

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:

CPS 5402/2

Permit Holder:

Cooperative Bulk Handling Ltd

Duration of Permit:

12 October 2013 to 12 October 2019

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 constructing slip lanes.

2. Land on which clearing is to be done

South Coast Highway road reserve (PIN 11386422)

3. Area of Clearing

The Permit Holder must not clear more than 2.15 hectares of native vegetation within the area hatched yellow on attached Plan 5402/2a.

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. Offset - Rehabilitation

In relation to the areas hatched red on attached Plan 5402/2b the Permit Holder must implement and adhere to the CBH Gairdner Rehabilitation Plan, Revised October 24th 2014, attached as Appendix A to this permit.

PART III - RECORD KEEPING AND REPORTING

6. 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:
 - 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; and
 - (iii) the size of the area cleared (in hectares).
- (b) In relation to the revegetation and rehabilitation of areas pursuant to condition 5:
 - 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).

7. 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 6 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 12 July 2019, the Permit Holder must provide to the CEO a written report of records required under condition 6 of this Permit where these records have not already been provided under condition 7(a) of this Permit.

DEFINITIONS

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

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

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

Jane Clarkson

A/SENIOR MANAGER

CLEARING REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

26 February 2015

Appendix A

CBH Gairdner Rehabilitation Plan Revised October 24th 2014



Client: CBH Group

Consultant: David McFall (Temple Farm Trading Company

26 Jersey St Narrogin WA 6312)

Note: The following plan has been updated to reflect post changes made in the original rehabilitation plan dated 30th July 2013. Updated components are the Map and Monitoring coordinates. These changes were primarily a reconfiguration of area A3 to accommodate site access, fire control measures and to facilitate site fencing to exclude stock.

Background:

CBH is undertaking expansion works at the Gairdner Receival Point.

Engineering works have commenced and community consultation has been ongoing between CBH and The Shire of Jerramungup.

General landscaping works have been requested by the Shire to improve the amenity of the receival infrastructure and provide site screening and windbreak values to adjacent landholders.

CBH are also undertaking to establish an Offset planting Program of a minimum 4.35ha to satisfy obligations under the *Environmental Protection ACT 1986*.

Temple Farm Trading Company (TFTC) is based at Narrogin and consults on general revegetation matters relating to farmscape environmental services (Agribusiness) and other specific client needs such as roadside revegetation (Shire/ Mainroads) and clearing offsets (Industry/ CBH). David McFall is principle of TFTC and has prepared this report on behalf of CBH.

The

Scope of works

The following scope of works will be addressed in the Rehabilitation Plan:

- Locality of revegetation works
- Use of local plants
- · Weed management
- Associated works

Site Environment Natural and Built

The areas built environment is a grain receival facility located approximately 1km south west of Gairdner Township. Access is via South Coast Highway.

The areas natural environment contains remnant roadside vegetation to the north and East of the receival facility and cleared agricultural land [purchased to future receival point expansion and target Offset planting area].

An appraisal of the vegetation on site and adjoining areas was first undertaken during an onsite visit 29th August 2012, accompanied by CBH representative John Ivers. While a formal flora survey was not undertaken during this visit reference to a more extensive flora base and planting list was guided by the formal Flora Survey conducted by Ellen J. Hickman [November 2012], The attached species list was guided by this Flora Survey.

The on-site appraisal visit was conducted by Wayne O'Sullivan of Environmental Services on behalf of TFTC. Site notes are attached and contain a brief commentary on the roadside verge condition. Further development of the rehabilitation plan has since occurred as the Offset area is now targeted to rehabilitation of the wetland to the south east of the recieval complex. Soils of the site are varied and typical of the locality. Noted soils include gravelly loams [western boundary] to heavy clay [southern boundary] and shallow duplex shallow duplex/clay [north western boundary]. The road side vegetation complex is an open mallee low scrub over dwarf scrub with open low sedges and herbs, dominated by *Eucalyptus pluracaulis* and *Allocasuarina huegellii* over *Acacia acuminata*, and *Allocasuarina humilis*. This is indicative of deep sand over gravel profile.

Soils associated with the wetlands to the south east of the site are typically duplex loam to shallow loam over clay. Salinity and waterlogging is evident with prior plantings of mixed species buffering the natural drainage lines.

Additional species such as *Eucalyptus occidentalis* and Melaleuca sub species such as *Mel uncinata* are common in the area and can suit the target landscape for the offset project.

Vegetation Rehabilitation structure and logistics:

Seven potential zones of revegetation have been identified in the plan [see Plan pg6].

It was noted that the prospects of successful revegetation around the existing accommodation hut are low due to the pre-existing competition of the current trees so this area does not feature in the plan.

Limited revegetation of the smaller internal detention basin has been eliminated as an offset area due to the low footprint and habitat value.

Securing and hand planting of containerised seedling stock is desirable to ensure seedling density though there is also scope to include a direct seeded component within the project. Direct seeding can provide additional vegetation cover and site establishment insurance.

Preference is for the reintroduction of local species however min order nursery logistics may limit species in the number and split as suggested in the species list. Therefore 'bulking' of species may occur though the nursery procurement process. This is a practical step in providing supply.

It is suggested that a mix of under and over story selections be provided to maximise the biodiversity habitat and visual aspect values desired from the planting project. Specifically final species selection will contain the approximate understory/ over story population density values:

- Understory [including groundcovers] 85%
- Overstory 15%

Preference is for all seedlings to be grown by local or regional nursery providers. It is calculated that up to 17,520 native seedlings of mixed form will be required to meet the planting density of all the proposed sites [Note: this site list is subject to nursery supply verification and may be trimmed as required]

A suggested seedling list is attached to this report [Pg7].

Operations Matrix

An operations/planting matrix is provided with this report and sets out major works functions and recommended aftercare requirements. The works matrix suggests best practice monitoring and weeds control activities to year 5 post planting, however this timeframe can be amended to suit client requirements. It is suggested a minimum 5 year project is adopted to account for contingency works such as a 2nd year infill and ongoing maintenance such as weed control.

Site works

RIPPING: Rehabilitation areas [excluding internal swale sections of drains and basins] will require a rip to minimum 300mm at 1000mm centres. Grader implement or tractor with single type ripper will be suitable to achieve this outcome.

TOP SOIL: Removed topsoil may be spread over the rehabilitation areas though can introduce long term weed management issues and is therefore not a critical requirement within this project.

MULCH: It is assumed that there is no mulch available to spread on the project areas though ,if available, it is best applied on the northern boundary areas. Mulch needs to be even spread to a maximum thickness of 100mm.

AMENDED SOIL_BASIN FLOOR: No amended soil is required within the scope of works.

Fire control

Ongoing fire control measures are the responsibility of the landholder with support from the local Fire Service. Access is available to all sites though any management of a fire event is best undertaken in areas of open access such as from the neighbour paddocks.

Water points and site fire management protocols will be managed within CBH existing fire risk and management policy.

Maintaining weed free/ low fuel conditions on the planted site will assist such endeavours and lower potential seedling scorch and possible death risks.

Weed control

Weed control measures are required to ensure effective control of winter and summer weeds. Chemical usage and handling shall be in accordance with label recommendations, appropriate to the environment, and contained onsite.

Weed control will be required over the two year implementation/ management period and is scheduled for further application as outlined in the Site establishment and associated works matrix.

Rabbit control

Rabbits are a threat to seedling establishment and growth and need to be monitored and dealt with as required i.e. regular baiting.

Ongoing Monitoring, Management/Maintenance and Criteria for Success

The rehabilitation area is required to be monitored and maintained for a minimum 5 year period post planting as per the attached matrix [pg8·9].

3 Monitoring Quadrants Locations (MQL) comprising dimensions 10m x10m are suggested for the OFFSET AREA and are depicted on the Project map as follows:

Q1 678472mE 6212312 mN

Q2_678395mE 6212110 mN

Q3_678104mE 6212178 mN

No field photo's of the MQL's are available at the time of the report though can be supplied at a later date if required. Post and pre plant photo documentation will be kept on file to assist reporting.

Primary criteria for success is Seedling survival exceeding 85% planting. Infill to occur in areas as required in consultation with CBH if these values are lower.

Secondary criteria for success is effective weed control and weed seed population reduction comprising less than 25% groundcover after year 3 control practice. It is noted that the main risk period for weed suppression of seedling growth is in the establishment year though ongoing control is considered best practice and supports external objectives such as fire risk management at the recieval site and good neighbour policy.

Post planting monitoring of seedling establishment and weed threat to commence 1st spring period year 1 [post planting 2014]. Photo monitoring will occur at the designated MQL's and shall be supported with survival counts.

Designated Contractor to report to CBH Group results of monitoring and any planned future works/ site issues.

Below: Stylised site image and marked up OFFSET planting areas



NOTE: Target Offset area has been segmented into rehab areas including portion of Rehab area1 [wetlands] and comprises a minimum 4.62ha

Gairdner CBH Reveg Plan_Site specs and suggested species list-July 2013

Site ref	Soll type	Length(m)	Width (m)	Area(ha)	Rip spacing	Tree spacing	Branch Value	Amount required[*)	Notes					
Reveg1-Landscape	Clay/gravel sand	1000	1	4 0	.4	2	3	950	South and	west boundary	strip			
Reveg2_landscape	Gravel	200		5	1	2	3	240	North wes	t ne de comer	sall spal			
Reveg3_Landscape	Sandy gravel	300	9	6,	5	2	3	350	North road verge _Total length 850m_effective plant area ~150m open plus infill va				pen plus infill variou	
Reveg4_Landscape	Gravel	200	40		1	2	15	2520	Almside Proposed large block site plan to be verified					
DBasin1_Landscape	Clay	430	10	0 0	,4	2 :	6	950	O Deterition basin south east comer. Plant east side to connect to offset plantings				fset plantings	
Revegs_Offset	Clay/loam	various	various		5	2 :	2 2	12480	C Rohab 1-4_Offset area - Wetland / Roadverge buffer plus wetland rehab				hab	
TOTAL			VII	7.	05			17520				Barrier H		
					Reveg	1 Reveg2	Reveg3	Reveg4	DBasin1	RevegS OFFSE	total			
Genus	speries	subsperies	heightimi	soll	91	0 20	360	2520	960	12480	17570			

					Reveg1		Contract of the Contract of th	Reveg4	minimizationship	RevegS OFFSE	total
Genus	species	subspecies	height(m)	soll	960	240		2520	960	12480	17520
Acacia	accuminata		6	sand, learn	180	50	60	180		1200	1680
Acacia	consobrina		1977	clay, red loam						490	480
Aracia	cupolaris		1.2	Loam, sandy day						350	360
Acacia	glaucoptera		15	clay, gravel		- 50		60	60	520	700
Azacia	gonuphylla			clay, gravel						520	520
Acacia	harveyli		3	clay, loam, sand					68	520	580
Acacia	heterocina		3	gravel, clay					60	520	580
Acacia	myrtifolia		3	sand, gravel				60			60
Acacia	patagiata		2	clay					60	300	390
Acacia	saligna	lindleyi	6	sand, loam				120			120
Allocasuarina	huegellii			sand, gravel, loam	120		60	180			860
Saeckea	preissiana		2	sand, loam, gravels				60			60
Seaufortia	empetrifolia		2	sand			60	60			120
Beaufortia	micrantha		1	sand, gravel			60	60			120
Beaufortia	schaueri		1	sand, gravel			60	60			120
Callistemon	phoeniceus			sand, gravel, loam, clay	170		123	120			1500
Calothamnus	gracilis		1.2	sand, sandy day				60	60		120
Calothamnus	sanguineus		1.5	sand, gravel	120			60		520	700
Calethamous	villosus		1.2	sand gravel, clay				60			60
Eucalyptus	falcata		i	sand , gravel				120			120
Eucalyptus	occidentalis		20	sand, clay				180	60	480	720
Eucalyptus	phaenophylla	phaenophylla		sand, gravel						300	300
Eucalyptus	suggrandis	suggrands		sand, gravel				60			50
Eucalyptus	thamcides	megista		gravel, loam				60			50
Eucalyptus	vegrandis	recondita		sand, loam, sandy clay	120				60	490	660
Hakea	corymbosa		1	sand, gravel, sandy clay						240	240
Hakea	ferroginea		3	sand, loam, clays						240	240
Hakea	florida		1.5	sand, loam, clays						240	240
Hakea	faurina			sand, gravel, clay				180	E	243	480
Hakea	lissocamha			sand, gravel						493	480
Hakea	prostrata			sand, loam, gravel, day	60					520	580
Hakea	varia			sand, loam, gravel, day		E		170	61		240
Hovea	pungens		1.5	sand, loam, gravel, day					60		60
Kurzea	recurva			sand, loam, gravel, clay Icam	60						60
leptos permum	erubescens			sand, gravel			50				60
Melaleuca	acuminata	acuminata		sand, clay	120			120	120	0 490	860
Melaleuca	hamata			sand, Icam, gravel, clay Icam				120	_	480	600
Melalguca	hamulosa		-	sand, Icam, gravel, clay Icam				120	3	490	600
Melaleuca	lateralis	1	1.	sand, Icam, gravel		61)			480	590
Melaleuca	lateriflora			sand, clay					6	480	500
Melaleuca	suberosa			sand, foam, gravel, clay loam				61			60
Melaleuca	subfalcata			sand, Icam, gravel, clay				61	-		60
Melaleuca	viminea			sand, clay	60			69		9 490	660
Pultenaea	verruculasa			sand, gravel	1			61			60
Viminaria	juncea			sand, day				61		0 240	360
Total	CAN TO SERVICE STREET			- Annual - A	960	24	360			The second second	17520

Note: Suggested species spread to indicate site diversity. Supply subject to Seed/ Nursery availability. Numbers rounded to 60 seedlings/tray

Gairdner CBH Site establishment and associated works matrix_August 2013

Period	ref	Calendar period	Seedling supply	Site works	Planting	Weed control	Monitoring/ reporting	Misc
Quarter	1- yr0	Oct-Dec 2013	Place nursery order					
Quarter	2- yr0	Jan -Mar 2014		Rip tree lines				
Quarter	3- yr0	April - June 2014			Plant after adequate rain	Pre plant winter weed control		Planting to involve Gairdner Primary School students
Quarter	4- yr0	July - Sept 2014				Post plant spring weed control	Monitoring visit/ set up photo points	
Quarter	5- yr1	Oct-Dec 2014	Order year 2 infill as required					
Quarter	6- yrl	Jan -Mar 2015						Vermin control as required
Quarter	7- yrl	April - June 2015					Monitoring visit post summer/ report	
Quarter	8- yr1	July - Sept 2015				Post winter weed control	Monitoring visit/ spring weed risk	
Quarter	9- yr 2	Oct-Dec 2015				Table and Addition		
Quarter	10 - yr2	Jan -Mar 2016						Vermin control as required
Quarter	11- yr2	April - June 2016					Monitoring visit post summer/ report	A 400 TO 100 TO
Quarter	12- yr2	July - Sept 2016				Post winter weed control	Monitoring visit/ spring weed risk	

		ect timeline divide ery order placed	d into cale	endar quar	ters and sel	heduled to co	mmence Octobe	er 2013 with				
-	mana	management issues Monitoring to commence 1st spring period post planting and continues for 5 years										
	will	Weed control threat: High [impact on seedling performance and survival likely] Low [seedlings will 'grow through' weed threat] Monitoring to include photo documentation and report on seedling survival and any additional site										
Notes:	herb	appropriate herbic icideds if near we	areas/ wa	terways e	ic.			E 1997 (CANA				
Quarter	24- yr5	July - Sept 2019			00.1/	Post winter weed control	Monitoring visit/ spring weed risk					
Quarter	23- yr5	April - June 2019					Monitoring visit post summer					
Quarter	22- yr5	Jan -Mar 2019						Vermin control as required				
Quarter	21- yr5	Oct-Dec 2018										
Quarter	20- yr4	July - Sept 2018				Post winter weed control	Monitoring visit/ spring weed risk					
Quarter	19- yr4	April - June 2018					Monitoring visit post summer					
Quarter	18- yr4	Jan -Mar 2018						Vermin control as required				
Quarter	17- yr4	Oct-Dec 2017										
Quarter	16- yr3	July - Sept 2017				Post winter weed control	Monitoring visit/ spring weed risk					
Quarter	15- yr3	April - June 2017					Monitoring visit post summer					
Quarter	14- yr3	Jan -Mar 2017						Vermin control as required				
Quarter	13- yr 3	Oct-Dec 2016										

Site Visit Notes_Wayne O'Sullivan [Environmental Services] CBH Gairdner Bin 29 August 2012

Met with Works Supervisor John Ivers at 11.00 on site, inspected site with John. Areas inspected

1. Main Detention Basin

- · Basin is shallow, as the contractors have stopped at the saline white clay (pallid zone) layer
- Spoil is piled up alongside the basin and rolled. It is very heavy 'puggy' clay, which will be shaped
 into a flat topped bank about 10 m wide. The inside batter of the spoil bank will be a continuation of
 the detention basin batter.
- Topsoil in the area is very thin. Between topsoil and pallid zone clay is a layer of yellow clay.
- · Circumference of the basin is 385m, which accords with the scale shown on the CBH plan.
- John Ivers queried if topsoil should be spread across spoil bank. I suggested it would be beneficial, although insufficient to impact on soil structure, the micorrhizae will beneficial.
- The area has low weed burden and no problem weeds were noted in this area. Dominated by Erodium sp and grasses.

2. Small Detention basin

- . In the middle of the site, shown as small triangular area on plan, to the east of silos.
- · John unsure if any vegetation required.
- Any planting will be restricted to slope of the basin.

3. Southern and Western Boundary planting

- · Screening and windbreak planting
- Only a narrow strip of land available between drain and fence. This is variable width, between 5 and 8 m.
- Can plant up to edge of drain, and leave minimal vehicle access along fence for weed control and maintenance during plant establishment
- Soils vary across the site, getting increasingly heavy down slope. Northern most part of W boundary
 is ideal planting soil, good gravelly sandy loam, but the southern boundary is heavy clay with skeletal
 topsoil layer. Species mix will need to change accordingly.
- The area has low weed burden and no problem weeds were noted in this area. Dominated by Erodium sp, grasses, with some thistle noted.

4. Eastern Boundary

- John Ivers advises that the land to the east of the site is owned by CBH, mooted for possible expansion in future. He is unsure if this area is to be planted. This will need to be checked with CBH.
- Any planting will need to be on the outside (east) of the existing fence line. As the paddock is grazed, this will require an addition stock proof fence.
- Good access for site works, ideal opportunity to establish a good windbreak for the site.
- Soils as for western boundary.

5. Internal belt of trees (shown on CBH plan as boomerang shaped belt, centre of N part of site)

- Area currently has a bin (bulkhead) on hardstand. Shed will need demolishing, and site ripping. Need to confirm that this is happening with CBH, and ensure timing is suitable.
- Assume 500mm of compacted gravel over clay as substrate.

- · With deep ripping site will be a weed free, well drained planting.
- Area shown is a wide belt, allows for multi-row structured windbreak planting, tall trees in the centre
 with mallee and shrub on outer rows.

6. Northwest corner of site

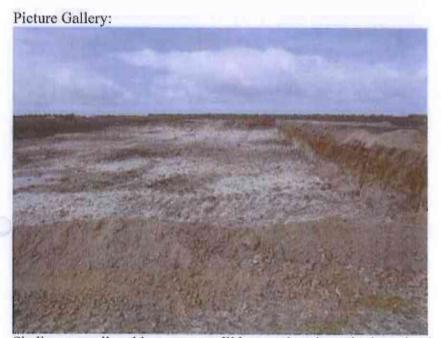
- Inside the fence in the NW corner of the site is a gravel bank 200m long and 5m wide.
- John Ivers advises that this was most likely left over spoil from time of construction, piled and rolled.
- Assume up to 500mm of gravel over a gravelly sand soil.
- · Very good well drained, weed free planting conditions, will be a valuable windbreak/screen
- Remainder of the area inside the N boundary cannot be planted, has drainage and roads against fence.

7. South Coast Hwy

The road verge is in fair condition, there are still good numbers and diversity of low understory species but it is compromised by patchy *Eragrostis* (love grass), some small seedling Eucalyptus cladocalyx (sugar gum), seedling from amenity plantings around the accommodation buildings, and an almost absent over story (fire damage?).

Current structure is a very poor windbreak/screen, needs infilling, but will be slow.

The worst areas, where there is almost no intact vegetation (approx 150 m in total, in several small patches) can be sprayed out and replanted as blocks. The remainder of the verge can be spot sprayed and infill planted with mid story plants, such as *Allocasuarina*, *Acacia* and mallee spp.



Shallow topsoil and loam over pallid zone clays in main detention basin



Shallow clays and spoil bank in SE corner of site



Looking SW from center of site, shallow duplex soil

Plan 5402/2a





Government of Western Australia Department of Environment Regulation WA Crown Copyright 2002

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

Plan 5402/2b





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

Government of Western Australia
Department of Environment Regulation

WA Crown Copyright 2002



Clearing Permit Decision Report

Government of Western Australia Department of Environment Regulation

1. Application details

Permit application details

Permit application No.:

Permit type:

Purpose Permit

Proponent details

Proponent's name:

Cooperative Bulk Handling Ltd

1.3. Property details

Application

Property:

1.4.

ROAD RESERVE (GAIRDNER 6337)

Local Government Area:

Shire of Jerramungup South Coast Highway

Colloquial name:

Clearing Area (ha)

No. Trees

Method of Clearing

For the purpose of:

2.15

Mechanical Removal

Road construction or maintenance

Decision on application

Decision on Permit Application:

Decision Date:

26 February 2015

2. Site Information

Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

Mapped Beard vegetation association 47:

Shrublands; tallerack mallee-heath (Shepherd et

al, 2001)

Clearing Description

The application is to clear 2.15 hectares of native vegetation within the South Coast Highway road

reserve for the purpose of construction of slip lanes.

Vegetation Condition

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management

(Keighery 1994)

Comment

The vegetation under application consists of a malleeheath on sand over laterite with Melaleuca sp. in the drainage depressions and tall woodland of Sheoak on heavier soils (Hickman, 2012). A number of weed species where significantly apparent within the application area, with the vegetation considered to be in a degraded (Keighery, 1994) condition (Hickman, 2012).

The condition of the vegetation under application was obtained from a Flora Survey (Hickman, 2012) and photos within the application.

3. Assessment of application against clearing principles

Comments

Clearing Permit CPS 5402/1 has been amended to alter the location of the offset area.

The assessment against the clearing principles has not changed and can be found in the Clearing Permit Decision Report CPS 5402/1.

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

Comments

The assessment against planning instruments and other matters has not changed and can be found in the Clearing Permit Decision Report CPS 5402/1.

No submissions for the application have been received.

4. References

Hickman, E (2012) Flora Survey South Coast Highway Entry & Exit to CBH Facility Gairdner River. Additional Information provided within Clearing Permit Application CPS 5402/1 - Cooperative Bulk Handling (DER Ref:A576239)

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

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.