



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

<b>Purpose Permit number:</b>	CPS 5312/1
<b>Permit Holder:</b>	Robe River Mining Co Pty Ltd
<b>Duration of Permit:</b>	28 December 2012 – 30 September 2017

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

### PART I – CLEARING AUTHORISED

**1. Purpose for which clearing may be done**

Clearing for the purpose of laying an above ground water pipeline.

**2. Land on which clearing is to be done**

Lot 265 on Plan 220920, Cooya Pooya and Roebourne  
Lot 43 on Plan 251288, Roebourne  
Lot 56 on Plan 248915, Roebourne  
North Location 36, Roebourne  
unallocated Crown land, Roebourne (PIN 693835)  
unnamed road reserve, Roebourne (PIN 693825)

**3. Area of Clearing**

The Permit Holder must not clear more than 3.5 hectares of native vegetation within the area hatched yellow on attached Plan 5312/1.

**4. Application**

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

**5. Type of clearing authorised**

This Permit authorises the Permit Holder to clear native vegetation for activities to the extent that the Permit Holder has the right to access land under the *Land Administration Act 1997* or any other written law.

**6. Compliance with Assessment Sequence and Management Procedures**

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

## PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

### 7. **Avoid, minimise etc clearing**

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

### 8. **Weed control**

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

### 9. **Vegetation management**

(a) Where practicable the Permit Holder shall avoid clearing *riparian vegetation*.

(b) Where a *watercourse* is to be impacted by clearing, the Permit Holder shall maintain the existing surface flow by use of culverts.

## **DEFINITIONS**

The following meanings are given to terms used in this Permit:

*fill* means material used to increase the ground level, or fill a hollow;

*mulch* means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

*riparian vegetation* has the meaning given to it in Regulation 3 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004;

*watercourse* has the meaning given to it in section 3 of the *Rights in Water and Irrigation Act 1914*;

*weed/s* means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.

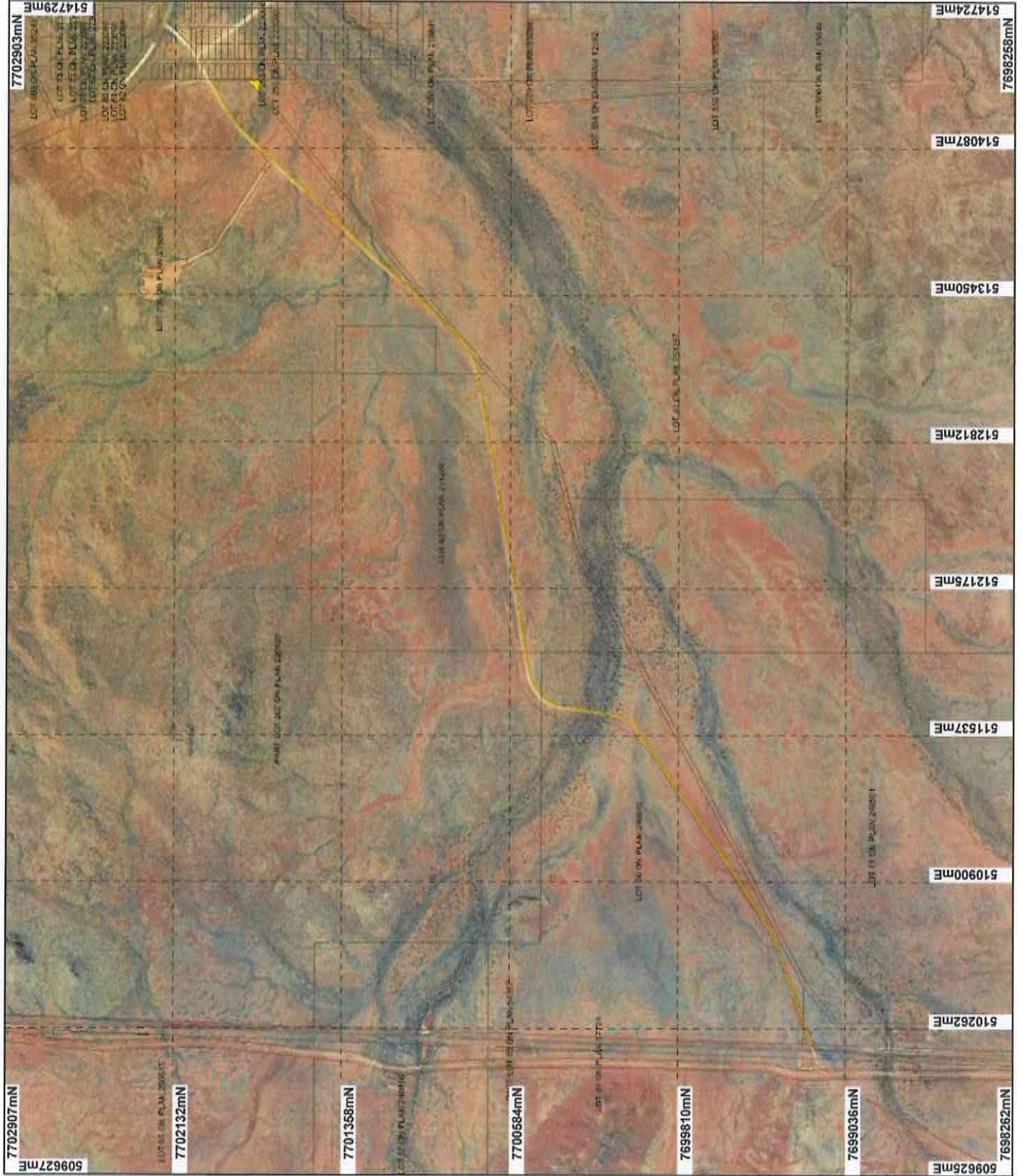


M Warnock  
A/MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

*Officer delegated under Section 20  
of the Environmental Protection Act 1986*

6 December 2012

# Plan 5312/1



## LEGEND

Clearing Instruments

Areas Approved to Clear

Roebourne 50cm Orthomosaic • Landgate  
2007  
Cadastral for labelling

\* Project Data is denoted by asterisk.  
This data has not been quality assured.  
Please contact map author for details.



Scale 1:23500

Approximate when reproduced at Letter

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

*Amend* Date 6/12/12

M Waincock

Officer with delegated authority under Section 20 of the Environmental Protection Act, 1986

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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## 1. Application details

### 1.1. Permit application details

Permit application No.: 5312/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Robe River Mining Co Pty Ltd

### 1.3. Property details

Property: PART LOT 265 ON PLAN 220920 ( COOYA POOYA 6714)  
PART LOT 265 ON PLAN 220920 ( COOYA POOYA 6714)  
LOT 56 ON PLAN 248915 ( ROEBOURNE 6718)  
PART LOT 265 ON PLAN 220920 ( ROEBOURNE 6718)  
PART LOT 265 ON PLAN 220920 ( ROEBOURNE 6718)  
LOT 43 ON PLAN 251288 ( ROEBOURNE 6718)  
ROAD RESERVE ( ROEBOURNE 6718)  
UNALLOCATED CROWN LAND ( ROEBOURNE 6718)  
NORTH LOCATION 36 ( ROEBOURNE 6718)

Local Government Area: Shire of Roebourne  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3.5		Mechanical Removal	Water/gas/cable/pipeline/power installation

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 6 December 2012

## 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
The vegetation under application is mapped as:	The application is to clear 3.5 hectares of native vegetation parallel to Cherratta Road between Roebourne Townsite and the Cape Lambert railway line for the purpose of creating access and turn around areas, and clearing and grubbing to facilitate the laying an above ground water pipeline.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The vegetation description was sourced from supporting documentation supplied with the application (ENV, 2012) and DEC Regional advice (DEC, 2012)
Beard Vegetation Association 157 - Hummock grasslands, grass steppe; hard spinifex, <i>Triodia wiseana</i> ; and		To	
Beard Vegetation Association 619 - Medium woodland; river gum ( <i>Eucalyptus camaldulensis</i> ) (Shepherd et al, 2001)	The vegetation condition along most of the proposed pipeline route has been impacted by weeds, grazing and infrastructure associated with the adjoining road reserve (drainage channels and culverts). Some small areas associated with watercourses remain in pristine condition. Approximately 28 per cent of the application area is in a completely degraded (Keighery, 1994) condition and 72 per cent varied	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	

between being in a degraded to excellent (Keighery, 1994) condition (ENV, 2012).

A 0.22 hectare area associated with a drainage line contains Eucalyptus victrix, Corymbia hamersleyana low open forest over Acacia trachycarpa and A. bivenosa tall open shrubland over tussock grassland (ENV, 2012)

### 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 to clear 3.5 hectares of native vegetation over a 6 metre wide by 5.3 kilometre route parallel to Cherratta Road, between Roebourne Townsite and the Cape Lambert railway line, for the purpose of creating access and turn around areas, and clearing and grubbing of vegetation to facilitate the laying of an above ground water pipeline. The vegetation under application ranges from being in a completely degraded to excellent (Keighery 1994) condition (ENV, 2012).

The application area comprises fauna and flora habitat, albeit degraded in places, typical for the Pilbara Bioregion, but none that can be described as conservation significant habitat as it is widespread in the Pilbara and not unique to the application area (ENV, 2012).

The 'Horseflat Land System of the Roebourne Plains', a Priority 3 Ecological Community (PEC), is recorded within the application area, comprising approximately one hectare over the entire 5.3 kilometre length of the proposed pipeline route. This PEC, as well as most of the Cherratta Road reserve, has been degraded and fragmented (DEC, 2012) by a variety of disturbances (weeds, grazing, access tracks and infrastructure associated with the adjoining road reserve) (ENV, 2012). Given this disturbance, the proposed clearing it is unlikely to significantly impact the remainder of this PEC.

A total of 75 flora taxa from 57 genera and 15 families were recorded in the application area. No rare flora or priority listed flora were recorded. Five weed species, four of which are environmental weeds, were also recorded (ENV, 2012).

One Priority 3 flora species (Acacia sp.) is recorded near to the application area, but despite being easily identifiable, it was not located during a flora survey (ENV, 2012).

The clearing as proposed is unlikely to be at variance to this Principle.

##### Methodology

References:  
DEC (2012)  
ENV (2012)

GIS database:  
SAC Biodataset - accessed November 2012

#### (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 is not likely to be at variance to this Principle**

The application area comprises fauna habitat typical, albeit degraded in places, for the Pilbara Bioregion, but none that can be described as conservation significant habitat as it is widespread in the Pilbara and not unique to the application area (ENV, 2012; DEC, 2012).

Forty-two fauna species of conservation significance have been recorded within 30 kilometre of the application area: 35 species are avian fauna, four reptile species (one threatened snake and two threatened skink species) and three mammal species (one threatened) (DEC, 2007-).

A survey conducted by ENV Australia (ENV, 2012) identified two habitat types: 'Plain' and 'Drainage Line'. Plain is the most common habitat in the Pilbara, comprising 85 per cent of application area. It contains low shrubs over grasslands, is favoured by reptiles and to a lesser degree by mammals and avian fauna. As tall trees are mostly absent, microhabitat in the form of leaf and bark litter and other debris was absent. Such structure is considered as having moderate habitat value (ENV, 2012).

Drainage Line habitat makes up the remainder of the application area and given it's more varied vegetation structure (eucalyptus trees with extensive canopies, acacia shrubs, tussock and hummock grasslands) and ephemeral creek systems, this habitat offers more diverse fauna habitat including tree hollows, ground debris/leaf litter, dense understorey and alluvial soils. Avian fauna, reptiles and larger mammals are more likely to use and benefit from this habitat. Thus this type of habitat is considered to have high habitat value (ENV, 2012).

The mobile avian species would be less likely to be impacted by the proposed clearing, and similarly with any ground dwelling fauna due to the linear nature, small footprint and amount of clearing proposed and degraded nature of the proposed pipeline route.

The proposed clearing is unlikely to be at variance to this Principle.

**Methodology** References:  
DEC (2012)  
DEC (2007-)  
ENV (2012)

GIS database:  
SAC Biodatst - accessed November 2012

**(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 species have been recorded within 50km of the application area and none were noted during a flora survey (ENV, 2012).

Given this, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** References:  
ENV (2012)

GIS Database:  
SAC Biodatset - accessed November 2012

**(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 threatened ecological communities are recorded within the application area and none were noted during a flora survey (ENV, 2012).

Given this, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** References:  
ENV (2012)

GIS Database:  
SAC Biodatset - accessed November 2012

**(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**

The area under application is located within the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has greater than 90 per cent of its Pre European vegetation extent remaining (Government of Western Australia, 2011).

The vegetation under application is mapped as Beard Vegetation Associations 157 and 619 each of which have greater than 90 per cent of their Pre-European extent remaining (Government of Western Australia, 2011).

The mapped vegetation associations retain vegetation above the 30 per cent threshold level as recommended in the National Objectives Targets for Biodiversity Conservation; below which species loss appears to accelerate exponentially at an ecosystem level Commonwealth of Australia, 2001).

The vegetation under application has been subject to a range of disturbances including weeds, grazing and infrastructure associated with the adjoining road reserve-drainage channels and culverts and no longer retains its

original structure.

The proposed clearing is not likely to be at variance to this Principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Pilbara	17,804,427	17,729,352	99.58	8.39
Shire*				
Shire of Roebourne	1,535,627	1,496,779	97.47	0.81
Beard Vegetation Association in Bioregion*				
157	198,634	197,098	99.23	5.73
619	118,920	118,087	99.3	0.2

\* Government of Western Australia (2011)

**Methodology** References:  
Commonwealth of Australia (2001)  
Government of Western Australia (2011)

GIS Database:  
Roebourne 50cm Orthomosaic - Landgate 2007  
Pre European Vegetation  
SAC Biodatasets - accessed November 2012

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

The proposed pipeline route traverses several minor, non-perennial watercourses. A small area (0.15 hectare) of one vegetation association, "medium woodland; river gum" contains *Eucalyptus victrix*, which is an indicator species for potential groundwater dependent ecosystems, occurs within the proposed route (ENV, 2012).

It is the applicant's intention to bury the pipeline at watercourse crossings to avoid riparian vegetation. However, some riparian vegetation may be inadvertently cleared and therefore the clearing as proposed may be at variance to this Principle. Watercourse management practices will assist in mitigating this risk.

**Methodology** References  
ENV (2012)

GIS Databases:  
Hydrography, linear

**(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 majority of the application area over the 5.3 kilometre proposed pipeline route is comprised of plains and minor drainage lines. Landform varies from hills and ranges with stony plains and alluvial plains and sandplains on volcanic/sedimentary rocks (ENV, 2012).

As a result, the soil types vary between being cherts (volcanic origins), alluvial sands and gravels (associated with watercourses and outwash areas) with clay/silt in channels on the floodplains. Appearance wise, the soils are stony, red loamy earths and red shallow loam soils (ENV, 2012; Northcote, et al 1960-68).

Soil erosion is possible in the plains and/or drainage areas of the Horseflat Land System which comprises approximately one hectare of the 6 metre wide by 5.3 kilometre long application area.

However, given the small amount of clearing over an extended footprint and provided measures are put in place to minimise erosion, it is unlikely the proposed clearing will cause appreciable land degradation.

The proposed clearing is unlikely to be at variance to this Principle.

**Methodology** References:  
ENV, 2012  
Northcote, et al (1960-68)

**(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 at variance to this Principle**

There are no conservation areas within 50 kilometre of the application area and therefore the proposed clearing is not at variance to this Principle.

**Methodology** GIS database:  
DEC Tenure

**(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**

Several minor and non-perennial watercourses are mapped within the application area. It is possible the clearing as proposed may cause minor deterioration to the water quality to the known watercourses during seasonal rains.

However, considering the relatively small amount of vegetation to be removed over the entire 5.3 kilometre proposed pipeline corridor, it is unlikely that the cumulative vegetation removal will cause deterioration in water quality with any impacts likely to be short term, minimal and manageable.

Department of Water (DoW) advised that the proposed clearing is unlikely to impact surface or groundwater sources (DoW, 2012).

The application is not likely to be at variance to this Principle.

**Methodology** References:  
DoW (2012)

GIS Database:  
Hydrography, linear

**(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**

Several minor and non-perennial watercourses are mapped within the application area.

However, considering the relatively small amount of vegetation to be removed over the entire 5.3 kilometre proposed pipeline corridor, it is unlikely that the cumulative vegetation removal combined with the sandy and stony nature of the soils present will cause or exacerbate the intensity of flooding.

The application is not likely to be at variance to this Principle.

**Methodology** GIS Databases:  
- Hydrography, linear

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

**Comments**

With regards to land access and a Section 91 Licence granted under the Land Administration Act 1997 (LAA), Robe River advise the following:

Access to freehold Land - a licence agreement between Mt Welcome Pastoral Co and the applicant is being negotiated. It is anticipated that the licence will finalised by early January 2013.

Access to Crown land & pastoral lease - an Agreed Act Certificate (AAC) that is provided for under the Indigenous Land Use Agreement between the applicant and the Ngarluma Peoples has been prepared. The AAC will allow an application to be made to the Department of Regional Development and Lands for issue of a section 91 licence under the LAA. It is anticipated that the licence will finalised by early January 2013 (Robe River, 2012).

Application area falls within the Pilbara Surface Water Area, an area covered by the Rights in Water and Irrigation Act 1914 (RIWI Act). Any interference with the bed or banks of a watercourse may require a permit from Department of Water.

Application area also falls within the Pilbara Groundwater Area covered by the RIWI Act. Any requirement to abstract water will require a permit from Department of Water (DoW, 2012).



DoW has advised they have no objections as the proposed clearing is unlikely to impact surface or groundwater sources (DoW, 2012).

The area under application is subject to native title claims. Both the claimants and their representing body have been notified of the application. To date no response has been received.

**Methodology**

References:

DoW (2012)  
Robe River (2012)

#### 4. References

- DEC (2007-) NatureBase - Fauna Species Profile - Accessed at <http://www.naturebase.net/content/view/840/1288/>. Department of Environment and Conservation, Western Australia. Accessed 8/11/12.
- DEC (2012) Regional advice for Clearing Permit Application CPS 5312/1 Department of Environment and Conservation, Western Australia (DEC Ref: A575627).
- DoW (2012) Department of Water advice for Clearing Permit Application CPS 5312/1 (DEC Ref: A563666).
- ENV (2012) Flora, Vegetation and Fauna Assessment of the Cherratta Road Water Pipeline. Prepared by ENV Australia Pty Ltd for Rio Tinto Iron Ore Pty Ltd (DEC Ref: A561015).
- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Robe River (2012) Application and supporting documentation for Clearing Permit application CPS 5312/1 (DEC Ref: A554732; A575132)
- 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.

#### 5. 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)