



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3794/6
Permit Holder:	Roy Hill Infrastructure Pty Ltd
Duration of Permit:	19 September 2010 – 16 October 2015

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

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of *geotechnical* and *hydrological investigations*.

2. Land on which clearing is to be done

Licence number Lic 00727/2009_4_8; Licence number Lic 00727/2009_3_10 Roy Hill to Port Hedland Railway Investigation Licence (UCL Section); Licence number Lic 00727/2009_3_8 Roy Hill to Port Hedland Railway Investigation Licence (BFS 2); Licence number Lic 00727/2009_3_11 Roy Hill to Port Hedland Railway Investigation Licence (Abydos Woodstock) and Licence number Lic 00727/2009_2_177 Roy Hill to Port Hedland Railway Investigation Licence (BFS 1) and *Railway (Roy Hill Infrastructure Pty Ltd) Agreement Act 2010 - Miscellaneous Licence 4SA (Railway and Other Purposes)*, located within the following properties:

CROWN RESERVE 23045 (MARBLE BAR 6760)
CROWN RESERVE 23046 (MARBLE BAR 6760)
UNALLOCATED CROWN LAND (MARBLE BAR 6760)
FORREST LOCATION 20 (MARBLE BAR 6760)
LOT 1203 ON PLAN 70562 (BOODARIE 6722)
LOT 1204 ON PLAN 70562 (BOODARIE 6722)
LOT 1279 ON PLAN 70562 (BOODARIE 6722)
LOT 1280 ON PLAN 70562 (BOODARIE 6722)
LOT 1281 ON PLAN 70562 (BOODARIE 6722)
LOT 1282 ON PLAN 70562 (BOODARIE 6722)
LOT 1283 ON PLAN 70562 (BOODARIE 6722)
LOT 1500 ON PLAN 68275 (NULLAGINE 6758)
LOT 1501 ON PLAN 68276 (NULLAGINE 6758)
LOT 164 ON PLAN 183379 (BOODARIE 6722)
LOT 190 ON PLAN 91708 (MARBLE BAR 6760)
LOT 197 ON PLAN 30401 (NEWMAN 6753)
LOT 203 ON PLAN 220594 (BOODARIE 6722)
LOT 208 ON PLAN 238219 (INDEE 6721)
LOT 209 ON PLAN 238236 (MARBLE BAR 6760)
LOT 218 ON PLAN 220376 (Lot No. 218 GREAT NORTHERN MULGA DOWNS 6751)
LOT 221 ON PLAN 238388 (MULGA DOWNS 6751)
LOT 228 ON PLAN 238638 (MARBLE BAR 6760)
LOT 272 ON PLAN 219540 (BOODARIE 6722)
LOT 273 ON PLAN 219540 (BOODARIE 6722)
LOT 281 ON PLAN 193734 (BOODARIE 6722)

LOT 282 ON PLAN 193734 (BOODARIE 6722)
LOT 299 ON PLAN 221428 (BOODARIE 6722)
LOT 311 ON PLAN 194620 (BOODARIE 6722)
LOT 323 ON PLAN 220768 (BOODARIE 6722)
LOT 324 ON PLAN 220768 (BOODARIE 6722)
LOT 347 ON PLAN 55942 (MARBLE BAR 6760)
LOT 349 ON PLAN 55942 (MARBLE BAR 6760)
LOT 350 ON PLAN 55942 (MARBLE BAR 6760)
LOT 352 ON PLAN 55943 (MARBLE BAR 6760)
LOT 354 ON PLAN 217400 (MARBLE BAR 6760)
LOT 358 ON PLAN 217402 (MARBLE BAR 6760)
LOT 372 ON PLAN 35620 (PORT HEDLAND, TOWN OF)
LOT 386 ON PLAN 221146 (BOODARIE 6722)
LOT 487 ON PLAN 61851 (BOODARIE 6722)
LOT 65 ON PLAN 48920 (MARBLE BAR 6760)
ROAD RESERVE (BOODARIE 6722)
ROAD RESERVE (MARBLE BAR 6760)

3. Area of Clearing

The Permit Holder must not clear more than 326 hectares of native vegetation within the area hatched yellow on attached Plan 3794/6.

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.

5. 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 *Railway (Roy Hill Infrastructure Pty Ltd) Agreement Act 2010* or any other written law.

6. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

7. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

8. 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* growing within areas cleared under this Permit.

9. Flora management

- (a) Prior to undertaking any clearing authorised under this Permit, the Permit Holder shall engage a *botanist* to undertake a flora survey of the area to be cleared in accordance with *Guidance Statement No. 51*.
- (b) Where *priority* or *undescribed flora* are identified in relation to condition 9(a) of this Permit, the Permit Holder shall ensure that:
 - (i) no clearing of identified *priority flora* or *undescribed flora* occurs; and
 - (ii) no clearing occurs within 10 metres of identified *priority flora* or *undescribed flora*, unless approved by the CEO.

10. Retain vegetative material and topsoil, revegetation and rehabilitation

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 six months following clearing authorised under this permit, *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this by:
 - (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
 - (ii) ripping the ground on the contour to remove soil compaction; and
 - (iii) laying the vegetative material and topsoil retained under condition 10(a) on the cleared area(s).
- (c) within 24 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 10(b) of this Permit:
 - (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
 - (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 10(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *revegetate* the area by deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area and ensuring only *local provenance* seeds and propagating material are used.
- (d) Where additional *planting* or *direct seeding* of native vegetation is undertaken in accordance with condition 10(c)(ii) of this permit, the Permit Holder shall repeat condition 10(c)(i) and 10(c)(ii) within 24 months of undertaking the additional *planting* or *direct seeding* of native vegetation.
- (e) Where a determination by an *environmental specialist* that the composition, structure and density within areas *revegetated* and *rehabilitated* will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, as determined in condition 10(c)(i) and (ii) of this permit, that determination shall be submitted for the CEO's consideration. If the CEO does not agree with the determination made under condition 10(c)(ii), the CEO may require the Permit Holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 10(c)(ii).

11. Drainage management

The Permit Holder shall not cause or permit the discharge of sediments, from within those areas permitted to be cleared under this permit, into the Fortescue Marshes.

12. Vegetation management

The Permit Holder shall not clear native vegetation within 100 metres of the Fortescue Marshes.

13. Environmental management plan

- (a) The Permit Holder must prepare, implement and adhere to a Mulga Community *EMP*, if clearing within Mulga communities.
- (b) The Mulga Community *EMP* must include:
 - (i) a plan for managing the *impacts*;

- (ii) a table setting out the Permit Holder's commitments to the Mulga Community *EMP*'s requirements; and
 - (iii) a program for monitoring compliance with the Permit Holder's commitments;
- (c) Once the Permit Holder has developed a Mulga Community *EMP*, the Permit Holder must provide that Mulga Community *EMP* to the CEO for the CEO's approval. The clearing to which the Mulga Community *EMP* relates and the implementation of the Mulga Community *EMP* shall not take place until the Permit Holder receives approval from the CEO.

PART III - RECORD KEEPING AND REPORTING

14. Records must 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 species composition, structure and density of the cleared area;
 - (ii) 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;
 - (iii) the date that the area was cleared; and
 - (iv) the size of the area cleared (in hectares).
- (b) In relation to flora management pursuant to condition 9 of this Permit:
 - (i) the location of each *priority flora* or *undescribed flora* 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 species name of each *priority flora* or *undescribed flora* identified; and
 - (iii) a copy of the botanists flora survey report.
- (c) 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;
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares); and
 - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*.
- (d) In relation to the drainage management of areas pursuant to condition 11 a description of the drainage management activities undertaken.
- (e) In relation to the environmental management plan of areas pursuant to condition 13 a description of the environmental management plan activities undertaken, in accordance with that environmental management plan.

15. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
 - (i) of records required under condition 14 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 19 June 2015, the Permit Holder must provide to the CEO a written report of records required under condition 14 of this Permit where these records have not already been provided under condition 15(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;

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;

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;

Geotechnical and hydrological investigations means activities that include drill pad construction and drilling, test pitting, temporary laydown areas for equipment (drill casings and supplies, sample storage), park up areas for equipment (trucks and excavators) and construction of access tracks;

local provenance means native vegetation seeds and propagating material from natural sources within 50 kilometres of the area cleared.

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 or 4 in the *Department's Declared Rare and Priority Flora List for Western Australia* (as amended);

regenerate/ed/ion means *revegetation* that can be established from in situ seed banks contained either within the topsoil or seed-bearing *mulch*;

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

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;

undescribed flora taxa means any flora taxon (either at the generic, species or infraspecies level) that has been discovered, but not yet formally described as per the International Code of Botanical Nomenclature.

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*

13 October 2011



1. Application details

1.1. Permit application details

Permit application No.: 3794/6
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Roy Hill Infrastructure Pty Ltd

1.3. Property details

Property:

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- ROAD RESERVE (BOODARIE 6722)
- ROAD RESERVE (MARBLE BAR 6760)

Local Government Area: Town of Port Hedland, Shire of Ashburton and Shire of East Pilbara

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
326		Mechanical Removal	Geotechnical investigations

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 13 October 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
The following Beard vegetation associations were mapped as persisting within the applied area: Beard Vegetation Association 29 - Sparse low woodland; mulga, discontinuous in scattered groups. Beard Vegetation Association 82 - Hummock grasslands, low tree steppe; snappy gum over <i>Triodia wiseana</i> . Beard Vegetation Association 93 - Hummock grasslands, shrub steppe; kanji over soft spinifex - (dominant vegetation type) Beard Vegetation Association 173 - Hummock grasslands, shrub steppe; kanji over soft spinifex & <i>Triodia wiseana</i> on basalt. Beard Vegetation Association 562 - Mosaic: Low woodland; mulga in valleys / Hummock grasslands, open low tree-steppe; snappy gum over <i>Triodia wiseana</i> . Beard Vegetation Association 589 - Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex. Beard Vegetation Association 619 - Medium woodland; river gum (<i>Eucalyptus camaldulensis</i>). Beard Vegetation Association 626 - Hummock grasslands, shrub-steppe; kanji over soft spinifex & <i>Triodia brizoides</i> . Beard Vegetation Association 647 - Hummock grasslands, dwarf-shrub steppe; <i>Acacia translucens</i> over soft spinifex. (Shepherd, 2009) Beard Vegetation Association 676: Succulent steppe; samphire - (only small amounts within applied area) Shepherd (2009)	The application is to clear of 326 hectares of native vegetation for the purpose of geotechnical and hydrological investigation to assist in the design and engineering for the Port Hedland to Roy Hill Rail Line to provide information into the Roy Hill 1 Iron Ore Project bankable feasibility study. The clearing will consist of investigation sites and access tracks to sites. The proposed works are to occur over the length of the application area, which is over 180km long and crosses multiple land systems. The condition of the vegetation ranges from degraded to pristine (Keighery, 1994) (RHIO, 2010), with some areas showing signs of disturbance such as grazing and weed invasion, while other areas remain undisturbed (RHIO, 2010).	Pristine: No obvious signs of disturbance (Keighery 1994)	Vegetation condition and description was determined using Roy Hill Infrastructure Pty Ltd (2010a) application and supporting information provided by the applicant (RHIO, 2010) and EPA Report 1342 (EPA, 2009a).

3. Assessment of application against clearing principles

Comments

The permit has been amended amalgamating CPS 3870/3 and CPS 3794/5 into one permit area and to add new special lease area to the previous Section 91 clearing footprint area. The assessment against the clearing principles have not changed, the findings from the previous assessment are still relevant and can be found in the Clearing Permit Decision Reports CPS 3794/5 and CPS 3870/3.

Methodology

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

Comments

The permit has been amended amalgamating CPS 3870/3 and CPS 3794/5 into one permit area and to add new special lease area to the previous Section 91 clearing footprint area. The assessment against the clearing principles have not changed, the findings from the previous assessment are still relevant and can be found in the Clearing Permit Decision Reports CPS 3794/5 and CPS 3870/3.

No submissions were received.

Methodology

4. References

- DEC (2010) Pilbara Regional Advice. Department of Environment and Conservation, DEC Ref: A318409.
Department of Regional Development & Lands (2011) Licence to Occupy Crown Land in accordance with Section 91 of the Land Administration Act 1997 (WA), Licence Number Lic 00727/2009_4_8, Roy Hill to Port Hedland Railway Investigation Licence (Rail Addition North)
DoW (2010), Department of Water advice, DEC Ref: A319340
EPA (2009a), Roy Hill 1 Iron Ore Mining Project Stage 1 - Report and recommendations of the Environmental Protection Authority, Perth, Western Australia, Report 1342, November 2009
Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
Roy Hill Infrastructure Pty Ltd (2010a) Clearing permit application - supporting information. DEC Ref: A310334

Roy Hill Infrastructure Pty Ltd (2010b) Roy Hill Infrastructure Pty Ltd Draft Early Works Investigation Environmental Management Plan. DEC Ref: A318405

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.

Statement No. 824 (2009) Statement that a proposal may be implemented (Pursuant to the provisions of the Environmental Protection Act 1986), Roy Hill 1 Iron Ore Mining Project Stage 1, 110 Kilometres North of Newman, Shire of East Pilbara, 23 December 2009

Statement No. 829 (2010) Statement that a proposal may be implemented (Pursuant to the provisions of the Environmental Protection Act 1986), Roy Hill 1 Iron Ore Mining Project Stage 2, 110 Kilometres North of Newman, Shire of East Pilbara, 31 March 2010

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)