



## CLEARING PERMIT

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

### PERMIT DETAILS

Area Permit Number: 3531/2

File Number: DEC9830

Duration of Permit: From 4 September 2010 to 4 September 2013

### PERMIT HOLDER

Simcoa Operations Pty Ltd

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 5548 on Plan 188561, Marriott Road, WELLESLEY 6233

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 7.7 hectares of native vegetation within the area hatched yellow on attached Plan 3531/2.

### CONDITIONS

#### 1. Wind erosion management

The Permit Holder must apply a soil stabilising agent within 7 days of clearing native vegetation.

#### 2. Dieback and 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* and *dieback*:

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

#### 3. Flora management

- (a) Prior to undertaking any clearing authorised under this Permit, the Permit Holder shall engage a *botanist*, in accordance with *Guidance Statement No 51* to undertake a targeted flora survey for the presence of the rare flora species *Drakaea elastica*, *Drakaea micrantha* and *Caladenia procera*.

- (b) Where *Drakaea elastica*, *Drakaea micrantha* or *Caladenia procera* is identified as a result of the survey carried out pursuant to condition 3(a) of this Permit, the Permit Holder shall ensure that:
- (i) all records of *Drakaea elastica*, *Drakaea micrantha* or *Caladenia procera* are to be submitted to the CEO within two weeks of completion of the survey; and
  - (ii) no clearing occurs within 50 metres of any rare flora, unless approved by the CEO.

#### 4. Offsets

If part or all of the clearing to be done is or may be at variance with one or more of the clearing principles, then the Permit Holder must implement an *offset* in accordance with conditions 4(a) and (b) of this Permit with respect to that clearing.

- (a) Determination of *offsets*:
- (i) in determining the *offset* to be implemented with respect to a particular area of native vegetation proposed to be cleared under this Permit, the Permit Holder must have regard to the *offset* principles contained in condition 4(b) of this Permit;
  - (ii) once the Permit Holder has developed an *offset proposal*, the Permit Holder must provide that *offset proposal* to the CEO for the CEO's approval prior to undertaking any clearing to which the *offset* relates, and prior to implementing the *offset*;
  - (iii) clearing may not commence until and unless the CEO has approved the *offset proposal* to which the clearing relates;
  - (iv) the Permit Holder shall implement the *offset proposal* approved under condition 4(a)(iii); and
  - (v) each *offset proposal* shall include a *direct offset*, timing for implementation of the *offset proposal* and may additionally include *contributing offsets*.
- (b) For the purpose of this condition, the *offset* principles are as follows:
- (i) *direct offsets* should directly counterbalance the loss of the native vegetation;
  - (ii) *contributing offsets* should complement and enhance the *direct offset*;
  - (iii) *offsets* are implemented only once all avenues to avoid, minimise, rectify or reduce environmental impacts have been exhausted;
  - (iv) the environmental values, habitat, species, *ecological community*, physical area, ecosystem, landscape, and hydrology of the *offset* should be the same as, or better than, that of the area of native vegetation being *offset*;
  - (v) a ratio greater than 1:1 should be applied to the size of the area of native vegetation that is offset to compensate for the risk that the *offset* may fail;
  - (vi) *offsets* must entail a robust and consistent assessment process;
  - (vii) in determining an appropriate *offset*, consideration should be given to ecosystem function, rarity and type of *ecological community*, vegetation *condition*, habitat quality and area of native vegetation cleared;
  - (viii) the *offset* should either result in no net loss of native vegetation, or lead to a net gain in native vegetation and improve the *condition* of the natural environment;
  - (ix) *offsets* must satisfy all statutory requirements;
  - (x) *offsets* must be clearly defined, documented and audited;
  - (xi) *offsets* must ensure a long-term benefit; and
  - (xii) an *environmental specialist* must be involved in the design, assessment and monitoring of *offsets*.

## 5. Records to be kept

- (a) The Permit Holder must maintain the following records in relation to flora management pursuant to condition 3 of this Permit:
  - (i) the location of each *Drakaea elastica*, *Drakaea micrantha* or *Caladenia procera* plant recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings; and
  - (ii) a copy of the botanist's flora survey report.
- (b) The Permit Holder must maintain the following records in relation to the *offset* of areas pursuant to condition 4:
  - (i) the location of any area of *offsets* recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
  - (ii) a description of the *offset* activities undertaken; and
  - (iii) the size of the *offset* area (in hectares).

## 6. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year a written report of records required under condition 5 of this Permit for activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 4 May 2013, the Permit Holder must provide to the CEO a written report of records required under condition 5 of this Permit where these records have not already been provided under condition 6(a) of this Permit.

## Definitions

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

**botanist** means a person with specific training and/or experience in the ecology and taxonomy of Western Australian flora;

**condition** means the rating given to native vegetation using the *Keighery scale* and refers to the degree of change in the structure, density and species present in the particular vegetation in comparison to undisturbed vegetation of the same type;

**contributing offset/s** has the same meaning as is given to that term in the Environmental Protection Authority's *Position Statement No.9: Environmental Offsets*, January 2006;

**dieback** means the effect of *Phytophthora* species on native vegetation;

**direct offset/s** has the same meaning as is given to that term in the Environmental Protection Authority's *Position Statement No.9: Environmental Offsets*, January 2006;

**ecological community/ies** means a naturally occurring biological assemblage that occurs in a particular type of habitat (English and Blythe, 1997; 1999);

**environmental specialist** means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

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

*Guidance Statement No. 51* means the Environmental Protection Authority Guidance Statement No 51, Guidance for the Assessment of Environmental Factors - Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia (2004);

*Keighery scale* means the vegetation condition scale described in *Bushland Plant Survey: A Guide to Plant Community Survey for the Community (1994)* as developed by B.J. Keighery and published by the Wildflower Society of WA (Inc). Nedlands, Western Australia;

*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;

*offset/s* means an offset required to be implemented under condition 4 of this Permit;

*offset proposal* means an *offset* determined by the Permit Holder in accordance with condition 4 of this Permit; and

*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*.

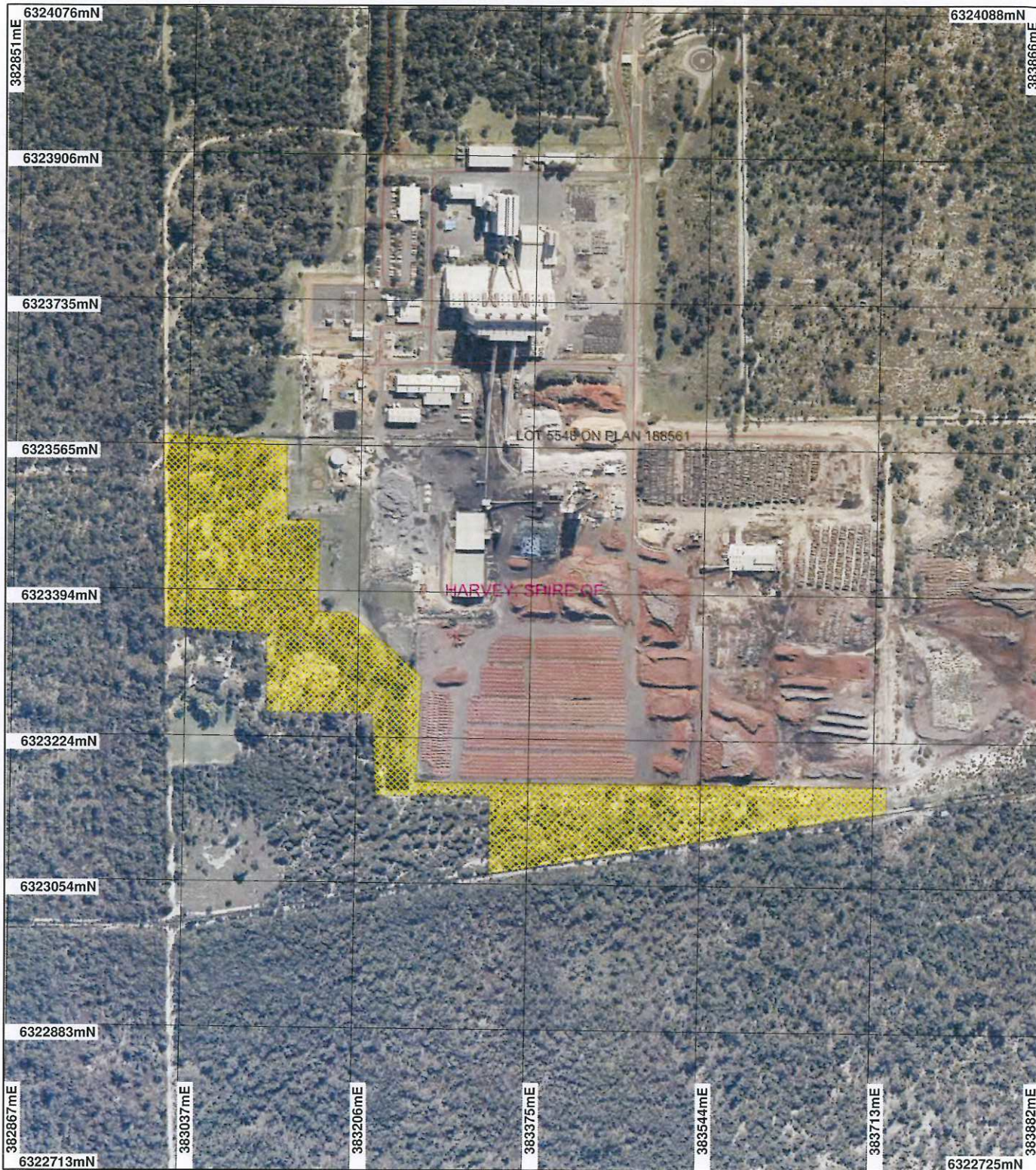


Kelly Faulkner  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

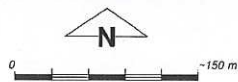
1 March 2011

# Plan 3531/2



## LEGEND

- Clearing Instruments
- Areas Approved to Clear
- Road Centrelines
- Cadastral for labelling
- Bunbury 50cm Orthomosaic - Landgate 2008
- Local Government Authorities



Scale 1:6000  
(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]*  
K Faulkner Date 1/3/11

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.: 3531/2  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Simcoa Operations Pty Ltd

### 1.3. Property details

Property: LOT 5548 ON PLAN 188561 (House No. 947 MARRIOTT WELLESLEY 6233)  
Local Government Area:  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
7.7		Mechanical Removal	Building or Structure

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 1 March 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
Beard Vegetation Association: 1000 - Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; teatree (Melaleuca spp.). (Shepherd 2007; SAC Bio datasets 2/02/2010).	The proposal is to clear 7.7 hectares of native vegetation for the purpose of expanding the laydown area and raw material storage area.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The vegetation clearing description and condition were obtained from aerial orthomosaics and the Kemerton Industrial Park Strategy Plan (2009); and from site inspections by DEC Officers (2010) and vegetation and flora survey (M.E. Trudgen & Associates, 2008) for the previously withdrawn clearing permit application CPS2856/1.
Hedde Vegetation Complex: Bassendean Complex - Central and South: Vegetation ranges from woodland of <i>E. marginata</i> - <i>C. fraseriana</i> - <i>Banksia</i> spp. to low woodland of <i>Melaleuca</i> species, and sedgelands on the moister sites. This area includes the transition of <i>E. marginata</i> to <i>E. todtiana</i> in the vicinity of Perth (Hedde et al 1980).		Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)  Degraded: Structure severely disturbed; regeneration to good condition requires intensive management	

### 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 at variance to this Principle**

This amendment is due to the recent determination of the Minister for Environment on the applicant's appeal against the conditions of the permit. The amendment removes the one month timeframe in Condition 1 of the Clearing Permit and replaces it with a condition requiring the application of a soil stabilising agent following clearing, prior to the construction of the storage and laydown area.

Lot 5548 Marriot Road, Wellesley is located within the Kemerton Industrial Park.

Simcoa originally applied to clear 22.9 hectares. The application was reduced to 7.7 hectares to remove the areas of native vegetation in very good to excellent (Keighery, 1994) condition and the majority of the dampland wetland on Lot 5548.

DEC's site inspections in 2010 identified the native vegetation (7.7 hectares) under application was in a degraded to very good (Keighery, 1994) condition (DEC, 2010a, b) comprising three plant communities:

- The dune area supports *Eucalyptus marginata*, *Banksia attenuata* and *Xylomelum occidentale* low open forest. This plant community appears to be impacted by kangaroo grazing and is considered to be in a good condition (Keighery, 1994): and
- Two differing dampland wetland plant communities. One dominated by a *Kunzea glabrescens*, *Banksia ilicifolia*, *Melaleuca preissiana* low open forest, over *Hypocalymma angustifolia*, *Pericalymma elliptica*, *Adenanthos meisneri*, *Jacksonia furcellata* open low heath. The other is dominated by a *Melaleuca preissiana*, *Banksia littoralis* low open forest, over *Kunzea glabrescens*, *Jacksonia furcellata* open heath, over *Hypocalymma angustifolia*, *Adenanthos meisneri* and *Aotus procumbens* closed low heath.

The application area has been reduced to remove a large area of the dampland wetland. The dampland wetland is in a degraded to very good condition (Keighery, 1994).

There are ten records of priority flora species occurring within the local area (10km radius). One plant of *Acacia semitrullata* (P4) was observed during the site inspection in July 2010. This species was observed in higher numbers to the north of this area and adjacent to the area under application. It is concluded that this species is likely to be common in the local area.

Given the vegetation under application includes priority flora, will impact on a dampland wetland the proposed clearing is at variance to this principle. An offset condition has been imposed to address this issue.

##### Methodology

##### References:

- DEC (2006)
- DEC (2010a)
- Keighery (1994)
- M.E. Trudgen & Associates, 2008)
- Thompson McRobert Edgeloe (et al, 2009)

##### GIS databases:

- Bunbury 50cm Orthomosaic - Landgate 2006
- CALM Managed Lands and Waters - CALM 01/06/05
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- Heddle Vegetation Complexes - DEP 22/06/95
- Pre European Vegetation - DA 01/01
- SAC BIO datasets - accessed 2/02/2010

#### (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**

There are nine fauna species of conservation significance that have been recorded within the local area (10km radius) including the Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*, Endangered), Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii*, Vulnerable), Chuditch (*Dasyurus geoffroii*, Vulnerable), Brush-tailed Phascogale (*Phascogale tapoatafa*, Vulnerable), Western Ringtailed Possum (*Pseudocheirus occidentalis*, Vulnerable), Eastern Curlew (*Numenius madagascariensis*, P4), Lined Skink (*Lerista lineata*, P3) and the Carpet Python (*Morelia spilota imbricata*, Other Specially Protected and P4) and the Peregrine Falcon (*Falco peregrinus*, Other Specially Protected).

The area under application is within the distribution range of the Carnaby's Black Cockatoo which inhabit

Eucalyptus and Banksia woodlands and coastal scrub, foraging on the seeds and nectar from the flowers of Eucalypts, Banksia, Grevillea and Hakea species (Burbidge, 2004). The vegetation under application includes some of these species which could be utilised by foraging Carnaby's Black Cockatoo.

During the recent site inspections (DEC, 2010a & b) Carnaby's Black Cockatoos and Red-tailed Black Cockatoos were observed on Lot 5548.

The amended area under application supports Eucalyptus marginata, Banksia attenuata, Xylomelum occidentale low open forest and may be considered to be habitat for these species. The condition of the vegetation was variable. The vegetation in which Xylomelum occidentale was dominant and the dampland wetland are likely to be less preferred as a food source for Carnaby's and Red-tailed Black Cockatoos.

The areas of dense vegetation under application are likely to provide suitable habitat for a range of ground dwelling fauna species such as the Quenda, kangaroos, snakes and lizards, with numerous kangaroo scats observed during the site inspection (DEC, 2010a & b).

Given the above the clearing may be at variance with this principle.

#### Methodology

##### References:

- Burbidge (2004)
- DEC (2010a)
- DEC (2010b)
- M.E. Trudgen & Associates (2008)
- Thompson McRobert Edgeloe (et al, 2009)

##### GIS Databases:

- Bunbury 50cm Orthomosaic - Landgate 2006
- CALM Managed Lands and Waters - CALM 1/07/05
- SAC Bio Dataset - 02/2/2010

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

#### Comments

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

Five rare flora species have been recorded within the local area (10km radius) *Diuris drummondii*, *Diuris micrantha*, *Caladenia procera*, *Drakaea elastica* and *Drakaea micrantha*.

*Diuris drummondii* grows in very wet swamps and *Diuris micrantha* grows in clayey wetlands. The area under application (dampland wetland) does not support these types of wetland and are not likely to be found within the area under application.

*Drakaea elastica*, listed as critically endangered, is known from the Kemerton area and occurs in deep sandy soil in jarrah/banksia woodland, including in low-lying areas alongside winter-wet swamps. While disadvantaged in disturbed sites, this species could be present given the condition of vegetation ranges from very good to degraded. Therefore the area under application may be suitable habitat for this species. This species is best surveyed while the leaf is fresh, being July and August.

Similarly, *Caladenia procera* is listed as Critically Endangered, and is known from jarrah woodlands. The area under application may be suitable habitat for this species. This species is best surveyed at the flowering time, being September to October.

*Drakaea micrantha*, listed as Vulnerable, grows in similar sites to that under application, however its habitat requirements are not well known. Therefore the area under application may be suitable habitat for this species. This species is best surveyed at the flowering time, being September to October.

Given the above the area under application may include or be necessary for the continued existence of rare flora and therefore may be at variance to this clearing principle. Targeted surveys, at the appropriate time, are necessary to determine whether these species occur on site. A condition is required to provide for surveys to be undertaken before any clearing can occur.

#### Methodology

##### References:

- Brown et al. (1998)
- DEC (2008)
- DEC (2010a)
- DEC (2010b)
- DEC (2010c)

##### GIS Database:

- Bunbury 50cm Orthomosaic - Landgate 2006
- Hedde Vegetation Complexes
- 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**  
There are no known recorded occurrences of Threatened Ecological Communities (TEC) within the local area (10km radius). The closest TEC identified as Muchea Limestone (Shrublands and woodlands on Muchea Limestone) is located approximately 10.1km northeast of the applied area. The native vegetation under assessment is not the same vegetation complex and soil type on which this TEC occurs.  
Given the above, the proposal is not likely to be at variance to this clearing principle.

**Methodology**      References:  
- DEC (2010e)  
- M.E. Trudgen & Associates (2008)  
GIS Database:  
- Bunbury 50cm Orthomosaic - Landgate 2006  
- Heddle Vegetation Complexes  
- Soils Statewide  
- SAC Bio Datasets accessed 2/02/2010

**(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 may be at variance to this Principle**  
Heddle et al. (1980) defines the vegetation under application as Bassendean Complex Central and South of which there is 27% of pre-European extent remaining (EPA 2000). The vegetation under application is also described as Beard vegetation association 1000 of which there is 28.59% of pre-European extent remaining (Shepherd 2007).

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

The area under application is part of a larger remnant of contiguous vegetation of a vegetation type that has been cleared below its target. It is therefore considered that the clearing may be at variance with this principle.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

The vegetation under application is not considered to be within an extensively cleared landscape as there is ~40% remaining in the local area.

**Methodology**      References:  
- EPA (2000)  
- Commonwealth of Australia (2001)  
- Heddle (1980)  
- Shepherd et al (2007)  
GIS Databases:  
- Bunbury 50cm Orthomosaic - Landgate 2006  
- Heddle Vegetation Complexes  
- Pre-European Vegetation  
- SAC Bio Datasets accessed 2/02/2010

**(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**  
During the site inspections (DEC, 2010a & b) dampland wetland vegetation was observed predominantly in the central and southwestern portions of the area under application. This dampland wetland area has not been mapped and is considered to be of comparable, if not better condition, than the Conservation Category Wetland located east of the Simcoa plant. The dampland wetland under application is part of a larger dampland wetland which occurs within the neighbouring properties, and is in excellent to pristine condition.

The proponent has amended the area under application to reduce the impact on the dampland wetland

vegetation. The majority of the area in very good condition has been removed from the proposal with the majority being in a degraded to good condition. There is however no buffer to the dampland wetland if the clearing is approved.

Runoff from the compacted and surfaced areas has the potential to adversely impact on the adjacent dampland wetland values if not managed and treated.

Given that the vegetation under application includes dampland wetland dependent vegetation, proposed clearing is at variance to this Principle. An offset condition is required to mitigate the impacts of clearing on this dampland wetland.

- Methodology**
- References**
- DEC (2010a)
  - DEC (2010b)
  - EPA (2008)
- GIS Databases:**
- ANCA wetlands - Environment Australia 26/3/99
  - EPP, Lakes
  - Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
  - Hydrography, linear\_1
  - Hydrography, linear (hierarchy)
  - Register of National Estate

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

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

The area under application is associated with subdued dune-swale terrain and the chief soils are described as leached sands (Northcote et al. 1968). Generally, these soils have a high risk of wind erosion and a low risk of water erosion due to the high infiltration rates associated with sands.

The main land degradation risk associated with the removal of vegetation on the identified soil type is considered to be wind and water erosion (the latter caused by the land use). Without appropriate vegetation cover, windbreaks or adequate dust suppression on exposed surfaces, the proposed clearing on sandy soils may result in wind erosion.

The proposal is for the purpose of storage of raw materials, and a compacted limestone and/or asphalt base (Simcoa, 2010a) will be applied over the sandy surface. This will minimise the risk of wind erosion (Commissioner of Soil, 2010). Furthermore, the vegetation to the west and south of the applied area should reduce wind velocity which would minimise the wind erosion risk even further.

Given the above, the proposed clearing may be at variance to this Principle.

- Methodology**
- References:**
- Northcote et al (1960-1968)
  - Simcoa (2010a)
  - Simcoa (2010b)
  - Commissioner of Soil (2010)
- GIS Databases:**
- Groundwater Salinity, Statewide
  - Salinity Risk LM 25m - DOLA 00
  - Soils, Statewide - DA 11/99
  - Topographic Contours, Statewide ? DOLA

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

There are numerous areas reserved for conservation purposes within a 10km radius of the area under application, the closest being Leschenault Peninsula Conservation Park and an un-named nature reserve which are respectively located approximately 4.6km west and 4.2km northwest of the applied area. There are also four System 6 Reserves within the local area (10km radius), the closest being located approximately 2km east of the area under application.

In addition Executive Director Freehold (EDF) land abuts the area under application. The southern portion of the identified EDF land forms part of a 1a ecological linkage as identified by the South West Regional Ecological Linkages (SWREL) project, endorsed by the EPA (Molloy et al. 2009, EPA 2009a).

The proposed clearing of 7.7ha of vegetation will reduce the size of the northern-southern corridor to this

linkage.

Given the above, the proposed clearing may be at variance to this Principle.

- Methodology** References:
- EPA (2009a)
  - Molloy et al.(2009)
- GIS Databases:
- CALM Managed Lands and Waters
  - CALM Regional Parks
  - Register of National Estate
  - System Six Reserves

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

The area under application is located within an unmapped wetland which appears to have values commensurate with a Conservation Category Wetland (DEC 2010a). The nearest wetland, a Resource Enhancement Wetland is located approximately 60m north of the applied area and the closest watercourse is a major drain which is located approximately 150m east of the area under application.

Although there is generally a low to nil salinity risk associated with the area under application, salinity risk mapping has identified two portions within the applied area as having a high (~0.8ha) and moderate (~1 ha) salinity risk. The removal of deep rooted vegetation from the applied area may cause rising groundwater levels and consequently impact on recharge of groundwater systems downslope, causing a deterioration in the quality of underground water. Furthermore, given a portion of the proposed clearing is within a dampland wetland, it is considered that it may cause a temporary deterioration in the quality of surface water through sedimentation.

Given the above, clearing may be at variance to this Principle.

- Methodology** References:
- DEC (2010a)
  - DEC (2010b)
- GIS Database:
- EPP, Lakes
  - Geomorphic Wetlands (Classification), Swan Coastal Plain
  - Hydrography, linear (hierarchy) - DOW
  - Public Drinking Source Areas (PDWAs) - DOW
  - Salinity Mapping LM 25m - DOLA
  - Soils, Statewide - DA 11/99

**(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 sandy soils on site generally have a high infiltration rate, given the relatively small scale of the proposed clearing (7.7 hectares) the proposed clearing is unlikely to impact on peak flood height or duration.

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

- Methodology** References:
- Simcoa (2010b)
- GIS Database:
- EPP, Lakes
  - Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC
  - Hydrography, linear (hierarchy) - DOW
  - Topographic Contours, Statewide ? DOLA

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

**Comments**

This amendment is due to the recent determination of the Minister for Environment on the applicant's appeal against the conditions of the permit. The amendment removes the one month timeframe in Condition 1 of the Clearing Permit and replaces it with a condition requiring the application of a soil stabilising agent following clearing, prior to the construction of the storage and laydown area.

A submission (Simcoa, 2010b) was received by DEC on 1 April 2010 in response to DEC's letter dated 4 March 2010 requesting additional information in relation to issue raised with Simcoa's application.

On 16 July 2010 Simcoa amended its application to 7.7 hectares. The amendment removes the areas of better quality Carnaby's black cockatoo habitat, and reduces the impact of the clearing on the dampland wetland.

Lot 5548 Marriott Road, Wellesley is located in the core industrial area of the Kemerton Industrial Park (KIP) and is zoned Industrial under the Greater Bunbury Regional Scheme (GBRS).

#### Methodology

References:

- Simcoa (2010b)

GIS Database:

- Aboriginal Sites of Significance

- Greater Bunbury Regional Area

- Town Planning Scheme Zones\_1

## 4. References

- Brown A., Thomson-Dans C. and Marchant N.(1998). Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia.
- Burbidge, A. (2004) Threatened Animals of Western Australia, Department of Conservation and Land Management, Perth, Western Australia.
- Commissioner of Soil and Land Conservation (2010) Advice. Department of Agriculture and Food. DEC Ref: DOC120869.
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## 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)