



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 7908/2  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Pioneer Resources Limited

### 1.3. Property details

Property: Mining Lease 63/665  
Miscellaneous Licence 63/77  
Local Government Area: Shire of Dundas  
Colloquial name: Pioneer Dome Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
190		Mechanical Removal	Mineral Production and associated infrastructure

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 24 May 2018

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

**Vegetation Description** The vegetation of the application area is broadly mapped as the following Beard vegetation associations:  
128: Bare areas; rock outcrops; and  
522: Medium woodland; redwood (*Eucalyptus transcontinentalis*) and merrit (*E. flocktoniae*) (GIS Database).

A flora and vegetation survey was conducted by Botanica Consulting (Botanica) in November 2017 over the Pioneer Dome project area (approximately 720 hectares), which included the original clearing permit area and the current amendment application area (Botanica, 2017).

The following four vegetation associations were recorded within the original permit area (Botanica, 2017):

#### **Eucalypt Woodland (CLP-EW-1)**

Mid woodland of *Eucalyptus salmonophloia* over mid open shrubland of *Atriplex nummularia*/ *Eremophila interstans* subsp. *interstans* and low open shrubland of *Atriplex vesicaria* on clayloam plain.

#### **Eucalypt Woodland (RH-EW-1)**

Mid woodland of *Eucalyptus dundasii* over mid open shrubland of *Eremophila interstans* subsp. *interstans* and low open shrubland of *Scaevola spinescens* on greenstone hill.

#### **Eucalypt Woodland (RH-EW-2)**

Mid open woodland of *Eucalyptus salmonophloia* over mid open shrubland of *Acacia collegialis* and low open shrubland of *Dodonaea microzyga* on greenstone hill.

#### **Eucalypt Woodland (RH-EW-3)**

Low woodland of *Eucalyptus torquata* over tall sparse shrubland of *Melaleuca pauperiflora* subsp. *fastigiata* and low open shrubland of *Dodonaea microzyga* on greenstone hill.

All of the above vegetation associations were also recorded within the amendment application area, with the exception of RH-EW-2.

The following three additional vegetation associations were recorded within the amendment area (Botanica, 2017):

#### **Eucalypt Woodland (CLP-EW-2)**

Low woodland of *Eucalyptus salubris*/ *E. transcontinentalis* over tall open shrubland of *Melaleuca pauperiflora* and low open shrubland of *Eremophila caerulea*/ *Olearia muelleri* on clayloam plain.

#### **Mallee Woodlands and Shrublands (CLP-MSW-1)**

Mid open mallee forest of *Eucalyptus eremophila*/ *Eucalyptus platycorys* over mid open shrubland of *Daviesia benthamii* and low sparse hummock grassland of *Triodia irritans*.

### Casuarina Forests and Woodlands (SLP-CFW-1)

Low woodland of *Allocasuarina huegeliana* over tall open heathland of *Melaleuca hamata/ Thryptomene australis* and open hummock grassland of *Triodia scariosa* on sandplain.

<b>Clearing Description</b>	Pioneer Dome Project. Pioneer Resources proposes to clear up to 190 hectares of native vegetation within a boundary of approximately 214 hectares, for the purpose of mineral production and mining related infrastructure. The project is located approximately 30 kilometres north-west of Norseman, within the Shire of Dundas.
<b>Vegetation Condition</b>	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).  To  Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).
<b>Comment</b>	Clearing permit CPS 7908/1 was granted by the Department of Mines, Industry Regulation and Safety on 1 February 2018 and was valid from 24 February 2018 to 24 February 2023. The permit authorised the clearing of up to 90 hectares of native vegetation within a permit boundary of approximately 97.5 hectares, for the purpose of mineral production.  The Permit Holder has applied to amend CPS 7908/1 to increase the amount of clearing authorised to 190 hectares, and increase the permit boundary to approximately 214 hectares.

## 3. Assessment of application against clearing principles

### Comments

Pioneer Resources Limited has applied to amend the clearing permit to increase the amount of authorised clearing by 100 hectares to 190 hectares, and to increase the permit boundary by approximately 116.7 hectares. The amendment area comprises the whole of Miscellaneous Licence 63/77 and adjoins the existing permit area at the north-western corner. The proposed additional clearing is to allow for mining related infrastructure, including a road.

The permit area is located within the Eastern Goldfields subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The subregion is characterised by Mallees, Acacia thickets and shrub-heaths on sandplains (CALM, 2002). Diverse *Eucalyptus* woodlands occur around salt lakes, on ranges, and in valleys. Salt lakes support dwarf shrublands of samphire. The area is rich in endemic Acacias (CALM, 2002).

The majority of the amendment area is broadly mapped as Beard vegetation association 522, which is consistent with the original permit area (GIS Database). Parts of the northern end of the amendment area are mapped as Beard vegetation association 128. Approximately 87% and 99% (respectively) of the pre-European extent of these Beard vegetation associations remains uncleared within the state, with approximately 99% of each association remaining uncleared within the bioregion (Government of Western Australia, 2018). Hence, the vegetation proposed to be cleared does not represent a significant remnant of native vegetation in an area that has been extensively cleared. Analysis of aerial imagery indicates that the vegetation, landforms, and habitat types occurring within the amendment area are similar to those occurring within the original permit boundary, and are well represented in the region (GIS Database). The amendment area is unlikely to represent an area of higher biodiversity than the original permit area or surrounding areas.

Botanica (2017) conducted a flora and vegetation survey over the amendment area and surrounding areas. No Threatened flora, Threatened Ecological Communities or Priority Ecological Communities have been recorded within the amendment area (GIS Database), and none were found during the flora and vegetation survey (Botanica, 2017). One Priority flora species was recorded during the flora survey; *Diocirea acutifolia* (P3), however it was not recorded within the amendment area (Botanica, 2017).

Botanica (2017) conducted a reconnaissance fauna survey over the amendment area and adjacent areas, during the flora and vegetation survey. Botanica (2017) reported that the fauna and fauna habitats recorded within the survey area were generally typical of the region.

Several fauna species of conservation significance have the potential to occur within the amendment area, based on known distributions and available habitats (Botanica, 2017), however the majority of these species are highly mobile. No conservation significant fauna were recorded during the survey (Botanica, 2017). The proposed additional clearing is unlikely to impact the conservation status of any fauna species, or have any significant additional impacts to fauna or fauna habitats.

One minor seasonal watercourse crosses the amendment area (GIS Database). The linear nature of the proposed additional clearing, is unlikely to result in appreciable land degradation, or have any significant additional impact on surface or groundwater quality, or on the incidence or intensity of flooding. Continued

implementation of the existing staged clearing condition may minimise the risk of land degradation. The amendment area is not within or in close proximity to any conservation areas (GIS Database). The Coolgardie Bioregion remains largely uncleared (Government of Western Australia, 2018), and the proposed additional clearing is unlikely to significantly impact on ecological linkages to any conservation areas.

Three weed species were recorded within the survey area during the flora and vegetation survey (Botanica, 2017). Weeds have the potential to out-compete native vegetation and reduce biodiversity. Continued implementation of the existing weed management condition may minimise the risk of further spread of weeds.

The amendment represents a substantial increase in both the amount of proposed clearing and the permit boundary, however the surrounding areas remain largely undisturbed. The vegetation associations, habitat types and landforms found within the amendment area are similar to the original permit area, and are well represented in surrounding areas (Botanica, 2017; GIS Database). The additional 100 hectares of proposed clearing is unlikely to have any significant additional environmental impacts.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision report CPS 7908/1.

**Methodology** CALM (2002)  
Government of Western Australia (2018)  
Botanica (2017)

GIS Database:  
- DPaw Tenure  
- Hydrography, Lakes  
- Hydrography, Linear  
- IBRA Australia  
- Imagery  
- Pre-European Vegetation  
- Threatened and Priority Flora  
- Threatened and Priority Ecological Communities boundaries  
- Threatened Fauna

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

##### **Comments**

There is one native title claim (WC1999/002) over the area under application (DPLH, 2018). This claim has been registered with the National 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 no registered Aboriginal Sites of Significance within the application area (DPLH, 2018). 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 Water and Environmental Regulation and the Department of Biodiversity Conservation and Attractions, 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 amendment application was advertised on 19 March 2018 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. One submission was received, raising no concerns in relation to this application.

**Methodology** DPLH (2018)

#### **4. References**

- Botanica (2017) Flora and Fauna Assessment Pioneer Dome Lithium-Caesium-Tantalum Project. Report prepared for Pioneer Resources Limited, by Botanica Consulting, November 2017.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DPLH (2018) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage.  
<http://maps.daa.wa.gov.au/AHIS/> (Accessed 10 May 2018).
- Government of Western Australia (2018) 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full

Report). Current as of December 2017. WA Department of Biodiversity, Conservation and Attractions.

<https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>

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:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia (now DPLH)
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia (now DPIRD)
<b>DBCA</b>	Department of Biodiversity Conservation and Attractions, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
<b>DEE</b>	Department of the Environment and Energy, Australian Government
<b>DER</b>	Department of Environment Regulation, Western Australia (now DWER)
<b>DMIRS</b>	Department of Mines, Industry Regulation and Safety, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia (now DMIRS)
<b>DPIRD</b>	Department of Primary Industries and Regional Development, Western Australia
<b>DPLH</b>	Department of Planning, Lands and Heritage, Western Australia
<b>DRF</b>	Declared Rare Flora
<b>DoE</b>	Department of the Environment, Australian Government (now DEE)
<b>DoW</b>	Department of Water, Western Australia (now DWER)
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia (now DBCA)
<b>DSEWPaC</b>	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
<b>DWER</b>	Department of Water and Environmental Regulation, Western Australia
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>PEC</b>	Priority Ecological Community, Western Australia
<b>RIWI Act</b>	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
<b>TEC</b>	Threatened Ecological Community

### Definitions:

{DPaW (2017) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

<b>T</b>	<b>Threatened species:</b> Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , 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).  <b>Threatened fauna</b> is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the Wildlife Conservation Act.  <b>Threatened flora</b> 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.
<b>CR</b>	<b>Critically endangered species</b> Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
<b>EN</b>	<b>Endangered species</b> Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , 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.