



## CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

### PERMIT DETAILS

Purpose Permit Number: CPS 4500/1  
File Number: 2011/005806  
Duration of Permit: 19 September 2011 - 19 September 2013

### PERMIT HOLDER

Central Systems Pty Ltd

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 229 on Deposited Plan 240259 (KWINANA 6966)  
Lot 230 on Deposited Plan 240259 (KWINANA 6966)

### PURPOSE FOR WHICH THE CLEARING MAY BE DONE

Clearing for the purpose of refurbishment of Kwinana Power Station's stage A cooling water outfall canal, including access to the existing canal and creation of a working area for construction equipment.

### CONDITIONS

#### 1. Area of Clearing

The Permit Holder must not clear more than 0.73 hectares of native vegetation within the area hatched yellow on attached Plan 4500/1.

#### 2. 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.

#### 3. 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 power to clear native vegetation for those activities under the *Land Administration Act 1997* or any other written law.

#### 4. 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*:

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

## **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;

**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*.



---

Kelly Faulkner  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

25 August 2011

# Plan 4500/1



## LEGEND

- Local Government Authorities
- Cadastre for labelling Clearing Instruments**
- Areas Approved to Clear

Swan Coastal Plain Central  
20cm Orthomosaic - Landgate  
2009



0  50 m

Scale 1:1946  
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

*[Signature]* Date 25/8/11

K Paulkner

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.



Department of Environment and Conservation

Our environment, our future  
WA Crown Copyright 2002

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



## 1. Application details

### 1.1. Permit application details

Permit application No.: 4500/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Central Systems Pty Ltd

### 1.3. Property details

Property: LOT 229 ON PLAN 240259 ( NAVAL BASE 6165)  
LOT 230 ON PLAN 240259 ( NAVAL BASE 6165)

Local Government Area: Town of Kwinana

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.73		Mechanical Removal	Infrastructure Maintenance

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 25 August 2011

## 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
<p>The vegetation under application is mapped as:</p> <p>Beard vegetation association: 3048: Shrublands; scrub-heath on the Swan Coastal Plain (Shepherd, 2009)</p> <p>Hedde vegetation complex: Quindalup Complex (Qw): Coastal dune complex consisting mainly of two alliances - the strand and fore-dune alliance and the mobile and stable dune alliance. Local variations include the low closed forest of <i>Melaleuca lanceolata</i> (Rottneest Teatree) - <i>Callitris preissii</i> (Rottneest Island Pine) and the closed scrub of <i>Acacia rostellifera</i> (Summer-scented Wattle) (Hedde et al, 1980).</p>	<p>The application is for the proposed clearing of 0.73 hectares of native vegetation within Lot 229 and 230 on Deposited Plan 240259, for the purpose of refurbishment works on the cooling water outfall canal at the Verve Energy Power Station in Kwinana.</p> <p>The vegetation under application consists of predominantly coastal weeds and 10% native vegetation comprising 11 species predominantly <i>Spinifex longifolius</i>, <i>Scaevola crassifolia</i> and <i>Olearia axillaris</i> (Natural Area Consulting, 2011). The vegetation has been assessed as degraded (Keighery 1994) condition (Natural Area Consulting, 2011).</p>	<p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)</p> <p>to</p> <p>Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994)</p>	<p>The vegetation condition and description was determined from a site inspection conducted by Natural Area Holdings in June 2011 and aerial photography (GIS Databases; Swan Coastal Plain Central, 2009).</p>

## 3. Assessment of application against clearing principles

### Comments

The application to clear up to 0.73 hectares of native coastal vegetation for the purpose of refurbishment of the Verve Energy's Kwinana Power Station Stage A Cooling Water Outfall Canal is unlikely to have any significant environmental impacts. The vegetation is considered to be in a good to degraded (Keighery, 1994) condition and has been classified as coastal fore-dune vegetation dominated by coastal weeds (Natural Area Holdings, 2011a, 2011b).

There are two declared rare flora species (*Verticordia plumosa* var. *ananeotes* and *Diuris micrantha*), one priority flora species (*Dodonea hackettiana*- Priority 4) and one Priority Ecological Community (Priority 3) recorded within 5kms of the proposed clearing. However, a flora survey did not identify these species within the application area (Natural Area Holdings, 2011a). The vegetation to be cleared consists of 11 common native species that are well represented in the local area, and would not have a detrimental impact on native fauna.

The proposed clearing may cause some short term erosion issues in terms of localised wind and water erosion of the calcareous sands (Northcote et al, 1960-68) on the foredunes during the works. However, these issues should be minimised as works will include a Revegetation Plan, endorsed by the Town of Kwinana, to prevent erosion and other minor land degradation issues associated with the works, ie weed control, revegetation, fencing and infill planting, (Natural Area Holdings, 2011b).

The assessment of the application identified that the clearing is not likely to be at variance to any of the clearing principles.

**Methodology** Keighery (1994)  
 Natural Area Holdings (2011a)  
 Natural Area Holdings (2011b)  
 Northcote et al (1960-68)

GIS databases:  
 - Clearing Regulations - Environmentally Sensitive Areas  
 -Soils, statewide  
 - Hydrography, linear  
 - Heddle Vegetation Complexes  
 - Pre-European vegetation  
 - SAC Biodatasets (Accessed 22 August 2011)

### Planning instruments, Native Title, Previous EPA decisions or other matters.

**Comments**

No submissions from the public have been received.

The Town of Kwinana (2011) advised that upon completion of the project, the adjacent beach and foreshore area affected by the development is to be reinstated and rehabilitated back to its original state [prior to the commencement of works]. This is to occur in conjunction with the Town's Environment Team.

The area under application is zoned for Parks and Recreation under the Metropolitan Regional Scheme.

**Methodology** Town of Kwinana (2011)

GIS Databases:  
 Metropolitan Regional Scheme

### 4. References

Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Natural Area Consulting (2011a) Clearing Permit Application- Kwinana Beach- Additional Information- June 2011, Whiteman, WA

Natural Area Consulting (2011b) Kwinana Beach (Verve Energy)- Draft Revegetation Plan- June 2011, Whiteman, WA

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

Shepherd, D.P. (2009) 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.

Town of Kwinana (2011); Advice for proposed maintenance, upgrade and replacement works for the Verve Energy- Kwinana Power Station Outfall Canal, received 15/07/2011; Town of Kwinana, Kwinana, WA (DEC REF A413035).

Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 22/08/2011).

### 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)