



1. Application details

1.1. Permit application details

Permit application No.: 1141/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: EDL NDG (WA) Pty Ltd

1.3. Property details

Property: LOT 648 ON PLAN 209773 (House No. 8 WODEHOUSE DERBY 6728)

Local Government Area: Shire Of Derby-West Kimberley

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.5		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 764: Shrublands, pindan; Acacia eriopoda and Acacia tumida (pindan wattle) shrubland with scattered Eucalyptus spp. (low bloodwood) and Eucalyptus setosa (roughleaf bloodwood) over Chrysopogon spp. (ribbon grass) and Triodia bitextura (curly spinifex) (Hopkins et al, 2001).	The site currently houses the existing diesel power station. The new natural gas power station will be located adjacent to the old station. Almost half of the proposal area has been previously cleared for vehicle access to the existing power station. Within this area there remains small patches of disturbed vegetation which is proposed to be cleared. The remaining half of the proposal area retains vegetation typical of the area, and does not exhibit any signs of disturbance (EDL NDG (WA) Pty Ltd, 2006).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The description of the vegetation under application was obtained from a consultant's report containing site photos (DoE TRIM Ref: KNI1449) and aerial photographs of the site (Derby Townsite 70cm Orthomosaic - DLI 01).

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 at the site is comprised of a single, relatively uniform community, represented by Beard Vegetation Association 764. Species likely to be present include Acacia eriopoda and Acacia tumida shrublands, Eucalyptus setosa over Chrysopogon spp. and Triodia bitextura (Hopkins et al, 2001).

Half of the proposal area is disturbed from existing activities associated with the current power station. Site photos (EDL NDG (WA) Pty Ltd, 2006) and aerial photos from 2001 show the remaining vegetation within the proposal area to be in good condition.

This Association is well represented in the surrounding local area, which is well vegetated and in excellent condition. It is likely that the surrounding area contains a higher biological diversity than the proposal area due to the relatively undisturbed condition.

No Declared Rare and Priority Flora, Threatened Fauna or Threatened Ecological Communities were located within the site proposed for clearing (EDL NDG (WA) Pty Ltd, 2006).

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

Methodology Hopkins et al (2001);
EDL NDG (WA) Pty Ltd (2006);
GIS Databases:
- Declared Rare and Priority Flora List - CALM 01/07/05
- Threatened Fauna - CALM 30/09/05
- Threatened Ecological Communities - CALM 12/4/05
- Derby Townsite 70cm Orthomosaic - DLI 01

(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

An on-ground fauna survey did not find any known Threatened Fauna within the area proposed to be cleared (EDL NDG (WA) Pty Ltd, 2006).

A desktop survey indicated the possibility of two Threatened Fauna existing within a 50 kilometre radius of the area applied to clear. These were one day sighting of a Priority 4 bird species and one trapping of a Schedule 1 bird species.

The proponent will implement a Flora and Fauna Management Procedure to minimise impacts on fauna within the development area. This commenced with the surveying of the site under application to identify any protected species of flora and fauna, of which none were identified within the area to be cleared (EDL NDG (WA) Pty Ltd, 2006). Other management practices include fencing the construction area to prevent fauna movement into the disturbance site and immediately contacting local wildlife rescue services should any fauna be injured (EDL NDG (WA) Pty Ltd, 2006).

The clearing of 2.5 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 large distances between the proposal area and the priority species. The implementation of the Flora and Fauna Management Procedure will significantly reduce any impacts on the fauna of the local area. Additionally, the areas surrounding the proposal site are 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 EDL NDG (WA) Pty Ltd (2006);
GIS Database:
- Threatened Fauna - CALM 30/9/05

(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

An on-ground flora survey did not locate any Declared Rare or Priority Flora within the area proposed to clear (EDL NDG (WA) Pty Ltd, 2006), and a desktop survey failed to locate any within a 50 kilometre radius of the area.

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

Methodology EDL NDG (WA) Pty Ltd (2006)
GIS Database:
- Declared Rare and Priority Flora List - CALM 01/07/05

(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

An on-ground flora survey found there were no Threatened Ecological Communities within the area proposed to be cleared (EDL NDG (WA) Pty Ltd, 2006).

A desktop survey indicated that the closest Threatened Ecological Community is 50 kilometres from the proposal area. These are the Mound Springs located on coastal mudflats and associated with the Big Springs complex, with rainforest patches found on several of the larger springs (Graham, 2001). The Big Springs complex is prone to the threatening influence of grazing and its condition is declining, however if managed stands a fair to good chance of recovery (Graham, 2001).

The distance between the proposal site and the mound springs is considered adequate to ensure the clearing will not have any adverse impacts on the Big Springs complex.

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

Methodology EDL NDG (WA) Pty Ltd (2006);
Graham (2001);
GIS Databases:
- Threatened Ecological Communities - CALM 12/4/05
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

(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 764 (Hopkins et al, 2001). None of this Association is located within any IUCN Class I-IV Reserves (Shepherd et al, 2001). There is approximately 99% of the pre-European extent of this Association remaining (Shepherd et al, 2001), which indicates it is well represented in the natural environment. Therefore, this Association is of least concern for biodiversity conservation (Department of Natural Resources and Environment, 2002).

The implementation of the Flora and Fauna Management Procedure will significantly reduce any impacts on the flora of the surrounding local area. These include fencing the area to prevent unauthorised clearing, and preventing the spread of weeds within and outside the proposal area via manual removal and implementation of any required remedial action (EDL NDG (WA) Pty Ltd, 2006).

Clearing of 2.5 hectares will not significantly reduce the remaining extent of this vegetation Association, therefore the proposal is not likely to be at variance to this Principle.

Methodology Department of Natural Resources and Environment (2002);
Hopkins et al (2001);
Shepherd et al (2001);
EDL NDG (WA) Pty Ltd (2006);
GIS Databases:
- 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 area proposed to be cleared is located approximately 4 kilometres east of the coast line, 3.5 kilometres north east of Airport Creek and approximately 2.5 kilometres south-south west of Doctor's Creek (EDL NDG (WA) Pty Ltd, 2006).

The small size of the area to be disturbed and the large distances between the proposal area and the creeks and ocean will prevent any impacts on the watercourses.

There is the potential for siltation to occur in adjacent minor drainage areas resulting from water erosion on the site due to construction activities. The proponent will implement a Surface Water and Soil Erosion Management Plan which involves the installation of a site drainage system to prevent erosion and avoid siltation of the surrounding areas (EDL NDG (WA) Pty Ltd, 2006), thereby significantly reducing any impacts of the clearing on the drainage areas.

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

Methodology EDL NDG (WA) Pty Ltd (2006);
GIS Databases:
- Hydrography, linear (hierarchy) - DOE 13/4/05

(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 clearing is likely to be blade down, resulting in removal of all root systems that currently stabilise soils and prevent erosion. The soils on site are red earthy sands (Northcote et al, 1960-68) so have a moderate potential for erosion (Schoknecht, 2002). Half of the area is disturbed from the current power station activities, and as such is already quite degraded.

To minimise land degradation of these sandy soils, the proponent will implement a Surface Water and Soil Erosion Management Plan which involves the installation of a site drainage system to prevent erosion and avoid siltation of the surrounding areas (EDL NDG (WA) Pty Ltd, 2006). Given the small size of the proposed clearing,

2.5 hectares, the Plan will be adequate to manage any potential land degradation, and might possibly improve the condition of the site from its current degraded state.

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

Methodology Northcote et al (1960-68);
Schoknecht (2002);
EDL NDG (WA) Pty Ltd (2006);
Application form;
GIS Database:
- Soils, Statewide - DA 11/99

(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 at variance to this Principle

A desktop survey failed to locate any conservation areas within a 50 kilometre radius of the area proposed to clear.

The closest known conservation areas are the Windjana Gorge and Geike Gorge National Parks (Graham, 2001), which are over 140 kilometres to the east of the proposal area. This large distance from the proposal area will prevent any impacts to the parks.

Therefore, the proposal is not at variance to this Principle.

Methodology Graham (2001);
GIS Database:
- 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

The proposal area is located within the Derby Townsite Subarea of the Derby Groundwater Area proclaimed under the Rights in Water and Irrigation Act 1914. The coast line is approximately 4 kilometres to the west, Airport Creek approximately 3.5 kilometres to the south west and Doctor's Creek approximately 2.5 kilometres north-north east of the proposal area (EDL NDG (WA) Pty Ltd, 2006).

Due to the large distances between the application area and the tributaries, and the small size of the proposed clearing, it is unlikely that the proposal will impact on the water quality of the ocean or surrounding creeks.

The Public Drinking Water Source Protection Area lies approximately 1 kilometre to the north of the proposal area. These bores were drawing water from the unconfined aquifer, however they have now been decommissioned. All of Derby's town water supply is now sourced from artesian bores, therefore the water source protection plan no longer applies and has been abolished. The construction of the power station is regulated by the current Works Approval, which ensures all potential contaminants are stored appropriately and all spills are managed correctly. Therefore, it is not likely that the proposed clearing and resulting land use of a power station will affect the town water supply.

There are a number of private bores in the local vicinity. Again, the Works Approval will govern the storage of chemicals and spills, thereby protecting the quality of the water for private use.

Additionally, the proponent will implement a Surface Water and Soil Erosion Management Plan to further reduce the potential for degradation of the surface water quality of the area (EDL NDG (WA) Pty Ltd, 2006).

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

Methodology EDL NDG (WA) Pty Ltd (2006);
GIS Databases:
- Public Drinking Water Source Areas (PDWSAs) - DOE 07/02/06
- RIWI Act, Surface Water Areas - WRC 18/10/02
- RIWI Act, Groundwater Areas - WRC 13/06/00
- Hydrography, linear (hierarchy) - 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

Flooding occurs seasonally over the December to March period, where the flood height and duration are

lengthy and extreme. The clearing of 2.5 hectares of vegetation is not likely to increase the incidence or intensity of these naturally occurring flood events.

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

Methodology GIS Database:
- Rainfall, Mean Annual - BOM 30/09/01

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

Comments

There were no objections received in relation to the proposed clearing.

EDL NDG (WA) Pty Ltd holds a lease over the land from Western Power Corporation. The land is zoned for the purposes of Powerhouse, Depot and Quarters.

There are no Native Title claims over the area under application. As the lease has been granted and the proposed activity complies with the land zoning, the granting of a clearing permit does not constitute a future act under the Native Title Act 1993.

The proposed clearing occurs in an area that is covered by the following Registered Indigenous Heritage Site - Maradja (ID 20599). It is the proponent's responsibility to comply with the Aboriginal Heritage Act 1972 and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

A Works Approval has been issued for the construction of the power station. A Licence under the Environmental Protection Act 1986 is required for the operation of the power station.

Water is not required for the operation of the power station, however is required for ablution facilities and emergency showers. This water will be obtained from the mains supply, therefore a Water Licence under the Rights in Water and Irrigation Act 1914 is not required.

The area under application has been subject to three referrals to the Environmental Protection Authority. Two of the referrals are not related to the proposal under assessment. The third referral applies to the power station, however it was not assessed as the overall environmental impact of the proposal was not so severe as to require formal assessment (CRN 212420). Advice was given in relation to obtaining a Works Approval prior to construction, and that approval from other decision making agencies is obtained. Therefore the proposal is not in conflict with this decision.

Methodology GIS Databases:
- Native Title Claims - DLI 7/11/05
- Aboriginal Sites of Significance - DIA
- Environmental Impact Assessments - DOE 24/02/06

4. Assessor's recommendations

Purpose	Method Applied	area (ha)/ trees	Decision	Comment / recommendation
Industrial	Mechanical Removal	2.5	Grant	Assessable criteria have been addressed and no objections were raised. The proposal was found to be not at variance for principle h and found not likely to be at variance for principles a, b, c, d, e, f, g, i and j. The Assessing Officer therefore recommends that the permit should be granted.

5. References

- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- EDL NDG (WA) Pty Ltd (2006) Supporting Information for Land Clearing Permit Application. Broome Fuel Storage Facility West Kimberley Power Project Broome, Western Australia. Revision 1. DOE TRIM Ref: KNI1449
- Graham G. (2001) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002. Dampierland 2 (DL1 - Fitzroy Trough subregion)
- 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.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- 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.

Schoknecht N. (2002) Soil Groups of Western Australia. A simple guide to the main soils of Western Australia. Resource Management Technical Report 246. Edition 3.
Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)