spp. over Hummock Grassland of *Triodia longiceps*, *T. wiseana*.

Minor Gullies and Creeklines

3a - Low shrubland of *Acacia pyrifolia*, *Petalostylis labicheoides* over *Triodia* species and low shrubs and herbs on minor gullies in undulating hills.

Low Undulating Hills and Associated Slopes

10b - Hummock grassland of *Triodia wiseana* with patches of *Acacia arida*, *A. pyrifolia*, *A. tetragonophylla* over

Eremophila cuneifolia over low herbs and grasses on lower undulating hills.

Clearing Description	Turee Syncline Project Rio Tinto Exploration Pty Ltd proposes to clear up to 10 hectares of native vegetation within a total boundary of approximately 1,259 hectares for the purpose of drill sites, access tracks and camp. The proposal is located approximately 12 kilometres east of Paraburdoo in the Shire of Ashburton.
Vegetation Condition	Completely degraded: No longer intact; completely/almost completely without native species (Keighery, 1994). to: Pristine: No obvious signs of disturbance (Keighery, 1994).
Comment	Clearing Permit CPS 6916/1 was granted by the Department of Mines and Petroleum (DMP) on 24 March 2016 and authorised the clearing of up to 10 hectares of native vegetation within a clearing permit boundary of approximately 1,259 hectares. The clearing was authorised for the purpose of drill sites, access tracks and camp.

3. Assessment of application against Clearing Principles

Comments Rio Tinto Exploration Pty Ltd has applied to amend CPS 6916/1 to extend the duration of the permit and the period in which clearing may be done by an additional five years. The amount of clearing authorised and permit boundary remain unchanged.

The proposed amendment is unlikely to result in any significant change to the environmental impacts of the proposed clearing. The assessment against the clearing principles remains consistent with the assessment contained in decision report CPS 6916/1.

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments There is one native title claim over the area under application (DAA, 2016). This claim (WC2010/011) has been registered with the Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

According to available databases, there are no registered Aboriginal Sites of Significance within the application area (DAA, 2016). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, Department of Parks and Wildlife and the Department of Water to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

Methodology DAA (2016)

4. References

- DAA (2016) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 20 May 2016).
- GHD (2009a) Report for Turee Syncline Project – Vegetation, Flora and Fauna Baseline Surveys. Prepared for Rio Tinto Iron Ore by GHD. March 2009.
- GHD (2009b) Report for Turee Syncline – Phase Two Flora Survey. Prepared for Rio Tinto Iron Ore by GHD. October 2009.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DPaW and DER)
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DotE	Department of the Environment, Australian Government
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DotE)

EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T Threatened species:
Published as Specially Protected under the *Wildlife Conservation Act 1950*, listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened fauna is that subset of ‘Specially Protected Fauna’ declared to be ‘likely to become extinct’ pursuant to section 14(4) of the Wildlife Conservation Act.

Threatened flora is flora that has been declared to be ‘likely to become extinct or is rare, or otherwise in need of special protection’, pursuant to section 23F(2) of the Wildlife Conservation Act.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR Critically endangered species
Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EN Endangered species
Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

VU Vulnerable species
Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EX Presumed extinct species
Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

IA Migratory birds protected under an international agreement
Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

CD Conservation dependent fauna
Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.

OS Other specially protected fauna
Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

- P** **Priority species**
 Species which are poorly known; or
 Species that are adequately known, are rare but not threatened, and require regular monitoring.
 Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.
- P1** **Priority One - Poorly-known species:**
 Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
- P2** **Priority Two - Poorly-known species:**
 Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
- P3** **Priority Three - Poorly-known species:**
 Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
- P4** **Priority Four - Rare, Near Threatened and other species in need of monitoring:**
 (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.
 (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.
 (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

Principles for clearing native vegetation:

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.
- (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.