



## 1. Application details

### 1.1. Permit application details

Permit application No.: 3196/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Oakajee Port and Rail Pty Ltd

### 1.3. Property details

Property: LOT 27 ON PLAN 221115 (WELD RANGE 6640)  
LOT 35 ON PLAN 238323 (EAST MURCHISON 6640)  
LOT 36 ON PLAN 238366 (MEEKATHARRA 6642)  
LOT 20 ON PLAN 238058 (EAST MURCHISON 6640)  
LOT 14 ON PLAN 238307 (SOUTH MURCHISON 6635)  
LOT 142 ON PLAN 238307 (WELD RANGE 6640)  
Local Government Area: Shire Of Cue & Shire Of Meekatharra & Shire Of Murchison & Shire Of Yalgoo  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
5.38		Mechanical Removal	Miscellaneous

## 2. Site Information

### 2.1. Existing environment and information

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

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Mapped Beard (1980) vegetation associations:  18: Low woodland; mulga (Acacia aneura)  29: Sparse low woodland; mulga, discontinuous in scattered groups 39: Shrublands; mulga scrub  182: Low woodland; mulga & bowgada (Acacia ramulosa)  202: Shrublands; mulga & Acacia quadrimarginea scrub  204: Succulent steppe with open scrub; scattered mulga & Acacia sclerosperma over saltbush & bluebush  1125: Succulent steppe with scrub; Acacia victoriae & snakewood over saltbush & bluebush  2081: Shrublands; bowgada and associated spp. scrub	The application is for the clearing of 5.38ha within sites across the midwest region for geotechnical investigations and associated tracks. The vegetation condition ranges from excellent to degraded (Keighery 1994), with some disturbance from grazing at most sites (OPR 2009).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The vegetation condition and description was determined from vegetation and flora surveys supplied by the proponent (OPR 2009).

### 3. Assessment of application against clearing principles

#### (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

**Comments**

**Proposal is not likely to be at variance to this Principle**

The application is for the clearing of 5.38ha of native vegetation, within a 4km wide, 240km long corridor, for geotechnical investigations and associated access tracks. The vegetation ranges from excellent to degraded (Keighery 1994) condition, disturbance caused by grazing and weeds is apparent in many areas under application.

The local area retains nearly 100% of its pre-European vegetation, and the Murchison IBRA Bioregion is well vegetated (Shepherd 2007). The sites proposed for clearing are therefore not considered to have a locally significant level of biological diversity, and the clearing as proposed is not likely to be at variance to this principle.

**Methodology**

Shepherd (2007)  
Keighery (1994)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 27 July 09
- Declared Rare and Priority Flora List - CALM 13/08/03
- Pre European Vegetation - DA 01/01
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

#### (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.

**Comments**

**Proposal may be at variance to this Principle**

The following rare fauna species have been identified as occurring within the corridor of which the proposed clearing is a part:

Western Spiny-tailed Skink (*Egernia stokesii badia*)  
Gilled Slender Bluetongue (*Cyclodomorphus branchialis*)  
Malleefowl (*Lepioa ocellata*)  
Rainbow Bee-eater (*Merops ornatus*)

The vegetation types under application are well represented within the Murchison bioregion, with close to 100% of the pre-European extent remaining (Shepherd 2007).

A survey (OPR, 2009) conducted by the applicant identified Western Spiny-tailed Skink and Malleefowl habitat within the surveyed corridor. The applicant has applied for areas to clear within this corridor where habitat for these species was not identified.

Given that the corridor within which the application area exists contains habitat for the Western Spiny-tailed Skink and Malleefowl the clearing as proposed may be significant habitat for fauna indigenous to Western Australia.

Fauna management conditions will be placed on the permit to mitigate the potential for clearing to impact on significant habitat for these conservation significant fauna.

**Methodology**

OPR (2009)  
Shepherd (2007)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 27 July 09
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

#### (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

**Comments**

**Proposal is not likely to be at variance to this Principle**

No rare flora has been recorded of within 30 km radius of the area under application. Additionally, no rare flora species were identified during flora surveys conducted throughout the proposed clearing areas (OPR 2009). The clearing as proposed is therefore not likely to be at variance to this principle.

**Methodology**

OPR (2009)



- GIS database:
- Declared Rare and Priority Flora List - CALM 13/08/03
  - Pre European Vegetation - DA 01/01
  - SAC Biodatasets - accessed 27 July 09
  - Soils, Statewide DA 11/99

**(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.**

**Comments**      **Proposal is not likely to be at variance to this Principle**  
 No known threatened ecological communities have been recorded within the immediate proximity of the area under application. The clearing as proposed is therefore not likely to be at variance to this principle.

**Methodology**    GIS Database:  
 - SAC Biodatasets - accessed 27 July 09  
 - Pre European Vegetation - DA 01/01  
 - Soils, Statewide DA 11/99

**(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.**

**Comments**      **Proposal is not likely to be at variance to this Principle**  
 All mapped Beard (1980) vegetation associations within the application area are well represented in the Murchison bioregion, with close to 100% of the pre-European extent remaining. The clearing as proposed is therefore not likely to be at variance to this principle.

**Methodology**    GIS Databases:  
 - Interim Biogeographic Regionalisation of Australia - EA 18/10/00  
 - Local Government Authorities - DLI 8/07/04  
 - Pre European Vegetation - DA 01/01  
 - SAC Biodatasets - accessed 27 July 09  
 - NLWRA, Current Extent of Native Vegetation 20 Jan 2001

**(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.**

**Comments**      **Proposal is at variance to this Principle**  
 Sandforn River intersects two of the areas under application, and the Murchison River 5.3km North. Additionally, various significant streams run nearby, and may intersect, areas under application. The proposed clearing is therefore considered to contain vegetation growing in association with a watercourse. Given the clearing size at these sites is approximately 0.6ha in a linear strip perpendicular to the watercourse, the likely impacts to the riparian vegetation is small. The clearing is therefore at variance to this principle.

**Methodology**    GIS Databases:  
 - Clearing Regulations, Environmentally Sensitive Areas 30 May 2005  
 - Hydrography linear - DOW 13/7/06  
 - Hydrography linear (hierarchy) - DoW 13/7/06

**(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

**Comments**      **Proposal is not likely to be at variance to this Principle**  
 The clearing of 5.38ha of native vegetation at sites spread along a 240km corridor within a highly vegetated landscape is not likely to result in appreciable land degradation. The clearing as proposed is not likely to be at variance to this principle.

**Methodology**    GIS database:  
 - Average Annual Rainfall Isohyets - WRC 29/09/98  
 - Annual Evaporation Contours (Isopleths) - WRC 29/09/98  
 - Hydrogeology, statewide - DOW 13/07/06  
 - Hydrography, linear - DOW 13/7/06  
 - Salinity Risk LM 25m - DOLA 00  
 - Soils, Statewide DA 11/99  
 - Topographic contours statewide - DOLA and ARMY 12/09/02  
 - Hydrogeology, Statewide 05 Feb 2002

**(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.**

**Comments Proposal is not likely to be at variance to this Principle**

No conservation areas occur within the local area (30km radius) of the proposed clearing. The clearing as proposed is therefore not likely to be at variance to this principle.

**Methodology GIS Databases:**

- CALM Managed Lands and Waters - CALM 01/06/05
- Hydrography, linear - DOW 13/7/06
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02
- System 1 to 5 and 7 to 12 areas - DEC 11/7/06

**(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.**

**Comments Proposal is not likely to be at variance to this Principle**

The clearing of 5.38ha of native vegetation from sites located over a 240km corridor within a highly vegetated landscape is not likely to have a significant impact on surface or ground water quality. The clearing as proposed is not likely to be at variance to this principle.

**Methodology GIS database:**

- Evapotranspiration Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Salinity Risk LM 25m - DOLA 00
- Topographic Contours, Statewide - DOLA 12/09/02

**(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.**

**Comments Proposal is not likely to be at variance to this Principle**

The clearing of 5.38ha of native vegetation from sites located over a 240km corridor within a highly vegetated landscape is not likely to have a significant impact on water runoff or flooding. The clearing as proposed is therefore not likely to be at variance to this principle.

**Methodology GIS database:**

- Evaporation Isopleths - WRC 29/09/98
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DoW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

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

**Comments**

The applicant is accessing the land via authority issued by the Public Transport Authority under Section 182 of the Land Administration Act (1997).

The area under application lies within the Wajarri Yamatji Native Title Claim area. The Claimants and Representative Body have been notified of the proposed clearing in accordance with the requirements of the Native Title Act.

A submission was received from the Shire of Yalgoo objecting to the proposal on the basis that alternative routes had not been shown to have been given adequate consideration (DOC97027).

**Methodology**

**4. Assessor's comments**

**Comment**

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is at variance to Principle (f), may be at variance to Principle (b) and is not likely to be at variance to the remaining clearing Principles.



## 5. References

- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Oakajee Port and Rail Pty Ltd (2009). OPR Rail Development - Vegetation Clearing Permit Supporting Document - Engineering Feasibility Works, Jack Hills to Meka Station. TRIM ref DOC89583.
- Shepherd, D.P. (2007). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

## 6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)

