



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2382/4
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

1.3. Property details

Property: Iron Ore (Hamersley Range) Agreement Act 1963 – Mineral Lease 4SA (AML70/4)
Local Government Area: Shire of Ashburton
Colloquial name: Mount Tom Price Iron Ore Mine

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
228		Mechanised clearing.	Mineral production, geotechnical drilling, mineral exploration, rehabilitation activities and associated disturbance.

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 27 December 2013

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

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| Vegetation Description | <ul style="list-style-type: none"> • H4: <i>Corymbia hamersleyana</i>, <i>Eucalyptus kingsmillii</i> subsp. <i>kingsmillii</i> and <i>E. gamophylla</i> very open mallee over <i>Acacia hamersleyensis</i> high shrubland over <i>Triodia brizoides</i> open hummock grassland on skeletal red brown silty clay on upper slopes of high rocky hills; • H5: <i>Corymbia hamersleyana</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> scattered low trees over <i>Acacia hamersleyensis</i> and <i>A. maitlandii</i> open shrubland over <i>Triodia brizoides</i> hummock grassland on skeletal red brown sandy loam on high rocky hill slopes; • H6: <i>Hakea chordophylla</i> scattered tall shrubs over <i>Acacia arida</i> open shrubland over <i>Triodia brizoides</i> hummock grassland on red-brown silty clay on upper slopes of high rocky hills; • G2: <i>Acacia aptaneura</i> and <i>A. pruinocarpa</i> high open shrubland over <i>Santalum lanceolatum</i> open shrubland over <i>Eriachne mucronata</i> and <i>Aristida obscura</i> very open tussock grassland on red-brown sandy loam in the base of gorges and gullies and on very steep slopes; • G3: <i>Corymbia hamersleyana</i> low open woodland over <i>Acacia hamersleyensis</i> high open shrubland over <i>Triodia brizoides</i> open hummock grassland on red-brown sandy loam in gullies and on steep slopes; • G4: <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> low open woodland over <i>E. gamophylla</i> scattered mallees over <i>Triodia epactia</i> hummock grassland on red-brown sandy loam on the slopes of gorges and gullies and on steep slopes of high rocky hills; • L4: <i>Acacia aff. aneura</i>, <i>A. rhodophloia</i> and <i>A. pruinocarpa</i> tall closed scrub over <i>Scaevola acacioides</i> and <i>Dodonaea pachyneura</i> scattered shrubs over <i>Triodia brizoides</i> open hummock grassland over <i>Eriachne mucronata</i> scattered tussock grasses on low hills; and • I1: Completely degraded / cleared areas including mining infrastructure and tracks. |
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Clearing Description	Mount Tom Price Iron Ore Mine. Hamersley Iron Pty Ltd proposes to increase the boundary of CPS 2382/3 by approximately 116.3 hectares to facilitate the rehabilitation of three waste dumps at the Tom Price mine site. Vegetation clearing is required to achieve a suitable slope angle and to provide access for the rehabilitation activities. No change to the current clearing limit of 228 hectares is proposed. The project is located approximately 7 kilometres south south-west of Tom Price, in the Shire of Ashburton.
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Vegetation Condition	Excellent (Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species):
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to

Completely Degraded (The structure of the vegetation is no longer intact and the area is completely or almost completely without native species).

Comment

Vegetation condition appears to have been recorded using the scale created by Trudgen (1988). These vegetation condition ratings have been converted to the scale implemented by Keighery (1994).

3. Assessment of application against clearing principles

Comments

Hamersley Iron Pty Ltd has applied to increase the clearing permit boundary of CPS 2382/3 by approximately 116.3 hectares (Rio Tinto, 2013). Within the proposed amended permit area 228 hectares of vegetation clearing will be undertaken to facilitate mineral production, geotechnical drilling, rehabilitation activities and associated disturbance.

During flora and vegetation surveys of the additional areas proposed to be included into the existing permit boundary (hereafter referred to as the project area) and the surrounding locality, seven intact vegetation communities were identified (Rio Tinto, 2013). The condition of these vegetation communities ranged from Excellent to Completely Degraded (Rio Tinto, 2013). None of the vegetation communities occurring within the project area or its surrounds were determined to be Threatened Ecological Communities or Priority Ecological Communities.

The most recent flora and vegetation survey of the project area and its surrounds recorded 311 flora taxa from 133 genera and 52 families, which is not considered to be a high level of diversity (Rio Tinto, 2013). Forty two species of conservation significant flora have been recorded within a 40 kilometre radius of the project area (Rio Tinto, 2013). Thirty seven of these species are not expected to occur in the project area due to the presence of unsuitable habitat or the low likelihood occurrences of these species would have been overlooked during previous survey work (Rio Tinto, 2013). Four of these species have been recorded within the project area; *Sida* sp. Hamersley Range (K. Newbey 10692) (Priority 1), *Indigofera ixocarpa* (Priority 2), *Dampiera anonyma* (Priority 3) and *Eremophila magnifica* subsp. *magnifica* (Priority 4). These species are not confined to the project area as Rio Tinto's internal database contains numerous records of these species from the wider Pilbara region (Rio Tinto, 2013). Therefore, while individuals of these species will potentially be lost during the clearing activities, the conservation status and distribution of these species is not expected to be adversely impacted by the clearing activities.

Sida sp. Barlee Range (S. van Leeuwen 1642) (Priority 3) may occur in the project area since it is possible this species has been overlooked during previous survey work due to its small size (Rio Tinto, 2013). Numerous occurrences of this species have been recorded from the Tom Price region (Rio Tinto, 2013), therefore should this species occur in the project area, the conservation status of this species is unlikely to be adversely impacted by the proposed clearing activities.

It should be noted that the threatened flora taxa *Lepidium catapycnon* was recorded 1 kilometre north of the project area (Rio Tinto, 2013). The proponent advises that neither this species nor its preferred habitat have been recorded in the project area during previous surveys (Rio Tinto, 2013).

Numerous weed species were identified in the project area and its surrounding locality during past survey work (Rio Tinto, 2013). During the most recent flora, vegetation and fauna survey of the project area and its surrounds 21 weed species were recorded including *Tamarix aphylla* (Rio Tinto, 2013). *Tamarix aphylla* is listed as a declared pest under Section 22 of the *Biosecurity and Agriculture Management Act 2007* (Department of Agriculture and Food, 2013). A weed management condition has been placed on the permit to minimise the impact clearing activities could have on the areas biodiversity.

The fauna habitats identified in the project area during fauna surveys of the project area and its surrounds are well represented in the Tom Price locality (Rio Tinto, 2013). Therefore, the clearing activities are not expected to remove any unique or rare fauna habitat. During fauna surveys of the project area and its surrounds the following conservation significant fauna species were identified; Pilbara Olive Python (*Liasis olivaceus barroni*) (Schedule 1, Vulnerable), Rainbow Bee-eater (*Merops ornatus*) (Schedule 3, Migratory), Star Finch (*Neochmia ruficauda* subsp. *clarescens*) (Priority 4), Ghost Bat (*Macroderma gigas*) (Priority 4) and the Western Pebble-mound Mouse (*Pseudomys chapmani*) (Priority 4). A desktop assessment determined that the project area may also provide suitable habitat for the following conservation significant fauna species; Northern Quoll (*Dasyurus hallucatus*) (Schedule 1, Endangered), Peregrine Falcon (*Falco peregrinus*) (Schedule 4), Australian Bustard (*Ardeotis australis*) (Priority 4), Bush Stone-curlew (*Burhunis grallarius*) (Priority 4) and the Long-tailed Dunnart (*Sminthopsis longicaudata*) (Priority 4).

An intensive trapping effort and opportunistic searches were undertaken to determine if the Northern Quoll occurred in the project area and its surrounds, however this survey work did not reveal any evidence of Northern Quoll occurrences (Rio Tinto, 2013). The Pilbara Olive Python was recorded approximately 3.1 kilometres to the northwest of the project area, however the proponent advises that no suitable habitat for this species exists within or immediately adjacent to the project area (Rio Tinto, 2013).

While conservation significant fauna species may utilise the habitats of the project area, these fauna habitats

are widespread within the Pilbara region. Therefore, it is unlikely the clearing activities will result in the loss of fauna habitat critical to the survival of conservation significant fauna species. In addition, none of the conservation significant fauna species identified above appear to be confined to the project area as occurrences of these species have been recorded across large areas of either the Pilbara region or Western Australia (Department of Environment and Conservation, 2007).

There are no permanent watercourses or wetlands, or Public Drinking Water Source Areas (PDWSA), within the project area. Therefore, no additional impacts to surface water flows or surface water and groundwater quality beyond those evaluated during the assessment of CPS 2382/3 are expected to result from the clearing activities.

The incorporation of additional area into the permit boundary is not expected to cause environmental impacts beyond those evaluated during the assessment of CPS 2382/3. Based on current environmental information the assessment of the clearing principles is consistent with the assessment in the clearing permit decision report for CPS 2382/3.

Methodology Department of Agriculture and Food (2013)
Department of Environment and Conservation (2007)
Rio Tinto (2013)
GIS Database
-Public Drinking Water Source Areas
-Hydrography, Linear Properties

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

There is one Native Title Claim (WC1997/089) over the area under application (GIS Database). This claim 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*.

There are several registered Aboriginal Sites of Significance within the application area (GIS Database). 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 (formerly Department of Environment and Conservation) 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.

The clearing permit amendment application was advertised on 28 October 2013 by DMP inviting submissions from interested parties. No submissions have been received regarding this application.

Methodology GIS Database
-Aboriginal Sites of Significance
-Native Title Claims – Determined by The Federal Court

4. References

- Department of Agriculture and Food (2013) Declared Pest (s22). Prepared by the Western Australian Department of Agriculture and Food.
- Department of Environment and Conservation (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed December 2013.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Rio Tinto (2013) Application for amendment to purpose permit CPS 2382/3. Prepared by Rio Tinto Iron Ore.
- Rio Tinto (2013) Statement addressing the 10 Clearing Principles; Tom Price – clearing for rehabilitation areas. Prepared by Rio Tinto Iron Ore.
- Trudgen, M.E. (1988) A report on the flora and vegetation of the Port Kennedy area. Unpublished report prepared for Bowman Bishaw and Associates, West Perth.

5. Glossary

Acronyms:

BoM Bureau of Meteorology, Australian Government
CALM Department of Conservation and Land Management (now DEC), Western Australia
DAFWA Department of Agriculture and Food, Western Australia
DEC Department of Environment and Conservation, Western Australia
DEH Department of Environment and Heritage (federal based in Canberra) previously Environment Australia

DEP	Department of Environment Protection (now DEC), Western Australia
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DoE	Department of Environment (now DEC), Western Australia
DoIR	Department of Industry and Resources (now DMP), Western Australia
DOLA	Department of Land Administration, Western Australia
DoW	Department of Water
EP Act	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (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
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
s.17	Section 17 of the Environment Protection Act 1986, Western Australia
TEC	Threatened Ecological Community

Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005. Department of Conservation and Land Management, Como, Western Australia*} :-

- P1** **Priority One - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P2** **Priority Two - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P3** **Priority Three - Poorly Known taxa:** taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
- P4** **Priority Four – Rare taxa:** taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.
- R** **Declared Rare Flora – Extant taxa (= Threatened Flora = Endangered + Vulnerable):** taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
- X** **Declared Rare Flora - Presumed Extinct taxa:** taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

- Schedule 1** **Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
- Schedule 2** **Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
- Schedule 3** **Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.
- Schedule 4** **Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna. Department of Conservation and Land Management, Como, Western Australia*} :-

- P1** **Priority One: Taxa with few, poorly known populations on threatened lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P2** **Priority Two: Taxa with few, poorly known populations on conservation lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation

status before consideration can be given to declaration as threatened fauna.

- P3 Priority Three: Taxa with several, poorly known populations, some on conservation lands:** Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P4 Priority Four: Taxa in need of monitoring:** Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.
- P5 Priority Five: Taxa in need of monitoring:** Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999*)

- EX Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.
- EX(W) Extinct in the wild:** A native species which:
- (a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
 - (b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
- CR Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
- EN Endangered:** A native species which:
- (a) is not critically endangered; and
 - (b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
- VU Vulnerable:** A native species which:
- (a) is not critically endangered or endangered; and
 - (b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
- CD Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

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.