

## **Environmental Protection Authority**

# Referral of a Proposal to the Environmental Protection Authority under Section 38 of the *Environmental Protection Act 1986*.

#### PURPOSE OF THIS FORM

Section 38 of the *Environmental Protection Act 1986* (EP Act) makes provision for the referral to the Environmental Protection Authority (EPA) of a proposal (significant proposals, strategic proposals and proposals under an assessed scheme) by a proponent, a decision making authority (DMA), or any other person.

The purpose of this form is to ensure that EPA has sufficient information about a proposal to make a decision about the nature of the proposal and whether or not the proposal should be assessed under Part IV of the EP Act. Information provided in the referral form must be brief (no more than 30 pages), sharp and succinct to achieve the purposes of this form.

This form does not prevent the referrer from providing a supplementary referral report. Should a referrer choose to submit a supplementary referral report please ensure the following.

- i. Information is short, sharp and succinct.
- ii. Attachments are below eight megabytes (8 MB) as they will be published on the EPA's website (exemptions apply) for public comment. To minimise file size, "flatten" maps and optimise pdf files.
- iii. Cross-references are provided in the referral form to the appropriate section/s in the supplementary referral report.

This form is to be used for all proposals<sup>1</sup> which can be referred to the EPA under section 38 of the EP Act; i.e. referrals from: **proponents** of proposals (significant proposals, strategic proposals, derived proposals, proposals under an assessed scheme); **DMAs** (significant proposals); and **third parties** (significant proposals).

This form is divided into several sections, including; Referral requirements and Declaration; Part A - Information of the proposal and proponent; and Part B Environmental Factors. Guidance on successfully completing this form is provided throughout the form and is also available in the EPA's Environmental Assessment Guideline for Referral of a Proposal under s38 of the EP Act (EAG 16).

<sup>&</sup>lt;sup>1</sup> Please note that this form consolidates and replaces the following forms: Referral of a Proposal by the Proponent to the EPA under section 38(1) of the EP Act; Referral of a Proposal by a third party to the EPA under section 38(1) of the EP Act; and Referral of a development proposal to the EPA by the decision making authority.

## Send completed forms to

Office of the Environmental Protection Authority Locked Bag 10, East Perth WA 6892

Email: Registrar@epa.wa.gov.au

## **Enquiries**

Office of the Environmental Protection Authority Locked Bag 10, East Perth WA 6892 Telephone: 6145 0800

Fax: 6145 0895

Email: info@epa.wa.gov.au Website: www.epa.wa.gov.au

# **Referral requirements and Declaration**

The following section outlines the referral information required from a proponent, decision making authority and third party.

## (a) Proponents

Proponents are expected to complete all sections of the form and provide GIS spatial data to enable the EPA to consider the referral. Spatial GIS data is necessary to inform the EPA's decision.

The EPA expects that a proponent will address Part B of the form as thoroughly as possible to demonstrate whether or not the EPA's objectives for environmental factors can be met.

If insufficient information is provided the EPA will request more information and processing of the referral will commence once the information is provided or the EPA decides to make a precautionary determination on the available information.

Proponent to complete before submitting form	
Completed all the questions in Part A (essential)	⊠ Yes □ No
Completed all the questions in Part B	⊠ Yes □ No
Completed all other applicable questions	⊠ Yes □ No
Included Attachment 1 – any additional document(s) the proponent wishes to provide	⊠ Yes □ No
Included Attachment 2 – confidential information (if applicable)	☐ Yes ⊠ No
Enclosed an electronic copy of all referral information, including spatial data and contextual mapping but clearly separating any confidential information	⊠ Yes □ No
Completed the Declaration	⊠ Yes □ No
What is the type of proposal being referred?  * a referred proposal seeking to be declared a derived proposal	<ul><li>Significant</li><li>Strategic</li><li>☐ derived*</li><li>☐ under an assessed scheme</li></ul>
Do you consider the proposal requires formal environmental impact assessment?	☐ Yes ⊠ No
If yes, what level of assessment?  API = Assessment of Proponent Information PER = Public Environmental Review	☐ API Category A ☐ API Category B ☐ PER

**NB:** The EPA may apply an Assessment on Proponent Information (API) level of assessment when the proponent has provided sufficient information about:

- the proposal;
- the proposed environmental impacts;
- the proposed management of the environmental impacts; and
- when the proposal is consistent with API criteria outlined in the <u>Environmental Impact</u> Assessment (Part IV Division 1 and 2) Administrative Procedures 2012.

If an API A formal level of assessment is considered appropriate, please refer to Environmental Assessment Guideline No. 14 Preparation for an Assessment on Proponent Information (Category A) Environmental Review Document EAG 14 (EAG14).

## Declaration

I, Craig McManus declare that I am authorised on behalf of Cristal Pigment Australia Ltd (being the person responsible for the proposal) to submit this form and further declare that the information contained in this form is true and not misleading.

	//			8
Signature		Name (print) Crai	g McManus	
Position	SHE Manager	Organisation	Cristal Pigment	Australia Ltd
Email	craig.mcmanus@cristal.co	m		
Address	Lot 1	Marriot Road		N.
	Kemerton	±*	WA	6233
Date	11/3/15,			

# (b) Decision-making authority

The EPA expects decision-making authorities to complete applicable sections of Part A of the form and provide the proponent an opportunity to provide additional information in Part B of the form where appropriate.

Wherever possible the DMA should obtain relevant spatial information from the proponent and provide this to the EPA with the referral.

DMA to comp	lete before submitting form	n		
Completed all the questions in Part A (essential)			Y	′es 🗌 No
Provided Part	B to the proponent for comp	letion	Y	′es 🗌 No
Completed all	other applicable questions		Y	′es 🗌 No
Included Attac	hment 1 – any supporting in	formation	Y	′es 🗌 No
	lectronic copy of all referral i al data and contextual mapp		☐ Y	′es □ No
Completed the	below Declaration		Y	′es 🗌 No
	er the proposal requires forn impact assessment?	nal	Y	′es 🗌 No
What is the typ	be of proposal being referred	<b>!</b> ?	significar	nt proposal
			nt proposal under sed scheme	
Declaration  I,, (full name) submit this referral to the EPA for consideration of the environmental significance of its impacts.				
Signature		Name (print)		
Position		Organisation		
Email				
Address	Street No.	Street Name		
	Suburb		State	Postcode
Date				

## (c) Third Party

Third parties are asked to have consideration for the Significance Test outlined in Part A Section 1.5 of this form before referring a significant proposal to the EPA. The EPA will only consider proposals that are likely, if implemented, to have a significant effect on the environment.

Third parties are to provide sufficient information to clearly identify the significant proposal, the proponent, and their reasons for referring the proposal. This can be done by completing as much of Part A of the form as possible, taking into consideration the information available. Third parties may wish to fill in Part B of the form to advance their own views of the significance of the environmental impacts and the need for EPA assessment.

In most cases the EPA will seek additional information from the proponent. This will be to confirm or amend the identity of the proponent, the proposal, and to allow the proponent opportunity to provide its views on the significance of the environmental impacts and the need for EPA assessment.

Third Party	to complete before su	ıbmitting form		
Complete all	plete all applicable questions in Part A and B			☐ Yes ☐ No
Completed th	ne Declaration			☐ Yes ☐ No
Do you consi assessment?		res formal environmenta	I impact	☐ Yes ☐ No
consideration		, (full name) sulignificance of its impacts		rral to the EPA for
Signature	Signature Name (print)			
Email		•		
Position		Organisation		
Address	Street No.	Street Name		
	Suburb		State	Postcode

## PART A: Information on the proposal and the proponent

All fields of Part A must be completed by the proponent and/or decision-making authority for this document to be processed as a referral. Third party referrers are only expected to fill in the fields they have information for.

#### 1 PROPONENT AND PROPOSAL DESCRIPTION

## 1.1 The proponent of the proposal

Proponent and/or DMA to complete	
Name of the proponent	Cristal Pigment Australia (CPA) Ltd
Joint Venture parties (if applicable)	
Australian Company Number(s) (if applicable)	008 683 627
Postal Address (Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State)	Locked Bag 245 Bunbury WA 6230
Key proponent contact for the proposal  Please include: name; physical address; phone; and email.	Craig McManus Cristal Pigment Australia Ltd Lot 1 Marriot Road Kemerton, Western Australia, 6233 Phone: (08) 9780 8315 Email: craig.mcmanus@cristal.com
Consultant for the proposal (if applicable)  Please include: name; physical address; phone; and email.	Roger Banks Strategen Environmental Consultants Pty Ltd 177 Spencer Street, BUNBURY 6230 Phone: (08) 9792 4797 Email: r.banks@strategen.com.au

## 1.2 Proposal

Proposal is defined under the EP Act to mean a "project, plan, programme policy, operation, undertaking or development or change of land use, or amendment of any of the foregoing, but does not include scheme". Before completing this section please refer to <u>Environmental Protection Bulletin 17 – Strategic and derived proposals (EPB 17)</u> and <u>Environmental Assessment Guideline for Defining the Key Characteristics of a proposal (EAG 1).</u>

Proponent and/or DMA to complete	
Title of the proposal	Dardanup Residue Disposal Facility (the
	Proposal)
What project phase is the proposal at?	☐ Scoping
	☐ Feasibility
	□ Detailed design
	Other
Proposal type	☐ Power/Energy Generation
More than one proposal type can be identified,	Hydrocarbon Based – coal
however for filtering purposes it is recommended	☐ Hydrocarbon Based – gas
that only the primary proposal type is identified.	☐ Waste to energy
	☐ Renewable – wind
	☐ Renewable – wave

Proponent and/or DMA to complete	
	Renewable – solar
	Renewable – geothermal
	<ul> <li>         ☐ Mineral / Resource Extraction         ☐ Exploration – seismic         ☐ Exploration – geotechnical         ☐ Development     </li> </ul>
	Oil and Gas Development  Exploration Onshore – seismic Onshore – geotechnical Onshore – development Offshore – seismic Offshore – geotechnical Offshore – development
	☐ Industrial Development ☐ Processing ☐ Manufacturing ☐ Beneficiation
	□ Land Use and Development □ Residential – subdivision □ Residential – development □ Commercial – subdivision □ Commercial – development □ Industrial – subdivision □ Industrial – development □ Agricultural – subdivision □ Agricultural – development □ Tourism
	☐ Linear Infrastructure ☐ Rail ☐ Road ☐ Power Transmission ☐ Water Distribution ☐ Gas Distribution ☐ Pipelines
	<ul> <li>Water Resource Development</li> <li>□ Desalination</li> <li>□ Surface or Groundwater</li> <li>□ Drainage</li> <li>□ Pipelines</li> <li>□ Managed Aquifer Recharge</li> </ul>
	Marine Developments Port Jetties Marina Canal Aquaculture

Proponent and/or DMA to complete	
	☐ Dredging
	If other, please state below:
	Other _Residue Disposal Facility
Proponent and/or DMA to complete	
Description of the proposal – describe the key characteristics of the proposal in accordance with EAG 1.	The Proposal is to develop a residue disposal facility at Lot 4580, Panizza Road and upgrade part of Panizza Road, Dardanup. The Proposal will provide for the disposal of Treated Solid Residue (TSR), which is produced from CPA's existing processing facilities at Kemerton and Australind. The Proposal comprises a total disturbance area of up to 58 ha comprising 55 ha within Lot 4580 and approximately 3 ha along a 1 km section of Panizza Road (the site; see Figure 1). The Proposal will comprise the following:
	• up to nine Residue Disposal Areas (RDAs)
	<ul> <li>a lined leachate containment pond</li> </ul>
	<ul> <li>stormwater collection dam</li> </ul>
	<ul> <li>upgraded access road</li> </ul>
	other ancillary infrastructure, including internal roads and offices.
	RDAs will be designed to meet the specifications and requirements for acceptance of Class III waste according to the Landfill Waste Classification and Waste Definitions 1996 (DEC 2009). RDAs will be double lined, i.e. High Density Polyethylene (HDPE) and clay, and constructed in accordance with Best Practice Environmental Management: Siting, Design, Operation and Rehabilitation of Landfills (EPA Victoria 2010).
	TSR is produced from CPA's existing processing facilities at Kemerton and Australind. Process water is used to produce a slurry of the TSR at a production rate of approximately 120,000 m3 per year - this equates to a total of 4,200,000 m3 of slurry to be deposited within the RDAs over the life of the Proposal. Minor amounts (up to 100 tonnes per year) of solid waste, including chlorinator bricks, will also be disposed in the RDAs.
Timeframe in which the proposal is to occur (including start and finish dates where applicable).	Construction to begin in 2016, with a nominal residue disposal lifespan of 45 years (2019 to 2064).

Proponent and/or DMA to complete	
Details of any staging of the proposal.	The Proposal is proposed to be staged as follows:  RDA 1 and 9 (initial RDAs) operational in 2019 RDA 2 through 8 as required until site is fully utilised.
What is the current land use on the property, and the extent (area in hectares) of the property?	Lot 4580 is approximately 55 ha and is currently used for grazing livestock.  The property is currently zoned 'general farming'. The approximately 1 km section of Panizza Road, from the northern boundary of Lot 4580 to the intersection with Depiazzi Road, consists of a gravel road which is used to access Lot 4580 and the adjacent Shire of Dardanup extractive industry site.
Have pre-referral discussions taken place with the OEPA?  If yes, please provide the case number. If a case number was not provided, please state the date of the meeting and names of attendees.	Yes. A pre-referral meeting with Richard Sutherland and Kaylene Carter from the OEPA was held on 11 June 2014. The meeting was attended by staff from CPA and their consultants (Strategen).
DMA (Responsible Authority) to complete	
For a proposal under an assessed scheme (as defined in section 3 of the EP Act, applicable only to the proponent and DMA) provide details (in an attachment) as to whether:	
<ul> <li>The environmental issues raised by the proposal were assessed in any assessment of the assessed scheme.</li> </ul>	
<ul> <li>The proposal complies with the assessed scheme and any environmental conditions in the assessed scheme.</li> </ul>	

# 1.3 Strategic / derived proposals

Complete this section if the proposal being referred is a strategic proposal or you are seeking the proposal to be declared a derived proposal. Note: Only a proponent may refer a strategic proposal and seek a proposal to be declared a derived proposal.

Proponent to complete	
Is this referred proposal a strategic proposal?	☐ Yes 🔀 No
Are you seeking that this proposal be declared a derived proposal?	☐ Yes ⊠ No
If you are seeking that this proposal be declared a derived proposal, what is the Ministerial Statement number (MS #) of the associated strategic proposal?	MS #:

## 1.4 Location

Proponents and DMAs must provide spatial data. Please refer to <u>EAG 1</u> for more detail.

Name of the Local Government Authority in which the Shire of Dardanup
proposal is located.
Location:  The site is located approximately 3 km southeast of the Dardanup town
a) street address; lot number; suburb; and nearest road intersection; or
b) if remote the nearest town; and distance and direction from that town to the proposal site.
Have maps and figures been included with the referral (consistent with <u>EAG 1</u> where appropriate)?
The types of maps and figures which need to be provided (depending on the nature of the proposal) include:
<ul> <li>maps showing the regional location and context of the proposal; and</li> </ul>
figures illustrating the proposal elements.
Proponent and DMA to complete
Have electronic copies of spatial data been included with the referral?
<b>NB:</b> Electronic spatial (GIS or CAD) data, geo-referenced and conforming to the following parameters:
GIS: polygons representing all activities and named;
CAD: simple closed polygons representing all activities and named;
datum: GDA94;
<ul> <li>projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA);</li> </ul>
format: ESRI geodatabase or shapefile, MapInfo     Interchange Format, Microstation or AutoCAD

# 1.5 Significance test and environmental factors

Proponent, DMA and Third Party to complete		
What are the likely significant	☐ Benthic Communities and Habitat	
environmental factors for this proposal?	☐ Coastal Processes	
	☐ Marine Environmental Quality	
	☐ Marine Fauna	
	☐ Landforms	
	☐ Subterranean Fauna	
	☐ Terrestrial Environmental Quality	
	☐ Terrestrial Fauna	
	☐ Hydrological Processes	
	☐ Air Quality & Atmospheric Gases	
	☐ Amenity	

Proponent, DMA and Third Party to compl	ete	
Having regard to the Significance Test (refer to Section 7 of the EIA Administrative Procedures 2012) in what ways do you consider the proposal may have a significant effect on the environment and warrant referral to the EPA?	☐ Heritage ☐ Human Health ☐ Offsets ☐ Rehabilitation and Decommissioning The Proposal will require clearing of up to 12.8 ha of native vegetation and 29 scattered paddock trees. The deposition of TSR has the potential to result in soil and groundwater contamination.	
1.6 Confidential information		
All information will be made publically available used or subject to the Freedom of Information Act 1992	•	
Proponent to complete		
Does the proponent request that the EPA treat any part of the referral information as confidential?	☐ Yes ⊠ No	
Ensure all confidential information is provided in a separate attachment in hard copy.		
<ul> <li>2 REGULATORY CONSIDERATIONS         This section applies to the Local, State and Commonwealth regulatory considerations for the referred proposal.     </li> <li>2.1 Government approvals         2.1.1 State or Local Government approvals     </li> </ul>		
DMA to complete		
What approval(s) is (are) required from you as a decision-making authority?		
Is rezoning of any land required before the proposal can be implemented?	☐ Yes ☐ No	

If yes, please provide details.

## 2.1.2 Regulation of aspects of the proposal

Complete the following to the extent possible.

Proponent to complete		
Do you have legal access required for the implementation of all aspects of the proposal?	⊠ Yes	□No
If yes, provide details of legal access authorisations / agreements / tenure.	<u> </u>	
If no, what authorisations / agreements / tenure is required and from whom?		

Outline both the existing approvals and approvals that will be / are being sought as a part of this proposal.

Proponent to complete			
Aspects* of the proposal	Type of approval	Legislation regulating this activity	Which State agency /entity regulate this activity?
Deposition of waste	Works Approval and Licence	EP Act 1986 – Part V	DER
Clearing	Native Vegetation Clearing Permit	EP Act 1986 – Part V	DER
Town Planning approvals	Town Planning Scheme Amendment Development Approval	Shire of Dardanup Town Planning Scheme No. 3	Shire of Dardanup
Management of low- level radioactive waste	Radiation Management Plan	Radiation Safety Act 1975	Radiological Council

<sup>\*</sup>e.g. mining, processing, dredging

# 2.1.3 Commonwealth Government *Environment Protection and Biodiversity Conservation Act 1999* approvals

Refer to the <u>assessment bilateral agreement</u> between the Commonwealth of Australia and the State of Western Australia for assistance on this section.

Pro	Proponent to complete			
1.	Does the proposal involve an action that may be or is a controlled action under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)?	Yes No  If no continue to Part A section 2.1.4.		
2.	What is the status of the decision on whether or not the action is a controlled action?	<ul> <li>□ Proposal not yet referred</li> <li>☑ Proposal referred, awaiting decision</li> <li>□ Assessed – controlled action</li> <li>□ Assessed – not a controlled action</li> </ul>		
3.	If the action has been referred, when was it referred and what is the reference number (Ref #)?	Date: 11/3/2015 Ref #: EPBC 2015-7448		

Pro	Proponent to complete			
4.	If the action has been assessed, provide the decision in an attachment. Has an attachment been provided?	☐ Yes ☐ No		
5.	Do you request this proposal to be assessed under the bilateral agreement?	⊠ Yes □ No		

Complete the following to the extent possible for the Public Comment of EPBC Act referral documentation.

Proponent to complete	
6. Have you invited the public to comment on your referral documentation?	☐ Yes ☐ No
7. How was the invitation published?	newspaper website
8. Did the invitation include all of the following?	
(a) brief description of the action	☐ Yes ☐ No
(b) the name of the action	☐ Yes ☐ No
(c) the name of the proponent	☐ Yes ☐ No
(d) the location of the action	☐ Yes ☐ No
(e) the matters of national environmental significance that will be or are likely to be significantly impacted	☐ Yes ☐ No
(f) how the relevant documents may be obtained	☐ Yes ☐ No
(g) the deadline for public comments	☐ Yes ☐ No
(h) available for public comment for 14 calendar days	☐ Yes ☐ No
(i) the likely impacts on matters of national environmental significance	☐ Yes ☐ No
(j) any feasible alternatives to the proposed action	☐ Yes ☐ No
(k) possible mitigation measures	☐ Yes ☐ No
Were any submissions received during the public comment period?	☐ Yes ☐ No
Have public submissions been addressed? If yes provide attachment.	☐ Yes ☐ No

## 2.1.4 Other Commonwealth Government Approvals

Proponent, DMA and Third Party to complete				
Is approval requir Commonwealth C part of the propos	Sovernment/s for any	☐ Yes ☐ No  If yes, please complete the table below.		
Agency / Authority	Approval required	Applio lodg		Agency / Local Authority contact(s) for proposal
		☐ Yes	☐ No	
		☐ Yes	☐ No	

## 3. SUPPORTING INFORMATION

Please attach copies of any relevant information on the proposal, supporting evidence and / or existing environmental surveys, studies or monitoring information undertaken and list the documents below.

Propo	Proponent, DMA and Third Party to complete			
(1)	Town Planning Scheme Amendment No. 189	Town Planning Management Engineering Pty Ltd	Town Planning Scheme Amendment to facilitate the future development of a waste residue disposal facility at the site.	
(2)	Fauna assessment of Lot 4580 and Panizza Road (part)	Greg Harewood	Report on the results of a fauna assessment of the site.	
(3)	Level 2 Flora and Vegetation Survey – Lot 4580, Panizza Road, Dardanup	Ecoedge Environmental Pty Ltd	Report on the results of a flora and vegetation assessment of part of Lot 4580, Dardanup.	
(4)	Level 2 Flora and Vegetation Survey – Lot 4580, Panizza Road, Dardanup	Ecoedge Environmental Pty Ltd	Report on the results of a flora and vegetation assessment of part of Lot 4580 and part of Panizza Road, Dardanup.	
(5)	Hydrogeological Investigation for Proposed Residue Disposal Area Panizza Road, Dardanup	WML Consultants	Hydrogeological assessment of the site.	

## PART B: ENVIRONMENTAL FACTORS

The purpose of Part B is to assist the EPA to determine the significance of the likely environmental impacts of the proposal in accordance with the EPA's *Environmental Assessment Guideline for Environmental factors and objectives* (EAG 8) and *Environmental Assessment Guideline for Application of a significant framework in the EIA process* (EAG 9). Referrers completing Part B should refer closely to EAG 8 and EAG 9.

The EPA has prepared <u>Referral of a Proposal under s38 of the EP Act EAG No.16 - Appendix A</u> (Appendix A) to assist in identifying factors and completing the below table. Further guidance can be found in the guidance and policy documents cited in Appendix A under each factor.

#### How to complete Part B

For each environmental factor, that is likely to be significantly impacted by the implementation of the proposal, make a copy of the table below and insert a summary of the relevant information relating to the proposal. The table can be broken down into more than one table per factor, if the need arises. For example the hydrological processes factor can be presented in two separate tables, one for surface water and one for groundwater, or similarly one for construction and one for operations.

For complex proposals a supplementary referral report can be provided in addition to the referral form. If this option is chosen the table must still be completed (summaries are acceptable) to assist the Office of the EPA with statistical reporting and filtering proposals for processing.

Proponents expecting an API level of assessment must provide information in accordance with the EPA's *Environmental Assessment Guideline for Preparation of an API-A environmental review document* (EAG 14).

For <u>each</u> of the significant environmental factors, complete the following table (Questions 1 - 10).

Propoi	Proponent to complete. DMA and Third Party to complete to the best of their knowledge.			
1	Factor, as defined in <u>EAG 8</u>	Flora and vegetation		
2	EPA Objective, as defined in <u>EAG 8</u>	To maintain representation, diversity, viability and ecological function at the species, population and community level.		
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	EPA Position Statement No. 2, Environmental Protection of Native Vegetation in Western Australia (EPA 2000)		
		EPA Position Statement No. 3, Terrestrial Biological Surveys as an Element of Biodiversity Protection (EPA 2002)		
		EPA Guidance Statement No. 51, Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia (EPA 2004)		
		EPA Environmental Protection Bulletin No. 6, The Natural Values of the Whicher Scarp.		

- 4 Consultation outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including:
  - anticipated level of public interest in the impact;
  - consultation with regulatory agencies; and
  - consultation with community.

Relevant government agencies, including OEPA, Department of the Environment (DotE), Department of Environment Regulation (DER), Department of Parks and Wildlife (Parks and Wildlife), Shire of Dardanup, Radiological Council, have been consulted during the scoping phase of the project. Outcomes of this consultation have informed the approval strategy for the Proposal and development of management measures proposed to be implemented.

CPA will maintain stakeholder consultation throughout the life of the Proposal as part of normal business practice, providing updates to relevant stakeholders as required.

Baseline information - describe the relevant characteristics of the receiving environment.

This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.

The Proposal will disturb up to 58 ha of mostly cleared farmland with the exception of areas of vegetation and individual paddock trees within Lot 4580 and small areas of vegetation within the Panizza Road reserve. In total, the site supports approximately 12.8 ha of remnant vegetation and up to 29 scattered trees. The vegetation complexes within the site are Whicher Scarp, Cartis, Kingia and Guildford (Ecoedge Environmental 2013; 2014). Vegetation types identified within the site are described in detail in the flora and vegetation assessments (Ecoedge Environmental 2013, 2014; attached). Vegetation condition varies across the site from completely degraded to very good as using the Keighery (1994) **Bushland Condition Scale** (Ecoedge Environmental 2013; 2014). The majority of the vegetation within the site is completely degraded (approximately 48.2 ha) with most of the remaining vegetation good (4.6 ha) or degraded (approximately 4.5 ha). A very small area of remnant vegetation is in very good condition (totalling approximately 0.66 ha). No threatened flora were recorded

within the site during the 2013 and 2014 flora and vegetation assessments and no Threatened Ecological Communities (TECs) were identified (Ecoedge Environmental 2013, 2014). A Parks and Wildlife listed Priority 4 flora species, Acacia Semitrullata, was recorded in the southern road reserve of Panizza Road. A total of five individual plants were recorded. Priority 4 species are considered to be adequately surveyed, and whilst being rare, are not currently threatened by any known factors.

Prop	Proponent to complete. DMA and Third Party to complete to the best of their knowledge.			
6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	The Proposal will require the clearing of remnant native vegetation within the transition zone of the Southern Jarrah Forest subregion and the Perth Coastal Plain subregion which has been subject to widespread clearing activities.		
7	Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:  • Avoidance - avoiding the adverse environmental impact altogether;  • Minimisation - limiting the degree or magnitude of the adverse impact;  • Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and  • Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.	CPA, and their contractors, will develop environmental management plans designed to address any potential environmental impacts associated with proposed clearing and construction activities undertaken as part of the Proposal. Some of the environmental management measures to be implemented include the following:  undertaking staged clearing and rehabilitation  undertaking staged clearing and rehabilitation  developing a fire management plan to reduce the risk of unplanned fires and provide contingency measures to minimise any associated impacts.  Based on the need to maintain the integrity of the capping and lining of the RDAs, rehabilitation will be limited to shallow rooted plant species such as shrubs.		

Propo	Proponent to complete. DMA and Third Party to complete to the best of their knowledge.			
8	Residual impacts – review the residual impacts against the EPA objectives.  It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require:  • quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;  • putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and  • comparison against any established environmental policies, guidelines, and standards.	The rehabilitation of the site will be limited given the requirement to only utilise shallow rooted plant species which will result in a residual impact on the flora and vegetation values of the site. However, impacts to flora and vegetation are not expected to be significant given the relatively small size of clearing and the degraded nature of the majority of remnant vegetation on the site.		
9	EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? Refer to EAG 9			
10	Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions.			

Propo	Proponent to complete. DMA and Third Party to complete to the best of their knowledge.			
1	Factor, as defined in <u>EAG 8</u>	Terrestrial Fauna		
2	EPA Objective, as defined in <u>EAG 8</u>	To maintain representation, diversity, viability and ecological function at the species, population and assemblage level.		
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	EPA Guidance Statement No. 56, Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia (EPA 2004) EPA Environmental Protection Bulletin No. 6, The Natural Values of the Whicher Scarp.		

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
4	Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: <ul> <li>anticipated level of public interest in the impact;</li> <li>consultation with regulatory agencies; and</li> <li>consultation with community.</li> </ul>	Relevant government agencies, including OEPA, DotE, DER, Parks and Wildlife, Shire of Dardanup, Radiological Council, have been consulted during the scoping phase of the project. Outcomes of this consultation have informed the approval strategy for the Proposal and development of management measures proposed to be implemented.  CPA will maintain stakeholder consultation throughout the life of the Proposal as part of normal business practice, providing updates to relevant stakeholders as required.
5	Baseline information - describe the relevant characteristics of the receiving environment.  This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.	A total of 148 species of fauna were identified as having the potential to occur within the site as a result of database searches and the fauna habitat assessment (Harewood 2014). Of these, 14 species are conservation significant fauna species which may potentially use the site at times (Harewood 2014).
		One conservation significant fauna species listed under the Wildlife Conservation (WC) Act and EPBC Act was recorded during the field surveys (Forest Red-tailed Black Cockatoo) and there was foraging evidence attributed to black cockatoos (Carnaby's Black Cockatoo, Baudin's Black Cockatoo and Forest Red-tailed Black Cockatoo). There was no evidence of current or past use of the site for breeding or roosting by black cockatoos (Harewood 2014).
6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	The Proposal will result in the clearing of black-cockatoo foraging habitat.

- Mitigation measures what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:
  - Avoidance avoiding the adverse environmental impact altogether;
  - Minimisation limiting the degree or magnitude of the adverse impact;
  - Rehabilitate restoring the maximum environmental value that is reasonably practicable; and
  - Offsets actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.

Black cockatoo habitat will be protected where possible within the road reserve and buffer areas. CPA, and their contractors, will develop environmental management plans designed to address any potential environmental impacts associated with proposed clearing and construction activities undertaken as part of the Proposal. Some of the environmental management measures to be implemented

include the following:

- employing a suitably qualified / experienced spotter to inspect logs and hollow trees (where possible) before clearing to reduce the likelihood of injury to fauna
- taking any native fauna injured during clearing to a designated veterinary clinic or DER nominated wildlife carer
- managing waste to ensure food scraps are not accessible to attract native fauna or feral animals
- undertaking staged clearing occurring outside of critical black cockatoo nesting and breeding seasons
- developing a fire management plan to reduce the risk of unplanned fires and provide contingency measures to minimise any associated impacts
- based on the need to maintain the integrity of the capping and lining of the cells, rehabilitation will be limited to shallow rooted plant species such as shrubs, however the species used for rehabilitation will include black cockatoo foraging species.

Propo	Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	Residual impacts – review the residual impacts against the EPA objectives.  It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require:  • quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;  • putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and  • comparison against any established environmental policies, guidelines, and standards.	The rehabilitation of the site will be limited given the requirement to only utilise shallow rooted plant species which has the potential to result in a residual impact on the fauna values of the site. However, impacts to fauna values are not considered to be significant due to the small area required to be cleared, the extent of surrounding protected areas, the largely degraded condition of fauna habitat present and the species being present on site infrequently.	
9	EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? Refer to EAG 9		
10	Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions.		

Propoi	Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, as defined in <u>EAG 8</u>	Terrestrial Environmental Quality	
2	EPA Objective, as defined in <u>EAG 8</u>	To maintain the quality of land and soils so that the environment values, both ecological and social, are protected.	
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	EPA Guidance Statement No. 6, Rehabilitation of Terrestrial Ecosystems	
		Best Practice Environmental Management: Siting, Design, Operation and Rehabilitation of Landfills (EPA Victoria 2010)	

- 4 Consultation outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including:
  - anticipated level of public interest in the impact;
  - consultation with regulatory agencies; and
  - consultation with community.

Relevant government agencies, including OEPA, DotE, DER, Parks and Wildlife, Shire of Dardanup, Radiological Council, have been consulted during the scoping phase of the project. Outcomes of this consultation have informed the approval strategy for the Proposal and development of management measures proposed to be implemented.

The Proponent will maintain stakeholder consultation throughout the life of the Proposal as part of normal business practice, providing updates to relevant stakeholders as required.

The Proposal is not expected to generate significant public concern given there have been no concerns raised during the 24 months of operation of the existing RDA at the nearby Transpacific Industries' (TPI) facility.

Baseline information - describe the relevant characteristics of the receiving environment.

This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.

The site has been used for extractive industry and agricultural purposes at times in the past. The Shire of Dardanup have recently adopted a draft Local Planning Strategy which recommends the zoning of the site and surrounding properties as Waste Disposal / Processing.

It is understood that urea formaldehyde waste was previously deposited on the site. Baseline groundwater monitoring of water quality has been undertaken in three bores installed across the site. Analysis of baseline groundwater quality has shown no indication of groundwater contamination (WML 2014). Sampling for formaldehyde at the three bores also indicates levels below detection (less than 0.1 mg/L).

The site is not on the register of contaminated sites maintained in accordance with the Contaminated Sites Act 2003.

Propo	Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	The Proposal involves the deposition of TSR into double lined RDAs. TSR is composed of impurities in the titanium rich ore and waste products from processing the ore into TiO <sub>2</sub> and mainly comprises iron, titanium, calcium, aluminium, magnesium, chloride, carbon, vanadium and manganese. The concentration of contaminants in TSR satisfies the Class III acceptance criteria according to the Landfill Waste Classification and Waste Definitions 1996 (DEC 2009). The Proposal has the potential to impact on the surrounding terrestrial environment as a result of TSR leaching out of the RDAs or due to spills.	
7	<ul> <li>Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:</li> <li>Avoidance - avoiding the adverse environmental impact altogether;</li> <li>Minimisation - limiting the degree or magnitude of the adverse impact;</li> <li>Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and</li> <li>Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.</li> </ul>	RDAs will be designed to meet the specifications and requirements for acceptance of Class III waste as outlined in Landfill Waste Classification and Waste Definitions 1996 (DEC 2009). RDAs will be double lined, i.e. HDPE and clay, and constructed in accordance with best practice environmental management guidelines.  Loading and unloading of tankers will be undertaken within areas designed to retain any spills of TSR e.g. concrete hardstands draining to sumps. Spill management procedures will be implemented during operation.	

Propo	Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	Residual impacts – review the residual impacts against the EPA objectives.  It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require:  • quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;  • putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and  • comparison against any established environmental policies, guidelines, and standards.	The potential environmental impacts of this Proposal will be addressed through engineering controls and management measures.	
9	EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? Refer to EAG 9	<ul><li></li></ul>	
10	Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions.		

Propoi	Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, as defined in <u>EAG 8</u>	Inland Waters Environmental Quality	
2	EPA Objective, as defined in <u>EAG 8</u>	To maintain the quality of groundwater and surface water, sediment and biota so that the environmental values, both ecological and social, are protected.	
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	Best Practice Environmental Management: Siting, Design, Operation and Rehabilitation of Landfills (EPA Victoria 2010)	

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
4	Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: <ul> <li>anticipated level of public interest in the impact;</li> <li>consultation with regulatory agencies; and</li> <li>consultation with community.</li> </ul>	Relevant government agencies, including OEPA, DotE, DER, Parks and Wildlife, Shire of Dardanup, Radiological Council, have been consulted during the scoping phase of the project. Outcomes of this consultation have informed the approval strategy for the Proposal and development of management measures proposed to be implemented.  The Proponent will maintain stakeholder consultation throughout the life of the Proposal as part of normal business practice, providing updates to relevant stakeholders as required.  The Proposal is not expected to generate significant public concern given there have been no concerns raised during the 24 months of operation of the existing RDA at the nearby TPI facility.
5	Baseline information - describe the relevant characteristics of the receiving environment.  This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.	Based on published studies of the groundwater within the region there are three regional aquifers systems; the superficial formation, the Leederville Formation and the Yarragadee Formation (WML 2014). The shallowest waterbearing sand layer of the Leederville Formation lies at approximately 40 m below ground level across the western half of the site (WML 2014). This sand layer is overlain by variable clayey sand with clay layers to the surface. The site is not within a proclaimed Groundwater Protection Area or public drinking water supply area. Groundwater monitoring bores were installed by Cristal in October 2013 to facilitate the collection of baseline data prior to the construction and operation of the waste disposal cells. Laboratory results of the baseline monitoring program are detailed in the hydrogeological investigation (WML 2014, attached).
6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	The Proposal has the potential to impact on the underlying groundwater resources as a result of TSR leaching from the RDAs.

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
7	<ul> <li>Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:</li> <li>Avoidance - avoiding the adverse environmental impact altogether;</li> <li>Minimisation - limiting the degree or magnitude of the adverse impact;</li> <li>Rehabilitate - restoring the maximum environmental value that is reasonably practicable; and</li> </ul>	RDAs will be designed to meet the specifications and requirements for acceptance of Class III waste as outlined in Landfill Waste Classification and Waste Definitions 1996 (DEC 2009). RDAs will be double lined, i.e. HDPE and clay, and constructed in accordance with best practice environmental management guidelines.
	Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.	Loading and unloading of tankers will be undertaken within areas designed to retain any spills of TSR e.g. concrete hardstands draining to sumps. Spill management procedures will be implemented during operation.
		Groundwater recovery bores will be been installed to allow recover any potentially contaminated groundwater.
8	Residual impacts – review the residual impacts against the EPA objectives.  It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require:	Based on the low permeability of the underlying soils, the significant depth of unsaturated clayey soils overlying the aquifer and proposed engineering controls the hydrogeological risk posed by the proposed operations at the site are considered to be low.
	<ul> <li>quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;</li> <li>putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and</li> <li>comparison against any established environmental policies, guidelines, and standards.</li> </ul>	
9	EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? <i>Refer to</i> <u>EAG 9</u>	<ul> <li>         ⊠ meets the EPA's objective         □ may meet the EPA's objective         □ is unlikely to meet the EPA's         objective     </li> </ul>
10	Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions.	
Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, as defined in <u>EAG 8</u>	Rehabilitation and

decommissioning

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
2	EPA Objective, as defined in <u>EAG 8</u>	To ensure that premises are closed, decommissioned and rehabilitated in an ecologically sustainable manner, consistent with agreed outcomes and land uses, and without unacceptable liability to the State.
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	EPA Guidance Statement No. 6, Rehabilitation of Terrestrial Ecosystems
4	Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: <ul> <li>anticipated level of public interest in the impact;</li> <li>consultation with regulatory agencies; and</li> <li>consultation with community.</li> </ul>	Relevant government agencies, including OEPA, DotE, DER, Parks and Wildlife, Shire of Dardanup, Radiological Council, have been consulted during the scoping phase of the project.  CPA intend to undertake ongoing consultation with relevant government agencies to ensure acceptable final closure outcomes are achieved.
5	Baseline information - describe the relevant characteristics of the receiving environment.  This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.	The site has been used for extractive industry and agricultural purposes at times in the past. The Shire of Dardanup have recently adopted a draft Local Planning Strategy which recommends the zoning of the site and surrounding properties as Waste Disposal / Processing.
6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	The Proposal has the potential to impact the environment after operations cease at the site.
7	<ul> <li>Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:</li> <li>Avoidance - avoiding the adverse environmental impact altogether;</li> <li>Minimisation - limiting the degree or magnitude of the adverse impact;</li> <li>Rehabilitate - restoring the maximum environmental value that is reasonably practicable; and</li> <li>Offsets - actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.</li> </ul>	Rehabilitation of the site will be staged, following decommissioning of RDAs. A rehabilitation plan will be developed in consultation with stakeholders and will include the following:  • potential future uses of the site  • surface contours before and after settlement  • specifications and materials to be used in the final cap  • preservation / installation of environmental monitoring features.

Propo	Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	Residual impacts – review the residual impacts against the EPA objectives.  It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require:  • quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;  • putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and  • comparison against any established environmental policies, guidelines, and standards.	Rehabilitation and decommissioning will be undertaken in accordance with a Closure and Rehabilitation Plan. The potential environmental impacts of the Proposal during decommissioning and rehabilitation can be adequately managed to meet the EPA's environmental objectives.	
9	EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? <i>Refer to EAG 9</i>	<ul><li></li></ul>	
10	Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions.		

In circumstances where there was some uncertainty on the level of significance of a particular factor it is recommended that a brief summary (no longer than 1 - 2 paragraphs) is provided on the steps taken to determine why a factor was not considered to be significant.