GOVERNMENT OF
WESTERN AUSTRALIA

# CLEARING PERMIT

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

## PERMIT DETAILS

Area Permit Number: 2518 / 1
File Number: DEC7797
Duration of Permit: From 11 October 2009 to 11 October 2011

## PERMIT HOLDER

Anna Plains Cattle Company Pty Ltd

## LAND ON WHICH CLEARING IS TO BE DONE

LOT 4 ON PLAN 208874 (EIGHTY MILE BEACH 6725)

## AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 45 hectares of native vegetation within the area hatched yellow on attached Plan 2518/1.

## CONDITIONS

1. **Weed control**
   (a) 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.

   (b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any *weeds* or species permitted for planting under a Pastoral Diversification Permit which are growing within the area hatched red on attached Plan 2518/1.

2. **Records to be kept**
   The Permit Holder must maintain the following records for activities done pursuant to this Permit in relation to the clearing of native vegetation authorised under this Permit:
   (a) the species composition, structure and density of the cleared area;
   (b) 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;
   (c) the date that the area was cleared; and
   (d) the size of the area cleared (in hectares).

**3. 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 2 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.

(b) Prior to 11 July 2011, the Permit Holder must provide to the CEO a written report of records required under condition 2 of this Permit where these records have not already been provided under condition 3(a) of this Permit.

**DEFINITIONS**

***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;

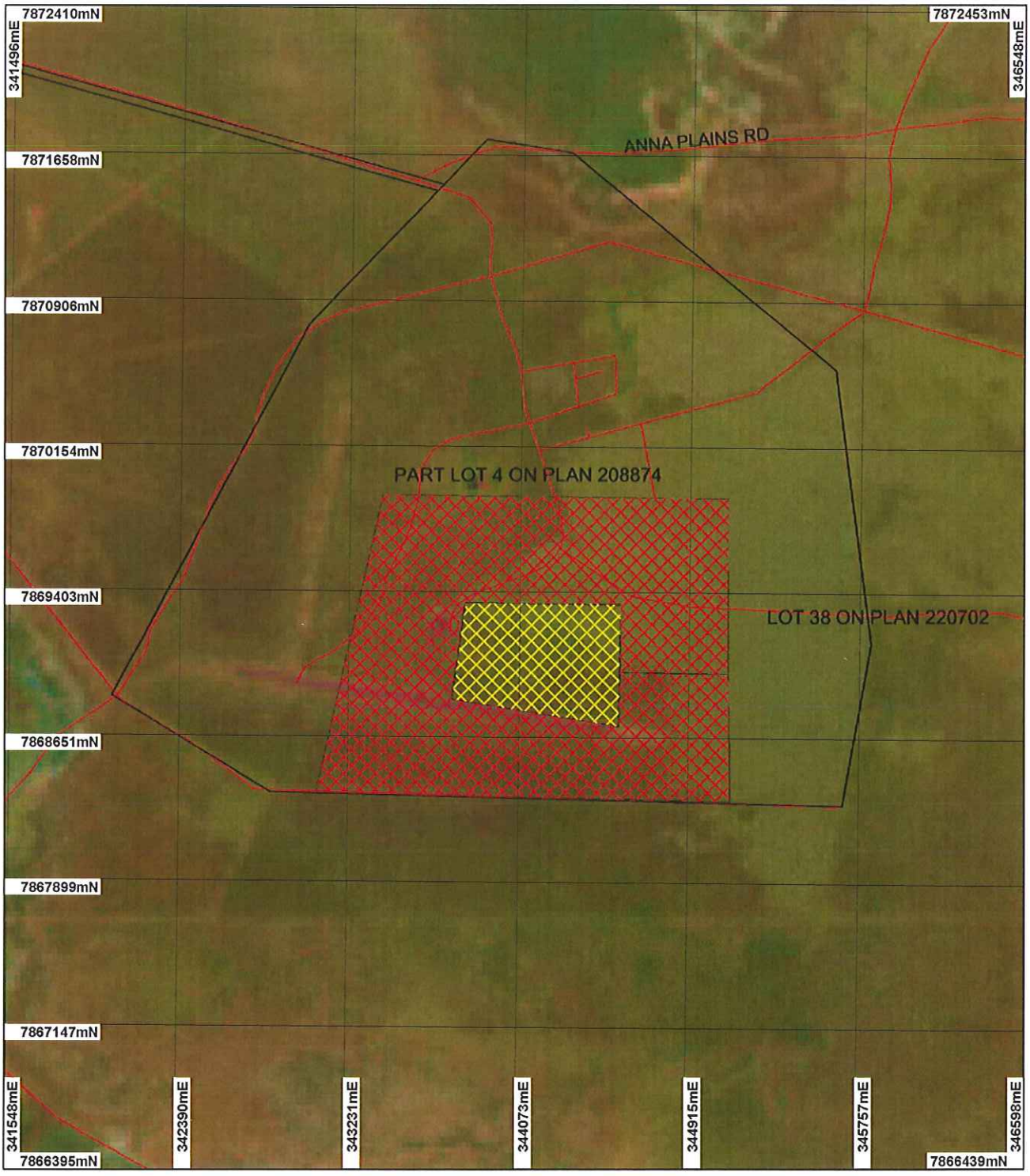
***weed/s***, for the purpose of this permit, means a species listed in Appendix 3 of the *Environmental Weed Strategy* published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*, excluding those species permitted for planting under a Pastoral Diversification Permit, issued by the Department of Regional Development and Lands.

Keith Claymore
A/ ASSISTANT DIRECTOR
NATURE CONSERVATION DIVISION

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

11 September 2009

# Plan 2518/1




## LEGEND

**Clearing Instruments**

- Areas Subject to Conditions
- Areas Approved to Clear
- Road Centrelines
- Cadastre

Western Australia ETM+ 25m 543 - AGO 2000

- Cadastre for labelling

N

0 ~750 m

*Scale 1:29000*
*(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.*

K Claymore ..... Date 11/9/09

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 acknowleged by the agency acronym in the legend.

Department of Environment and Conservation

*Our environment, our future*



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

Department of Environment and Conservation

# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

**Permit application No.:** 2518/1
**Permit type:** Area Permit

### 1.2. Proponent details

**Proponent's name:** **MR Anna Plains Cattle Company Pty Ltd**

### 1.3. Property details

**Property:** PART LOT 4 ON PLAN 208874 (EIGHTY MILE BEACH 6725)

**Local Government Area:** Shire Of Broome
**Colloquial name:**

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|---|---|---|---|
| 45 | | Mechanical Removal | Cropping |

## 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 699: Shrublands, pindan; Acacia eripoda shrubland with scattered low bloodwood (Eucalyptus dichromophloia) and Eucalyptus setosa over soft, curly spinifex on sandplain (Hopkins et al, 2001). | The proposed clearing is 45 ha for the purpose of establishing a pasture of Rhodes Grass (Chloris gayana) under centre pivot irrigation. This site has been historically cleared but has since regrown (DAFWA, 2008). | Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994) | The description of the vegetation under application was obtained from aerial photography and the application form and supporting documentation (DAFWA, 2008). |

## 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 vegetation within the proposal area is comprised of a single, relatively uniform community represented by Beard Vegetation Association 699 (Hopkins et al, 2001). The vegetation on-site is Pindan shrubland consisting of Acacia and Eucalypt species over Spinifex grasses (Hopkins et al, 2001). This vegetation type occurs throughout the immediate vicinity of the local area.

None of Association 699 is located within any IUCN Class I-IV Reserves (Shepherd et al, 2006). There is 1,985,022 hectares of this association remaining, approximately 99% of the pre-European extent (Shepherd et al, 2006), which indicates it is well represented in the natural environment.

Given the extensive range of similar habitat within the surrounding area as that under application, the proposed clearing of 45ha of vegetation is unlikely to have a significant impact on the biodiversity of the area.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology**

Hopkins et al (2001);
Shepherd et al (2006);
GIS Database:
- Environmental Impact Assessments EPA 22/2/07
- Clearing Regulations - Environmentally Sensitive Areas 30 May 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**

There are numerous records of threatened or priority bird species within the local area (30km radius). The habitat under application is well represented in the surrounding area, and given this the vegetation is not likely to be significant habitat for fauna.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology**

GIS Layer:
SAC Biodatasets 040708

**(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**

There are no recorded occurrences of rare flora within the local area (30km radius).

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology**

GIS Layer:
SAC Biodatasets 040708

**(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 recorded occurrences of threatened ecological communities within the local area (30km radius).

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology**

GIS Layer:
SAC Biodatsets 040708

**(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 applied to clear is a component of Beard Vegetation Association 699 (Hopkins et al, 2001). None of this Association is located within any IUCN Class I-IV or DEC managed reserves (Shepherd et al, 2006). There is 1,985,022 ha of this Association remaining, approximately 99.9% of the pre-European extent (Shepherd et al, 2006), which indicates that it is well represented in the natural environment. Therefore this Association is of least concern for biodiversity conservation.

The clearing of 45 ha is not likely to significantly reduce the remaining extent of this vegetation association, therefore the application is not likely to be at variance to this Principle.

**Methodology**

Hopkins et al (2001);
Shepherd et al (2006);
GIS database:
- Pre-European Vegetation - DA 01/01

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

The application area is located 10km east of the Broome coastline, 8km east of the Ramsar listed Eighty Mile Beach and 1.5km south of a canal within the property. Due to these large distances, it is not likely that the clearing will impact on these areas.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology**

GIS Databases:
- RAMSAR, Wetlands - CALM 14/02/03
- ANCA, Wetlands - CALM 08/01
- Hydrography, linear - DOE 1/2/04
- Hydrography, linear (hierarchy) - DOW

**(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 area under application is located within Pindan country-gently undulating sand plain with a few small rocky sandstone residuals; no external drainage: chief soils are red earthy sands (Northcote et al., 1960-68). The soils are deep red sandy Pindan soils with good drainage and the landscape is considerably flat with slight undulations (DAFWA, 2008).

Provided clearing is done shortly before planting of pasture there should be little risk of wind erosion (DAFWA, 2008). Furthermore, Pindan soils have good drainage reducing the likelihood of water erosion and waterlogging (DAFWA, 2008).

Groundwater salinity is less than 500mg/L and given the soils good drainage, salinity risk is low. The Department of Agriculture and Food WA (2008) advises the proposed clearing is unlikely to cause appreciable land degradation.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology**

Northcote et al (1960-68)
DAFWA (2008);
GIS Database:
- Soils statewide DA 11/99
- Groundwater Salinity Statewide DoW 13/07/06

**(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**

The application area is located 8km east of the Ramsar and Register of National Estate listed Eighty Mile Beach. Due to this large distance, it is not likely that the clearing will impact on these areas.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology**

GIS Databases:
- CALM Managed Lands and Waters - CALM 1/07/05

**(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**

Clearing of 45 hectares of vegetation is unlikely to have a significant impact on groundwater in the proposed area given the average annual rainfall of the site is 500mm, with most rainfall occurring over the summer months, and an evapotranspiration rate of 400mm per annum. The application area falls within the Sandy Desert - Lake Dora and Sandy Desert Basin Catchments where groundwater salinity is less than 500mg/L and given the soils good drainage, salinity risk is low (DAFWA, 2008).

Furthermore, the existing vegetation is shallow rooted grass and shrub species and thus the proposed clearing is unlikely to have a significantly impact the level or quality of the groundwater table.

There are no Public Drinking Water Source Areas within a 5 km radius. The nearest drainage line is approximately 8.9 km north west of the proposal area, a distance that is sufficient to ensure impacts from the clearing are unlikely.

Therefore the proposal is not likely to be at variance to this Principle.

**Methodology**

DAFWA (2008)
GIS Database;
- Public Drinking Water Source Areas (PDWSA)
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Topographic Contours, Statewide - DOLA 12/09/02

**(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 area surrounding the proposal area is considerably flat and experiences approximately 500mm annually.

The local area consists of low gradients and seasonal heavy downpours can cause localised flooding. Though the Pindan soil structure of the area is has good drainage and consequently flooding drains away quickly (DAFWA, 2008).

Given this, the clearing is not likely to cause or exacerbate the incidence or intensity of flooding within the area and therefore this proposal is not likely to be at variance to this Principle.

**Methodology** DAFWA (2008)
GIS Database;
- Topographic Contours, Statewide - DOLA 12/09/02
- Hydrography, linear - DOW 13/7/06

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

**Comments**

The application area lies within The Canning Kimberley Groundwater sub area as proclaimed under the Rights in Water and Irrigation Act 1914. Any groundwater extraction and/or taking or diversion of surface water for the purposes other than domestic and/or stock watering is subject to licence by the Department of Water. The applicant has obtained a Licence to Take Water.

The Pastoral Lands Board has granted a Pastoral Diversification Permit for the proposed fodder activity. The permit allows the establishment and irrigation of Rhodes grass, and also the harvesting of the fodder prior to seed maturity for feeding cattle across the station, or for sale. If intensive management of the grass is not maintained, the grass species has the potential to spread across the station.

Rhodes grass is a non-indigenous potential fodder species in Western Australia and is known to have a wide tolerance to a rage of climatic conditions. (Natural Resources and Water, 2006) The aggressive growing characteristics have resulted in this species being listed as an environmental weed (Hussey et al., 2007). The highly mobile ability of the seeds and the quantity of seeds produced during seeding (Natural Resources and Water, 2006) may result in escapees from the area under application.

Advice from Department of Agriculture and Food Western Australia indicated that, based of trials conducted with Rhodes grass in the Northern Territory, this species is unlikely to persist away from irrigation areas due to the low fertility of the soil and the low annual rainfall in the area. (Trim Ref DOC57541).

The proponent has received a Pastoral Diversification Permit consisting of weed management conditions, of which similar conditions may be included on the clearing permit if granted.

The Shire of Broome Interim Development Order No. 3 classifies land uses associated with the pastoral industry as a permissible activity and therefore the proposed purpose does not require approval from the shire.

The proposed works are not listed as Prescribed Premises under the Environmental Protection Regulations 1987, therefore no licences or works approvals are required.

There is a Native Title claim over the local area, which includes the area under application. The claimants have been notified. No response was received.

There is one Aboriginal Site of Significance listed within the areas under application, the applicant will be advised of their obligations under the Aboriginal Heritage Act 1972.

**Methodology** Hussey et al., (2007)
Natural Resources and Water (2006)
GIS Databases:
- Native Title Claims - LA 2/5/07
- Aboriginal Sites of Significance 26 April 2007
- Environmental Impact Assessments EPA 22/2/07
- RIWI Act, Groundwater Areas - DoW 13/07/06

## 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 likely to be at variance to the remaining clearing Principles.

## 5. References

Department of Agriculture and Food (2008) Advice. Commissioner of Soil and Land Conservation. DEC TRIM Ref: DOC58788.
Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.

Hussey, B.M.J., Keighery, G.J., Dodd, J., S.G. and Cousens, R.D. (2007) Western Weeds: A Guide to the Weeds of Western Australia. Second Edition. The Weeds Society of Western Australia, Department of Agriculture and Food Western Australia, Department of Environment and Conservation.

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 Resources and Water (2006) Facts Pest Series: Rhodes grass Chloris gayana. Land Protection PP91 QNRM05560. Queensland Government.

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. (2007). 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.

## 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) |