Government of **Western Australia**
Department of **Mines and Petroleum**

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7024/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Chevron Australia Pty Ltd**

1.3. Property details

Property: Production Licence L12
Local Government Area: Shire of Ashburton
Colloquial name: Thevenard Island

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.1012		Mechanical Removal	Petroleum Production and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 12 May 2016

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

A flora and vegetation survey of the application area and surrounding area conducted by Astron (2013) identified two vegetation associations within the application area:

1 – Shrubland of *Acacia coriacea* over open to low shrubland over grassland/open grassland and open herbs found on in the inland ridge system; and

1h – Hummock grassland of *Triodia epactia* (Pilbara form) with very scattered *Acacia coriacea*.

Clearing Description

Chevron Australia Pty Ltd proposes to clear up to 1.1012 hectares of native vegetation within a total boundary of approximately 1.1012 hectares, for the purpose of petroleum production and associated activities. The project is located on Thevenard Island approximately 21 kilometres north of Onslow, in the Shire of Ashburton.

Vegetation Condition

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

To:

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

Comment

The proposed clearing is to allow for the repair of gas seepage from the plugged and abandoned Thevenard-1 wellhead.

3. Assessment of application against clearing principles

Comments

The application area occurs within Thevenard Island, part of the Pilbara Islands group within the Roebourne subregion of the Pilbara Interim Biogeographic Regionalisation of Australia bioregion (GIS Database).

Based on aerial imagery, the vegetation within the application area is in a 'good' to 'degraded' condition (Keighery, 1994; GIS Database), with the vegetation condition affected by buffel grass and previous disturbance from petroleum production. Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Astron (2015) reported that buffel grass (*Cenchrus ciliaris*) has invaded areas surrounding the *Triodia epactia* grassland and is dense around the Thevenard-1 well. Nine other species of weeds were also identified on the island. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed and dieback management condition.

A search of the Department of Parks and Wildlife's Threatened and Priority Flora databases revealed no records of Threatened Flora species and one Priority Flora species within a 5 kilometre radius of the application area; *Carpobrotus* sp. Thevenard Island (M. White 050) (Priority 3) (DPaW, 2016). This species

usually occurs on coarse white sand and dune tops; however it is also found in disturbed areas, as well as the mainland (DPaW, 2016). Given the low impact nature and the small scale of the proposed clearing (1.1012 hectares of native vegetation) is not likely to significantly impact the conservation significance of this flora species.

No Threatened or Priority Ecological Communities have been recorded within the application area or Thevenard Island (Astron, 2013; GIS Database).

The biodiversity values assessment conducted by Astron (2013) identified 76 bird species that have been recorded during avifauna surveys on Thevenard Island between 1985 and 2013. Of the 76 species, 30 species are listed under the *Environment Protection and Biodiversity Conservation Act 1999* as Migratory avifauna, including migratory shorebird and seabird species that use the intertidal zone for feeding and beaches for resting. However, given that the application area is within the inland ridge system, the proposed clearing is not likely to impact the migratory avifauna. A small native mammal, the Lakeland Downs Short-tailed mouse (*Leggadina lakedownensi*) (Priority 4) was identified on the island. This species occurs across northern Australia with one population on Thevenard Island. On Thevenard Island, it occupies *Acacia* shrub lands and low shrubs on deep sandy soils (DEC, 2012). Vegetation within the application area is predominately *Triodia epactia,* and vegetation mapping by Astron (2013) indicates that nearby vegetation in the local area that is preferable for the Short-tailed mouse (*Acacia* shrubland). Given the low impact nature and the small scale of the proposed clearing (1.1012 hectares of native vegetation) is not likely to significantly impact the conservation significance of this fauna species.

The application area is located within Thevenard Island, which is a Nature Conservation Reserve (Reserve No. 33174) vested in the Conservation Commission of WA, primarily for the protection of seabird and shorebird populations utilising coastal habitats (Chevron, 2016). The application area also occurs within the Islands Exmouth Gulf and Rowley Shelf Environmentally Sensitive Area (Register of National Estate) (GIS Database). According to the Australian Heritage Database (2016) the small islands between Exmouth Gulf and the Mary Anne Group, have important seabird and turtle breeding grounds, and small native animals (Australian Heritage Database, 2016). Despite the application area being on the Register of National Estate and within a Native Conservation Reserve, it is considered that the proposed clearing is of low impact and of a small scale. The clearing of
1.1012 hectares of native vegetation is not likely to significantly impact on the environmental values of the area.

There are no permanent watercourses or water bodies mapped within the area under application (GIS Database).

The proposal to clear 1.1012 hectares of native vegetation for the purpose of repairing a gas leak is unlikely to have any significant environmental impacts.

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*, and the proposed clearing is not likely to be at variance to Principles (a), (b), (c), (d), (e), (f), (g), (h), (i), and (j).

Methodology

Astron (2013)
Astron (2015)
Australian Heritage Database (2016)
Chevron (2016)
DEC (2012)
DPaW (2016)
Keighery (1994)

GIS Database:
- DPaW Tenure
- Hydrography, Lakes
- Hydrography, linear
- IBRA Australia
- Pre-European Vegetation
- Reguster of National Estate
- Threatened and Priority Ecological Communities (TEC/PEC) - Boundaries
- Threatened and Priority Ecological Communities (TEC/PEC) - Buffered

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

Comments

There are no Native Title claims over the area under application (Department of Aboriginal Affairs, 2016). 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 no registered Aboriginal Sites of Significance within the application area (Department of Aboriginal Affairs, 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.

The clearing permit application was advertised on 25 April 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology Department of Aboriginal Affairs (2016)

4. References

Astron (2013) Biodiversity Values Assessment Thevenard Island Operations Terrestrial Environment. Prepared by Astron Environmental Services for Chevron Australia Pty Ltd, November 2013.

Astron (2015) Thevenard Island Operations Terrestrial Ecological Monitoring Report. Prepared by Astron Environmental Services for Chevron Australia Pty Ltd, April 2015.

Australian Heritage Database (2016) Department of the Environment. Australian Government, http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;place_id=10050. (Accessed 22 April 2016).

Chevron (2016) CPS 7024/1 – Chevron's Clearing Assessment Report. Prepared by Chevron Australia Pty Ltd, 2016.

DEC (2012) Fauna Profiles – Lakeland Downs Short-tailed Mouse *Leggadina lakedownensis*. Department of Environment and Conservation (now Department of Parks and Wildlife), https://www.dpaw.wa.gov.au/images/documents/plants-animals/animals/animal_profiles/lakeland-downs-short-tailed-mouse_2012.pdf. (Accessed 16 May 2016).

Department of Aboriginal Affairs (2016) Aboriginal Heritage Enquiry System. Government of Western Australia, http://maps.dia.wa.gov.au/AHIS2/. (Accessed 16 May 2016).

Department of Parks and Wildlife (DPaW) (2016) NatureMap Department of Parks and Wildlife, http://naturemap.dec.wa.gov.au. (Accessed 26 April 2016).

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	*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
PEC	Priority Ecological Community, Western Australia
RIWI Act	*Rights in Water and Irrigation Act 1914*, 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.