



## 1. Application details

### 1.1. Permit application details

Permit application No.: 2597/1  
 Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Dampier Port Authority

### 1.3. Property details

Property: LOT 314 ON PLAN 218195 ( BURRUP 6714)  
 Local Government Area: Shire Of Roebourne  
 Colloquial name:

### 1.4. Application

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

## 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
Beard Vegetation Association 117: Hummock grasslands, grass steppe; soft spinifex (Hopkins et al, 2001).	The proposed clearing on Lot 314 is for the purpose of construction of light port related industry.  The northern half of Lot 314 has been previously disturbed by construction on the adjacent lot and is heavily infested by the introduced Buffel Grass ( <i>Cenchrus ciliaris</i> L.). The southern half of the lot is well vegetated with an overstorey of ( <i>Acacia bivenosa</i> ) and Caustic Bush ( <i>Grevillea pyramidalis</i> ) over Soft Spinifex ( <i>Triodia pungens</i> ) and scattered mixed shrubs.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description was determined by a desktop study using GIS databases and supporting documentation of the clearing application (Dampier Port Authority, 2005) and verified via a site visit by a DoE officer (DoE Site Visit, 25/05/2006).

## 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 area under application occurs on the Burrup Peninsula within the Roebourne subregion of the Pilbara Biogeographic region. Vegetation types on the Burrup Peninsula are generally distinct from mainland vegetation, and have a high level of flora endemism (Kendrick and Stanley, 2001). The Burrup is also a fire and evolutionary refuge for flora, provides high habitat diversity for plants, and displays high species diversity for Camaenid land snails (Kendrick and Stanley, 2001).

The biodiversity of the Burrup Peninsula has intrinsic value and there are no other mainland -protected areas in the region with similar characteristics (CALM, 2003). Consequently, the non-industrial area of the Burrup Peninsula (about 60% of the total area) is proposed to be made into the Burrup Peninsula Conservation Reserve (Office of Native Title, 2005). The area under application is within the industrial area on the Burrup Peninsula. The industrial areas are highly disturbed from previous clearing, industrial dust emissions, other human activity and the invasion of weeds and pests (Kendrick and Stanley, 2001; CALM 2003; DoE Site Visit

25/05/2006). The northern half of the 3.2 ha applied to be cleared has been previously disturbed by construction on the adjacent lot (DoE Site Visit, 25/05/2006). Consequently, the site has been infested by Buffel grass and kapok bush, particularly in the northern half of the area under application.

Therefore, the area under application does not comprise of a high level of biological diversity compared to the non-industrial areas of the Burrup Peninsula and the proposal is not likely to be at variance to this principle.

**Methodology** CALM (2003);  
DoE Site Visit (25/05/2006);  
Kendrick and Stanley (2001);  
Office of Native Title (2005).

**(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**

A desktop search identified 12 Threatened Species which may occur within a 10km radius of the area under application). Of these species, the Southern Giant-Petrel (endangered), the Northern Quoll (endangered), the Pilbara Leaf-nosed Bat (vulnerable) and the Olive Python (vulnerable) are likely to be within the local area with the remaining of the threatened species identified being marine species.

The Southern Giant Petrel (*Macronectes giganteus*) (endangered) is a migratory species which is widespread across the Australian coastline near and south of the Tropic of Capricorn, with breeding mostly on the coast of Antarctica and the sub-Antarctic Islands (Pizzey and Knight, 1997). Therefore the clearing of 3.2 Ha of vegetation is unlikely to significantly reduce the habitat of this species.

The Northern Quoll (*Dasyurus hallucatus*) (endangered) makes its dens in rock crevices, tree holes or occasionally termite mounds (Department of the Environment and Heritage, 24/04/2006). This habitat type is not located within the area under application.

The Pilbara Leaf-nosed Bat (*Rhinonictis aurantius*) roosts in deep, warm, humid caves or mines and forages nearby (Menkhorst and Knight, 2001). This habitat does not occur within the area under application.

The Pilbara Olive Python (*Morelia olivacea barroni*) (Vulnerable) is regarded as common, widespread and not declining by Kendrick and Stanley (2001). This species is likely to occur near rocky areas, particularly along watercourses (Kendrick and Stanley, 2001). This habitat type is not within the area under application.

Although Rothschild's Rock-Wallaby (*Petrogale rothschildi*) is reasonably common, the Burrup Peninsula supports an isolated population that is considered to be locally significant because of its isolation (Kendrick and Stanley, 2001). It is largely confined to the northern sector of the Burrup Peninsula, located away from the area under application and therefore unlikely to be affected by the proposed clearing.

All the species listed above are mobile and not limited to vegetation types within the area of application. The clearing of 3.2 hectares of vegetation from the proposal area is not likely to significantly impact on the fauna species of the area, priority or otherwise, due to the small area to be cleared and the disturbed condition of the vegetation. Additionally, the areas to the west and the south of the area under application are relatively well vegetated and undisturbed which will provide habitat for any fauna displaced during the clearing process. Therefore, the proposal is not likely to be at variance to this Principle.

**Methodology** Kendrick and Stanley (2001);  
Menkhorst and Knight (2001);  
Pizzey and Knight (1997)  
GIS Layer:  
Sac Biodatasets 250708

**(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**

*Terminalia supranitifolia* (P3) and *Stackhousia clementii* (P1) have been recorded within a 10km radius of the area under application, with the closest known plant recorded approximately 2km from the area under application.

The northern half of the 3.2 ha applied to be cleared has been previously disturbed by construction on the adjacent lot (DoE Site Visit, 25/05/2006). Consequently, the site has been infested by the introduced Buffel grass (*Cenchrus ciliaris* L.), particularly in the northern half of the area under application.

Given this, the area under application is not likely to include or be necessary for continued existence of significant flora.

**Methodology** DoE Site Visit (25/05/2006);  
GIS Database:  
Sac Biodatasets 250708

**(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 at variance to this Principle**

There are no known Threatened Ecological Communities recorded within a 50km radius of the areas under application.

The Rock Pool communities and Rock Pile communities on the Burrup Peninsula have been identified as ecosystems at risk (Kendrick and Stanley 2001). These communities are not located within the area under application, and are unlikely to be impacted by the proposed clearing.

Therefore, the proposed clearing is not at variance to this principle.

**Methodology** Kendrick and Stanley (2001);  
GIS Database:  
Sac Biodatasets 250708

**(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 at variance to this Principle**

The area applied to clear is Beard Vegetation Associations 117, of which there is approximately 96.4% of pre-European extent remaining (Shepherd et al., 2006). 13.2% of this Association is represented within an IUCN Class I-IV Reserves and 1% is represented in other reserves (Shepherd et al, 2006). Furthermore, the area under application is located within the industrial area of the Burrup Peninsula. The non-industrial area of the Burrup (approximately 60% of the total area) is proposed to be made into the Burrup Peninsula Conservation Reserve (Office of Native Title, 2005).

The proposed clearing is not within an area that has been extensively cleared and is therefore not at variance to this Principle.

**Methodology** Shepherd et al (2006);  
GIS Database:  
~ Pre-European Vegetation - DA 01/01;  
~ Interim Biogeographic Regionalisation of Australia - EA 18/10/00;  
~ Interim Biogeographic Regionalisation of Australia (subregions) - EA 18/10/00.

**(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 not at variance to this Principle**

A perennial watercourse, which flows into King Bay, is adjacent to the eastern boundary of the area under application. However, the vegetation to be cleared is not growing in association with the watercourse. Therefore, the proposed clearing is not likely to be at variance to this principle.

Runoff from the site will be directed to a retention pond at the southern end to the site via two deep swales running along the eastern and western boundaries. The retention pond will capture the initial runoff from heavy rainfall and will control stormwater runoff from the site (Dampier Port Authority, 2005). This will prevent any potential pollutants from the proposed industry flowing into the watercourse. Given the small size of the site (3.2 ha), redirecting stormwater runoff from the watercourse will not significantly impact on the health of the watercourse.

**Methodology** Dampier Port Authority (2005);  
GIS Database:  
~ Hydrology, linear - DOE 1/02/04;  
~ Lakes 250K - GA;  
~ Rivers 250K - GA

**(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 soil type occurring in the area under application consists of rocky outcrops with pockets of shallow siliceous sands and loams. The area under application lies within the Granitic Land System (Van Vreeswyk et al., 2004). This land system is not susceptible to erosion under pastoral use (Payne, 2004), due to the abundance of

pebbles, cobbles and stones in the soil.

There are no low lying areas with poor drainage within the area under application (DoE Site Visit, 25/05/2006) and the proposed clearing is not expected to increase water logging or salinisation on or off the site (Dampier Port Authority, 2005).

Therefore the proposal is unlikely to be at variance to this principle.

**Methodology** Dampier Port Authority (2005);  
DoE Site visit (25/05/2006);  
Payne (2004);  
Van Vreeswyk et al. (2004);  
GIS Database:  
~ Soils, Statewide - DA 11/99;  
~ Groundwater Salinity, Statewide - 22/02/00

**(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**  
There are no reserves or conservation areas within a 20km radius of the proposed site. However, the proposed Burrup Peninsula Conservation Reserve, which will cover the non-industrial land on the Burrup Peninsula (Office of Native Title, 2005), is located less than 1km from the area under application. It is unlikely that the proposed clearing will have an impact on the environmental values of the proposed reserve given the existing industry adjacent to the area under application. Therefore, this proposal is unlikely to be at variance to this principle.

**Methodology** Office of Native Title (2005);  
GIS Database: CALM Managed Land and Waters - 1/06/04;

**(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 area under application is not in a Public Drinking Water Source Area. The existing vegetation is sparse and tree root systems are minimal (DoE Site Visit, 25/05/2006), therefore it is unlikely the proposed clearing would significantly affect the level of the groundwater table.

Therefore, the proposed clearing of vegetation is unlikely to significantly impact on surface water quality or groundwater resources in the area.

Additionally, Stormwater run off from the site will be directed to a retention pond at the southern end of the site via two deep swales running along the western and western boundaries (Dampier Port Authority, 2005). The retention pond will capture the initial run off from heavy rainfall and enable a level of control over stormwater run off from the site (Dampier Port Authority, 2005).

**Methodology** Dampier Port Authority (2005);  
DoE Site Visit (25/05/2006);  
GIS Database:  
~ Public Drinking Water source Areas (PDWSA's) -DOE 29/11/04;  
~ Hydrography, linear (hierachy) - DOE 13/4/05

**(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 region within which the project area is located receives an average annual rainfall of 300mm, majority of which falls during December to March. The elevation of the area is gently sloping and is located 500m upslope of King Bay.  
  
Flooding impacts are unlikely to occur as a result of the proposed clearing due to its location and rainfall levels in the area. Therefore, it is unlikely the proposed clearing of vegetation will cause or exacerbate the incidence of flooding.

Additionally, stormwater run off from the proposed area to be cleared will be directed to a retention pond at the southern end of the site via two swales running along the eastern and western boundaries (Dampier Port Authority, 2005). The retention pond will capture the initial run off from heavy rainfall events and will enable a level of control over stormwater run off from the site (Dampier Port Authority, 2005).

**Methodology** Dampier Port Authority (2005);

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

### Comments

No objections were raised in relation to this application to clear.

There is one Native Title Claim over the area under application by the Ngaluma / Injibandi people (WC99/14). On 2 May 2005, the Federal Court handed down its final determination and no native title rights were found to exist over the Burrup Peninsular (Office of Native Title, 2005) The State Government entered into the Burrup and Maitland Industrial Estates Agreement Implementation Deed (the Burrup Agreement) with the Ngaluma and Injibandi peoples, the Wong-goo-itt-oo peoples and the Yuaburar and Mardudhunera peoples on 1 November 2002. The Burrup Agreement enabled the State Government to compulsorily acquire any native title rights and interests in the area of the Burrup Peninsula and certain parcels of land near Karratha. The Burrup Agreement allows for industrial development to progress across southern parts of the Burrup Peninsula, while at the same time establishing a conservation estate and ensuring Aboriginal heritage is protected (Office of Native Title, 2005). Therefore, granting of CPS the application will not constitute a future act, as defined in the Native Title Act

The proposed clearing and subsequent land use do not require water, therefore a 5C Licence to Take under the Rights in Water and Irrigation Act 1914 is not required.

The proposed clearing and subsequent land use is not for a prescribed activity, therefore no other planning instruments are required under the Environmental Protection Act 1986.

The proposal submitted to the Environmental Protection Authority (CRN211764) was part of a larger project which was formally withdrawn by the Dampier Port Authority on 12 July 2006 (TRIM Ref: DOC 784). Therefore the proposed clearing is not at variance to advice or conditions set by the EPA.

### Methodology

Environmental Protection Authority (1998) CRN 211764;

GIS Database:

-Native Title Claims - DLI 19/12/04

-Environmental Impact Assessments, Polygon Features - DOE 29/11/04

-Aboriginal Sites of Significance - DIA

## 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 not at variance to Principles (d), (e), and (f) and is not likely to be at variance to the remaining clearing Principles.

## 5. References

- CALM (2003) Management Plan for the Burrup Peninsula Conservation Reserve - Discussion Paper. Department of Conservation and Land Management Website <[www.naturebase.net](http://www.naturebase.net)>
- Dampier Port Authority (2005) Dampier Port Authority Land Clearing Permit for De Witt Location 314 Purpose permit supporting documentation. DoE Trim Ref: IN25670
- Department of Environment and Heritage (2006) Protected Matters Search Tool, EPBC Act Protected Matters Report. Department of the Environment and Heritage <[www.deh.gov.au](http://www.deh.gov.au)>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Kendrick, P. and Stanley, F. (2001) Pilbara 4 (PIL4 - Roebourne synopsis). From "Bioregional Summary of the 2002 biodiversity Audit for Western Australia". Department of Conservation and Land Management.
- Menkhorst, P. and Knight, F. (2001) A Field Guide to the Mammals of Australia. Oxford University Press. Melbourne Australia.
- Office of Native Title (2005) Land Use Agreements: Burrup and Maitland Estate. Office of Native Title website. <[www.nativetitle.dpc.wa.gov.au](http://www.nativetitle.dpc.wa.gov.au)>
- Office of Native Title (2005) Land Use Agreements: Burrup and Maitland Estate. Office of Native Title website. <[www.nativetitle.dpc.wa.gov.au](http://www.nativetitle.dpc.wa.gov.au)>
- Payne, A.L. (2004) Land Systems. In Technical Bulletin No 92 an inventory and condition survey of the Pilbara region, Western Australia. Department of Agriculture, Government of Western Australia.
- Pizzey, G. and Knight, F. (1997) The field Guide to the Birds of Australia. Angus & Robertson Australia.
- Shepherd, D.P. (2006). 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.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A., and Hennig, P. (2004) Technical Bulletin No 92 an inventory and condition survey of the Pilbara region, Western Australia. Department of Agriculture, Government of Western Australia.

## 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)