



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	5899/1
Duration of Permit:	From 22 February 2014 to 22 February 2017
Permit Holder:	Warrego Energy Pty Limited

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

PART I - CLEARING AUTHORISED

- 1. Land on which clearing is to be done**
Petroleum Exploration Permit 469
- 2. Purpose for which clearing may be done**
Clearing for the purpose of a seismic survey and appraisal well.
- 3. Area of Clearing**
The Permit Holder must not clear more than 70 hectares of native vegetation. All clearing must be within the area cross-hatched yellow on attached Plan 5899/1.
- 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.

PART II - MANAGEMENT CONDITIONS

- 5. 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*:
 - clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

6. Flora Management

Where the rare flora species *Eucalyptus crispata*, *Paracaleana dixonii* and *Thelymitra stellata* and priority flora species *Lasiopetalum ogilvieanum*, *Malleostemon decipiens*, *Micromyrtus rogeri*, *Stylidium carnosum* and *Synaphea oulopha* have been identified and their written location(s), provided to the CEO, within report Woodman Environmental Consulting Pty Ltd (Woodman) (2013) West Erregulla Project – Flora and Vegetation Assessment, report prepared for Warrego Energy Pty Ltd, September 2013, the Permit Holder shall ensure that:

- (i) no clearing of *critical habitat* of the identified rare or *priority* flora occurs, unless first approved by the CEO; and
- (ii) no clearing of the identified rare or *priority* flora occurs, unless first approved by the CEO.

7. Fauna Management

The Permit Holder shall not clear within 10 metres of *Black Cockatoo habitat trees* found within the area cross-hatched yellow on attached Plan 5899/1.

8. Vegetation Management

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

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

9. Offset

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 9(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 9(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 9(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 6:1 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 (10-30 year) benefit; and
- (xii) an *environmental specialist* must be involved in the design, assessment and monitoring of *offsets*.

10. Retain and spread vegetative material and topsoil

The Permit Holder shall:

- (a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.
- (b) within 12 months following clearing authorised under this permit, *revegetate* and *rehabilitate* the areas that are no longer required for the purpose for which they were cleared under this Permit by:
 - (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
 - (ii) laying the vegetative material and topsoil retained under Condition 10(a).

PART III - RECORD KEEPING AND REPORTING

11. Records to be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit,
 - (i) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) the date that the area was cleared;
 - (iii) the size of the area cleared (in hectares); and
 - (iv) purpose for which clearing was undertaken.
- (b) In relation to the *revegetation* and *rehabilitation* of areas pursuant to Condition 10 of this Permit:
 - (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken; and
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares).

12. Reporting

- (a) The Permit Holder shall provide a report to the Director Operations, Environment, Department of Mines and Petroleum by 1 October each year for the life of this permit, demonstrating adherence to all conditions of this permit, and setting out the records required under Condition 11 of this permit in relation to clearing carried out between 1 July and 30 June of the previous financial year.
- (b) Prior to 22 February 2017, the Permit Holder must provide to the Director Operations, Environment, Department of Mines and Petroleum a written report of records required under Condition 11 of this Permit where these records have not already been provided under Condition 12(a) of this Permit.

DEFINITIONS

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

black cockatoo habitat tree/s: means trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater;

CEO means the Chief Executive Officer of the Department of Environment Regulation or an Officer with delegated authority under Section 20 of the *Environmental Protection Act 1986*;

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;

critical habitat means any part of the Permit Area comprising of the habitat of flora or fauna species and its population, that is critical for the health and long term survival of the flora or fauna species and its population;

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;

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

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 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, or who is approved by the CEO as a suitable environmental specialist;

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

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;

local provenance means native vegetation seeds and propagating material from natural sources within 100 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared;

offset/s means an offset required to be implemented under condition [#] of this Permit;

offset proposal means an *offset* determined by the Permit Holder in accordance with condition [#] of this Permit;

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;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

priority flora means those plant taxa described as priority flora classes 1, 2, 3, 4 or 5 in the *Department of Parks and Wildlife's Threatened and Priority Flora List for Western Australia* (as amended);

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

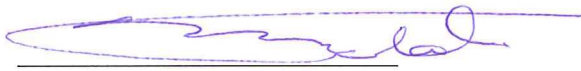
revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as *regeneration, direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;

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 any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Parks and Wildlife Regional Weed Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



Steve Tantala
DIRECTOR OPERATIONS
ENVIRONMENT
DEPARTMENT OF MINES AND PETROLEUM

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

30 January 2014