

## APA Technical Note - Western Outer Ring Main - Environment Effects Statement

<b>TECHNICAL NOTE NUMBER:</b>	TN02
<b>DATE:</b>	13 September 2021
<b>SUBJECT:</b>	Specialist Area: Waste and contamination An update for the purposes of the <i>Environment Protection Act 2017</i> (Vic) and responses to Inquiry RFIs 73, 79, 83 and 84
<b>SUMMARY</b>	This Technical Note outlines the implications of the <i>Environment Protection Act 2017</i> (Vic) (as amended by the <i>Environment Protection Amendment Act 2018</i> ) which came into effect on 1 July 2021, specific to Technical Report E <i>Contamination</i> of the Western Outer Ring Main (WORM) Environment Effects Statement (EES).
<b>REQUEST:</b>	<p>73. Advise whether the environmental management measures C1 to C10 in Table 19-7 of the EMF will be updated to reflect the changes to industrial waste management as per the EP Act 2017, the EP regulations 2021 and supporting legislation and guidance, as recommended by EPA (Submission 9).</p> <p>79. Advise whether C3 Table 19-7 of the EMF will be amended to include reference to National Acid Sulfate Soils Guidance, as recommended by EPA (Submission 9).</p> <p>83. Advise whether all the contamination environmental management measures referred to within the EMF Table 19-7 will be amended to apply the EP Act 2017 and meet the general environmental duty, duty to manage, duty to notify and the waste duties, as recommended by EPA (Submission No. 9).</p> <p>84. Advise whether the EMMs will be reviewed and updated in relation to the EP Regulations 2021, the ERS, and any other relevant guidance such as Waste Disposal Categories – Characteristics and Thresholds (publication 1828), which supersedes IWRG 621, as recommended by EPA (Submission 9).</p>
<b>ATTACHMENTS:</b>	Mark-up of EMMs numbers C1, C7, C8, C9, and C10.
<b>NOTE:</b>	

## Background

- 1 EES Technical Report E: *Contamination* and Chapter 10 of the WORM EES, it was foreshadowed that the *Environment Protection Act 2017* (Vic) (**new Act**) would come into effect on 1 July 2021 and that this would introduce the new General Environmental Duty (**GED**).
- 2 This note outlines the key implications of the new Act and the *Environment Protection Regulations 2021* (Vic) (**new Regulations**), guidelines and standards that will be relevant to the assessment of the environmental effects of the WORM Project during construction and/or operation.
- 3 This note also sets out changes recommended to the exhibited version of the Environmental Management Measures (EMMs) to account for the new Act, Regulations, guidelines or standards and responds to Inquiry RFIs 73, 79, 83 and 84.

## Implications of new GED

- 4 The new Act contains a General Environmental Duty (**GED**) that will be applicable to APA and all contractors carrying out the construction and operation of the WORM Project.
- 5 The GED (as defined in Section 25 of the new Act) requires a person or entity to:
  - identify risks and hazards that may impact the environment or human health that arise from its operations; and
  - eliminate or minimise those risks as far as reasonably practicable.
- 6 The Environmental Management Framework and Construction Environment Management Plan (CEMP) developed as part of the EES and Pipeline Licence Application responds to the identified risks to the environment and human health that may arise from the construction and operation of the WORM Project, responding to the first requirement of the GED.
- 7 A risk based approach to identify the potential presence of contamination along the Project alignment was undertaken for the EES. This was informed by site history investigations along the Project alignment using various sources of information to identify potentially contaminating activities that may have occurred at the site. In most instances where the potential for the presence of contamination was identified, targeted sampling and testing was conducted to confirm whether contamination was present. Where sampling and testing this was not possible in time to inform the preparation of EES Technical Report E: *Contamination*, investigations have since been undertaken, except in relation to Jacksons Creek (see Technical Note 10 – Contamination investigations).
- 8 The contamination results obtained from these investigations were compared to the waste criteria that were published at the time. Since completion of the EES, there have been some minor updates to the waste disposal criteria and more detail has been published that outlines the expectations around waste management. The waste soil management requirements have therefore been reviewed to ensure that additional requirements, criteria changes and / or expectations that have been published since the time of preparation of the EES have been captured.
- 9 As currently worded, it is considered that EMMs for the WORM Project relevant to contamination satisfactorily minimise the identified risks as far as reasonably practicable.
- 10 It is proposed to update EMMs C1 to C10 to reflect the changes to industrial waste management as per the new Act, the new Regulations and supporting guidance. These changes are reflected in Annexure 1 and 2 to this Technical Note and respond to Inquiry RFIs 73 and 84.

## Other relevant provisions of the new Act

11 Relevant provisions in the new Act relating to waste and contamination include the following:

- Under section 3 of the new Act, the definition of 'waste' has been updated to include:
  - matter that is discarded, rejected, abandoned, unwanted or surplus, irrespective of whether it has any potential use or value; and
  - any matter or greenhouse gas substance intended for, or undergoing, resource recovery

Therefore, matter will continue to remain a waste until it is reused for an original purpose.

- Part 3.4 of the new Act imposes duties relating to pollution incidents. Where a 'pollution incident' means an incident or a set of circumstances:
  - a) that causes a leak, spill or other unintended or unauthorised deposit or escape of a substance; and
  - b) as a result of which, pollution has occurred or is occurring

If a pollution incident has occurred as a result of an activity (whether by act or omission) and the pollution incident causes or is likely to cause harm to human health or the environment, a person who is engaging in that activity must, so far as reasonably practicable, restore the affected area to the state it was in before the pollution incident occurred.

A pollution incident is a notifiable incident where it causes or threatens to cause material harm to human health or the environment and results in Duty to notify Authority of notifiable incidents. A person who is engaging or has engaged in an activity that results in a notifiable incident must notify the Authority, as soon as practicable. The Construction Environment Management Plan (CEMP) will be updated to capture these notification duties as foreshadowed in Section 12.3.2 of the exhibited CEMP.

- Part 3.5 of the new Act imposes a duty on persons in 'management or control' of contaminated land to:
  - Notify the EPA of land and groundwater contamination (including historical contamination) that exceeds set thresholds. The EPA must be notified as soon as practicable after it becomes aware of, or reasonably should have been aware of, "notifiable contamination" (being contamination above the thresholds set out in part 2.1 of the new Regulations); and
  - Manage contaminated land to minimise risk of harm to human health or the environment, including identification, investigation and assessment and carrying out clean up of that contamination to the extent reasonably practicable where the contamination presents a risk of harm. Persons in management or control should also provide adequate information to anyone who may be affected by the contamination or who may become a person in management or control. This is required as a part of EMM C1 described in Attachment 1 and will be captured in the CEMP.
- Part 6.4 of the new Act sets out duties and controls in relation to industrial waste, including duties to classify wastes and to take reasonable steps to ensure the

waste is taken to a place authorised to receive that waste (known as a Lawful Place)

- Part 6.5 of the new Act sets out the duties and controls relating to priority waste (PW), previously known as “prescribed industrial waste”. PW that poses the highest level of environmental risk is known as reportable PW and carries more stringent controls in relation to transport and tracking.
- Section 142 of the new Act imposes an obligation on all persons undertaking a “prescribed transaction” in connection with reportable PW (transactions) to record that transaction. Under part 4.2 of the new Regulations, transaction details must be entered into EPA’s new Waste Tracker system (replacing electronic waste transport certificates) each time reportable PW (transactions) changes hands between producers, accredited consigners, transporters, drivers and receivers. Under schedule 5 of the new Regulations, reportable PW (transactions) include, for example, tyre pieces (waste codes T140-T141) and all reportable PW (transport).
- Section 143 of the new Act prohibits the transport of reportable PW (transport) without a permission, unless the net load is less than 50 kilograms or litres, and there is no fee or reward. Under schedule 5 of the new Regulations, reportable PW (transport) include, for example, waste oil/water, hydrocarbons/water mixtures or emulsions (Waste code J120).

### Relevant provisions of the new Regulations

- 12 The *Environment Protection (Industrial Waste Resource) Regulations 2009* (Vic) have been replaced by Part 4.2 (Industrial waste and priority waste) and schedule 6 (Categories of priority waste) of the new Regulations, and are supplemented by *EPA Publication 1827.2: Waste Classification Protocol*.
- 13 Relevant provisions in the new Regulations relating to waste and contamination include the following:
- Regulation 15 of the new Regulations requires that, if non-aqueous phase liquid is present in soil or groundwater, it must be, so far as reasonably practicable: (a) cleaned up; and (b) if the source of the non-aqueous phase liquid is located on the land, the source of the liquid must be removed or controlled. This requirement is included in EMM C1 under Remediation.
  - Part 2.1 of the new Regulations includes, among other things, thresholds and exemptions for the purposes of reporting notifiable contamination and relevant exemptions, and references to elements of the *National Environment Protection (Assessment of Site Contamination) Measure*. Regulation 8 defines “prescribed notifiable contamination” in or on soil for the purposes of the duty to notify of contaminated land under section 37 of the new Act. As discussed in paragraph 11, the CEMP will be updated, including Section 6.1 – Organisational structure and responsibility to reflect the new duties associated with the EP Act 2017. Further details around specific actions would be specified by the contractor.
  - Chapter 4 of the proposed Regulations addresses waste, including industrial waste and priority waste. Among other things, Part 4.2 prescribes certain waste to be industrial waste (IW), classifies IW, defines a Lawful Place, and describes the requirements for a “Declaration of Use” (a tool that enables waste producers and recyclers to reuse, store and recover materials from low-risk waste).

Relevant to APA’s operations, regulation 62 requires persons in management or control of soil sourced on-site from contaminated land that is IW to, as soon as practicable, classify the soil in accordance with *EPA Publication 1828*. For persons in management or control of soil that is PW, regulation 68 requires such persons to as soon as practicable classify the PW soil according to the categories

in schedule 6. Regulation 70 prohibits the mixture of PW including PW soils with any other waste. This requirement is included in EMM C1 under Handling, stockpiling and transport.

- Schedule 5 of the new Regulations outlines the waste classifications for various waste items. Relevant to APA's operations, sludges or slurries, including drilling muds, *containing hazardous substances* (Waste code T130-H) is classified as reportable PW for both transport and transactions while other sludges and slurries including drilling muds (Waste code T130-NH) are PW only. This requirement is included in EMM C9 under Management of drilling fluids

## Relevant Standards or Guidelines

- 14 EES Technical Report E *Contamination* and Chapter 10 refer to some EPA documents and subordinate instruments that have been replaced by new standards and guidance material, as outlined in the below table. It is noted that the table below is not a comprehensive list of all relevant new EPA guidelines, refer to the EPA website for a comprehensive and up to date list of draft and final EPA publications<sup>1</sup>.

Old standard/publication	New or updated standard/publication
<p>EPA Publication 1828.1:  <i>Waste disposal categories – characteristics and thresholds</i>  <i>Industrial Waste Resource Guideline: Soil hazard categorisation and management (IWRG621)</i><sup>2</sup></p>	<p>EPA Publication 1827.2 <i>Waste Classification Protocol</i>            EPA Publication 1828.2:  <i>Waste disposal categories – characteristics and thresholds</i></p>
<p><i>State Environment Protection Policy (Prevention and Management of Contamination of Land)</i><sup>3</sup></p>	<p>ERS - Part 4            EPA Publication 1915: <i>Contaminated land policy</i>            EPA Publication 1940: <i>Contaminated land: Understanding section 35 of the Environment Protection Act 2017</i>            EPA Publication 1977: <i>Assessing and controlling contaminated land risks: A guide to meeting the duty to manage for those in management or control of land</i>            DELWP Planning Practice Note 30: <i>Potentially Contaminated Land (July 2021)</i>            New Act - Pts 3.2 (ss 25-27), 3.4 (ss 29-34), 3.5 (ss 35-42)            New Regulations - Ch 2 (regs 8-15)</p>
<p><i>State Environment Protection Policy (Waters)</i></p>	<p>ERS - Part 5            New Regulations - Ch 5, Pt 5.4 (reg 132)  <i>Environment Protection Transitional</i></p>

<sup>1</sup> EPA website guidelines <https://www.epa.vic.gov.au/about-epa/publications?ps=10&pn=63&t=e2b4ed50532740b4a873a7d963233584&p=fd03c7feab9e46479915eab9fb9dbcc6&s=contentDateRecentFirst>

<sup>2</sup> We note that Publication 1828 supersedes IWRG621 to categorise soil, but IWRG702 continues to be relevant to determine an appropriate sampling and assessment regime. IWRG621 continues to apply only to saved classifications issued under the former IWR Regulations: <https://www.epa.vic.gov.au/about-epa/publications/1828-2>.

<sup>3</sup> SEPPs and WMPs no longer have a formal role under the new Act or Regulations. However, they are treated by EPA as valuable instruments that contribute to the state of knowledge on relevant risks and risk control measures that they address and will, while they remain relevant to each risk, support the operation of the duties under the new Act.

*Industrial Waste Management Policy (Waste Acid Sulfate Soils) 1999* .EPA Publication 1828.2: *Waste disposal categories - characteristics and thresholds*<sup>5</sup>  
.New Act - Part 6.5 (ss 138-141)  
.New Regulations - Pt 4.2 div 2; Pt 10.2 table item 8; Sch 1 item 79; Sch 5, items 26 and 85.

- 15 As of 1 July 2021, the formal statutory role of the SEPPs and Waste Management Policies (WMP) as subordinate instruments ended. Much of the content of the SEPPs and WMPs has been replaced by the new Act (in particular by the GED), the new Regulations and the Environment Reference Standard (ERS), or will be reframed in the future as EPA guidance: see *EPA Publication 1994: Using SEPPs and WMPs in the new environment protection framework guide*. Some clauses in SEPP Waters will remain in force for a period of 2 years including requirements around the discharge of saline waters, which may be relevant for this project where any disposal of saline groundwater is required in the event that groundwater pumping is required. The intent of other clauses in the SEPP largely remains, but noting that the requirements of the General Environmental Duty to manage risks to human health and the environment, is the primary consideration that over-rides the consideration of historical clauses in SEPPs and WMPs. Note that for land and water the requirements specified in the Environmental Reference Standard have not been substantially changed from the SEPPs.

### Changes to EMMs

- 16 The following EMMs relating to waste and contamination require amendment to reference the latest EPA guidance documents or to meet the GED:
- C1: Implement spoil management measures;
  - C3: Minimise impacts from disturbance and acid sulfate soil;
  - C7: Management of waste streams;
  - C8: Management of hydrostatic test water;
  - C9: Management of drilling fluids; and
  - C10: Minimise contamination risks during operation
- 17 Attached is a mark-up of the relevant EMMs showing the changes needed to include the updated requirements of the new Act and new Regulations and to reference the new guidelines and standards. These changes respond to Inquiry RFIs 73, 79, 83 and 84.
- 18 Consideration has also been given to whether the EMMs reduce the risk of harm to human health and the environment to the extent reasonably practicable and therefore meet the GED. Where further risk reduction is considered practicable, amendments have been made to the relevant EMMs as listed in paragraph 15 above.

### Currency of Technical Report and Chapter

- 19 The legislative updates including the new Environmental Reference Standard and guidance material was foreshadowed in the EES. Near final versions of these documents

<sup>4</sup> The transitional Regulations save certain clauses in SEPP (Waters) until 1 July 2023. Until then, DELWP and EPA will consult with stakeholders on whether these clauses should be remade in another subordinate instrument: *EPA Publication 1753.2: Guide to the Environment Protection Regulations*.

<sup>5</sup> Potential and actual acid sulfate soils are classified as waste acid sulfate soil (WASS) (Waste code N123) when they do contain: a) contaminant concentrations exceeding the upper limits for fill material in Table 3 of Publication 1828; or b) asbestos, additional relevant codes also apply. Further EPA guidance concerning management of WASS is provided at: <https://www.epa.vic.gov.au/for-business/new-laws-and-your-business/manage-waste/waste-classification/managing-waste-soil>

had been issued at the time the EES was written, with the notable exception being much of the waste guidance (with the exception of EPA Publication 1828 that provides the waste classification categories -although noting that Publication 1828 has also been updated since that time).

- 20 While the new waste management guidance issued since that time provides clarification around appropriate waste management measures, this information does not generally affect the advice provided in the EES. It is mainly relating to waste classification requirements that are not impacted by the type of contamination detected at the site to date and the detailed logistics of removing waste off site, such as the use of the waste tracker. The latter provides detailed requirements to be considered by the contractor in executing their duties and is unrelated to the type of information in the EES.
- 21 On the basis of the above the change in law and policy does not alter the conclusions in the EES technical report. The changes proposed to the EMMs below predominantly relate to updated terminology and references to be consistent with the new guidance.

## Annexure 1

### Changes to waste and contamination EMMs (Construction)

CONTAMINATION		
Ref.	Environmental controls	Project phase
C1	<p><b>Implement spoil management measures</b></p> <ul style="list-style-type: none"> <li>• Prepare and implement spoil management measures in accordance with relevant regulations, standards and guidelines including EPA Publication 1834 Civil construction, building and demolition guide. The spoil management measures must be developed in consultation with the EPA Victoria and include processes and measures to manage all spoil types i.e. all excavated material. The main spoil types would include mostly uncontaminated soils and potentially small volumes of <del>prescribed industrial waste (PIW)-priority waste (PW), including Category D waste or soil containing asbestos only (SCAO),</del> in the vicinity of the potential sources noted in Technical report E Contamination.</li> </ul> <p>The spoil management measures must define roles and responsibilities and include requirements and methods for:</p> <p><b>General</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Manage contaminated land to minimise risk of harm to human health or the environment, including identification, investigation and assessment and carrying out clean up of that contamination to the extent reasonably practicable where the contamination presents a risk of harm.</a></li> <li>• <a href="#">Persons in management or control should also provide adequate information to anyone who may be affected by the contamination or who may become a person in management or control</a></li> <li>• <a href="#">Leaving contaminated soils in-situ to the extent possible, while complying with the requirements of the duty to manage contamination specified above.</a></li> <li>• Complying with applicable regulatory requirements including EPA Publication 1834 Civil construction, building and demolition guide and <a href="#">the ERS - Part 4 SEPP (Prevention and Management of Contaminated Land)</a></li> <li>• Investigations in accordance with the Australian Standard AS 4482.1:2005 Guide to the investigation and sampling of sites with potentially contaminated soil, the ASC NEPM and the EPA Victoria Industrial Waste Resource Guidelines (IWRGs)</li> <li>• <del>Leaving contaminated soils in-situ to the extent possible.</del></li> <li>• Assessment of any material imported to the site for use as backfill in accordance with EPA Publication 1828, and <del>IWRG 621 and IWRG 702.</del> Imported material must meet the 'Fill Material' criteria as defined in Table 2 of <del>IWRG 621</del> <a href="#">EPA Publication 1828</a>.</li> </ul> <p><b>Assessment</b></p> <ul style="list-style-type: none"> <li>• Completing further soil investigations to assess soil quality for the analysis detailed in Technical report E Contamination prior to construction in order to inform the CEMP: <ul style="list-style-type: none"> <li>- At the Diggers Rest (KP 9.95 - KP10.14), which is being used to store hundreds of wrecked cars,</li> <li>- A possible former quarry in Beveridge (KP 37.5) along the construction corridor to ascertain if the former quarry extents encroaches onto the Project</li> <li>- The retarding basin (KP 34-35.5) prior to any excavation in these areas.</li> <li>- Wollert Compressor Station (KP 50.78 to KP 51.045)</li> </ul> </li> </ul>	Pre-construction and construction

**CONTAMINATION**

Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>- Shallow sediments in Jacksons Creek.</li> <li>• Following these further investigations, updating the CEMP to include areas of potential contaminated soils</li> </ul> <p><b>Remediation</b></p> <ul style="list-style-type: none"> <li>• Identifying where any contaminated or hazardous material is exposed during construction and how it would be made safe for the site owner and the environment. <a href="#">Beneficial uses</a><a href="#">Environmental values</a> of land and ASC NEPM guidance on criteria protective of those <a href="#">beneficial uses</a><a href="#">environmental values</a> must be considered for the land uses in these areas.</li> <li>• <a href="#">To the extent that non-aqueous phase liquid (eg oil, petrol, diesel and solvents) - is present in soil or groundwater within the authorised project construction footprint and exposed during APA construction activities, it must be, so far as reasonably practicable: (a) cleaned up; and (b) if the source of the non-aqueous phase liquid is located on the land, the source of the liquid must be removed or controlled.</a></li> </ul> <p><b>Unexpected contamination</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Identifying, containing and managing unexpected contamination in accordance with applicable regulatory requirements including EPA Publication 1828, and EPA IWRG 621 and 702</a></li> <li>• <a href="#">Notification of EPA and / or others who may be impacted by this contamination in accordance with the Environment Protection Act 2017 and the Environment Protection Regulations 2021.</a></li> </ul> <p><b>Handling, stockpiling and transport</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Conducting all spoil handling and transport for offsite disposal in accordance with the EPA IWRGs- Environment Protection Regulations 2021 (Vic), EPA Publication 1828, and EPA IWRG 702, including completing any applicable Waste Tracking records (or Declaration of Use), ensuring transporters are registered with EPA and that the offsite disposal site is to a Lawful Place.</a></li> <li>• <a href="#">Managing construction works during wet weather, which can lead to runoff of contaminated and uncontaminated soil from stockpiles and excavations into nearby waterways, in accordance with SW1 and SW4.</a></li> <li>• Regularly monitoring weather conditions and planning works accordingly to avoid or minimise impact to sensitive receptors from works during adverse weather (i.e. runoff from rainfall).</li> <li>• Implementing personal protective equipment and standard hygiene practices when handling contaminated spoil</li> <li>• Separating stockpiles of trench spoil into contaminated and uncontaminated soil. As both of these waste types can adversely impact the environment (e.g. through runoff to waterways), all stockpiles must be managed in accordance with EPA Victoria Publication 1834 Civil construction, building and demolition guide and EPA Publication 1895 Managing Stockpiles, 2020.</li> <li>• Where it is necessary to excavate contaminated soils, stockpiling these separately, with containment and treatment measures appropriate to the type of contamination present. This must include.             <ul style="list-style-type: none"> <li>- All stockpiles of potentially contaminated spoil must be appropriately secured, lined and bunded to prevent leaching</li> <li>- All stockpiles of potentially contaminated spoil must be appropriately covered and bunded to limit rainwater ingress, dust generation and contact by fauna</li> </ul> </li> </ul>	

**CONTAMINATION**

Ref.	Environmental controls	Project phase
	<ul style="list-style-type: none"> <li>- Stockpiling of contaminated soil must be kept to a minimum and removed to landfill or other use at the earliest opportunity</li> <li>• Handling and transport of contaminated spoil for off-site treatment/disposal in accordance with <a href="#">Environment Protection (Industrial Waste Resource) Regulations 2009 the Environment Protection Regulations 2021 (Vic)</a>. Transport companies must <del>be licensed</del> <a href="#">hold relevant registrations or permits</a> by EPA Victoria to carry contaminated soil <a href="#">and Waste Tracker documentation must be completed</a>.</li> <li>• Managing PFAS-impacted soil (if any) in accordance with the PFAS NEMP and EPA guidance, <a href="#">including EPA Publications 1669, 1836 and 1968</a>.</li> <li>• Monitoring, recording and tracking spoil and other waste handling including but not limited to stockpile management, trucking and destination tracking, and sampling results.</li> </ul> <p><b>Reuse or Disposal</b></p> <ul style="list-style-type: none"> <li>• Assessing potentially contaminated spoil, which is to be disposed of offsite, in accordance with <a href="#">EPA Publication 1828, and IWRG 621 and 702</a>.</li> <li>• Considering the waste management hierarchy including opportunities for reuse, with spoil that is unable to be reused to be removed from site via designated haulage routes</li> <li>• Disposing drilling muds in accordance with <a href="#">Environment Protection (Industrial Waste Resource) Regulations 2009 the Environment Protection Regulations 2021 (Vic)</a> and EPA Victoria Industrial Waste – Classification for Drilling Mud, Victoria Government Gazette G37 <a href="#">(or any subsequently updated document issued by EPA)</a>.</li> </ul>	
C3	<p><b>Minimise impacts from disturbance of acid sulfate soil</b></p> <p>PASS may be present in saturated alluvium beneath and within close proximity to the creeks. Carry out further assessment where dewatering of alluvium may occur, specifically at Jacksons Creek and Merri Creek.</p> <p>The spoil management measures referenced in EMM C1 must include requirements and methods to minimise impacts from disturbance of acid sulfate soil, including but not limited to:</p> <ul style="list-style-type: none"> <li>• Characterising acid sulfate soil and rock prior to excavation in accordance with EPA Publication 655.1 Acid sulfate soil and rock.</li> <li>• Developing appropriate stockpile areas including lining, covering and runoff collection to prevent release of acid to the environment</li> <li>• Identifying suitable sites for re-use management or disposal of acid sulfate soil</li> <li>• Preventing oxidation that could lead to acid formation if practicable, through cover and/or scheduling practices, for example by minimising the length of time that acid sulfate soil is left in stockpiles as far as reasonably practicable and/or addition of neutralising compounds</li> <li>• Completing further acid sulfate soil assessment prior to construction in order to inform the CEMP at:             <ul style="list-style-type: none"> <li>- Jacksons Creek</li> <li>- Merri Creek</li> </ul> </li> <li>• Requirements and methods must be in accordance with the Industrial Waste Management Policy (Waste Acid Sulfate Soils) <a href="#">(or any subsequently updated document issued by EPA)</a> and <a href="#">comply with EPA Publication 1834 Civil construction, building and</a></li> </ul>	Construction

**CONTAMINATION**

Ref.	Environmental controls	Project phase
	<p><a href="#">demolition guide</a>, EPA Victoria Publication 655.1 Acid Sulfate Soil and Rock, <del>and the Department of Sustainability and Environment's Victorian Best Practice Guidelines for Assessing and Managing Coastal Acid Sulfate Soil</del>, <a href="#">Consideration of the National Acid Sulfate Soils Guidance (at <a href="https://www.waterquality.gov.au/issues/acid-sulfate-soils">https://www.waterquality.gov.au/issues/acid-sulfate-soils</a>) is also recommended.</a></p>	
C7	<p><b>Management of waste streams</b></p> <p>Implement the following measures to manage non hazardous (<a href="#">industrial</a>) waste:</p> <ul style="list-style-type: none"> <li>• Manage wastes in accordance with the <a href="#">Part 6.4 of the Environment Protection Act 2017 (Vic)</a> and <a href="#">IWR Regulations Environment Protection Regulations 2021 (Vic)</a> <a href="#">Environment Protection Regulations 2021 (Vic)</a></li> <li>• Undertake an assessment of potential wastes to be generated for the construction phase of the project that identifies waste elimination, reduction measures and opportunities for the re-use and recycle of construction waste</li> <li>• Use appropriately designated/designed facilities to handle the identified waste streams including necessary segregation and storage requirements. This must include dedicated and labelled on site disposal locations, which segregates wastes into streams for offsite disposal or recycling</li> <li>• Locate waste facilities away from natural drainage systems and low-lying areas</li> <li>• <a href="#">PIW Priority wastes</a> (such as waste oils, oily water mixtures, oily rags and oil filters, etc) must be segregated, labelled and securely stored and transported to a facility <a href="#">authorised to receive licensed to accept</a> these wastes (<a href="#">Lawful Place</a>)</li> <li>• Classify and dispose waste in accordance with the <a href="#">Publication 1827.2 (Waste Classification Protocol)</a>, <a href="#">IWR Regulations Environment Protection Regulations 2021 (Vic)</a> including by using a licensed waste contractor and completing <del>w</del>Waste <a href="#">Tracker transport certificates records</a> for <a href="#">PIW priority waste</a></li> <li>• Carry out a toolbox meeting including specific awareness on chemical management/refuelling and differences between waste types to facilitate correct segregation, storage and disposal</li> <li>• Sufficiently enclose putrescible wastes for odour control (e.g. use of suitable bins)</li> <li>• No <a href="#">PIW priority waste</a> shall be comingled with other waste streams</li> <li>• Document and implement a detailed process for monitoring, recording and tracking waste handling.</li> </ul>	Construction
C8	<p><b>Management of hydrostatic test water</b></p> <p>Implement measures for management of hydrostatic testing water including:</p> <ul style="list-style-type: none"> <li>• Manage hydrostatic test water in accordance with <del>SEPP (Waters)</del> <a href="#">the Environment Reference Standard - Part 5</a>.</li> <li>• Sample water to be used for hydrostatic testing to determine water quality prior to use</li> <li>• Prior to hydrostatic testing, pre-clean the pipeline to remove weld debris, dust and surface scale</li> <li>• Reuse water where practicable to minimise the number of discharge locations and conserve water</li> <li>• Only discharge hydrostatic test water discharge where water designated for release into the environment is of a quality that is</li> </ul>	Construction

**CONTAMINATION**

Ref.	Environmental controls	Project phase
	<p><del>within relevant statutory water quality guidelines</del><u>not a risk of impacting human health or the environment.</u> Relevant landholder(s) must be consulted prior to any discharge of hydrostatic test water to land</p> <ul style="list-style-type: none"> <li>• Any discharge of hydrostatic test water must not result in soil erosion or sedimentation of land or water. Sediment control devices to remove suspended solids such as geotextile fabric filters must be used</li> <li>• Direct discharge must not occur to watercourses or drains.</li> </ul>	
C9	<p><b>Management of drilling fluids</b></p> <p>Implement measures for management of drilling fluids including:</p> <ul style="list-style-type: none"> <li>• Making spill kits or similar available to contain spills on land, preventing runoff into surface water and drains.</li> <li>• Identifying and implementing contingency measures when HDD activities are in the vicinity of waterway zones</li> <li>• Disposing drilling fluids in accordance with Environment Protection Regulations 2021 (Vic) and EPA Victoria Industrial Waste – Classification for Drilling Mud, Victoria Government Gazette G37.</li> <li>• If HDD occurs through a potentially contaminated site, <u>EPA Publications 1827 and 1828, and the IWRG 621 and 702,</u> must be followed for <u>classification and</u> offsite disposal, <u>and ensuring any waste consigned for offsite disposal is sent to a Lawful Place.</u></li> <li>• Selecting appropriate inert drilling fluids.</li> </ul>	Construction

## Annexure 2

### Changes to waste and contamination EMMs (Operation)

CONTAMINATION		
Ref.	Environmental controls	Project phase
C10	<p><b>Minimise contamination risks during operation</b></p> <p>Operate the Project in accordance with the existing VTS OEMP, <a href="#">implement measures to minimise to the extent reasonably practicable the risk of contamination during operations, and comply with EPA Publication 1834 Civil construction, building and demolition guide during any maintenance activities, by implementing the following</a> <del>Key</del> design and operation measures <del>must include</del>:</p> <ul style="list-style-type: none"> <li>• Conducting all operations and maintenance (including wastes) in accordance with <a href="#">the Environment Protection Act 2017 and Environment Protection Regulations 2021</a> and the EPA Industrial Waste Resource Guidelines</li> <li>• No permanent storage of fuel or other chemicals along the pipeline corridor</li> <li>• Compressor on a concrete area and surrounded by crushed rock hard stand and under cover with a shelter roof</li> <li>• Above ground oily water separator with triple interceptor and underground overflow pit with level sensors, serviced annually</li> <li>• Provision of general and regulated waste collection bins</li> <li>• Use of quick break detergents suitable for oily water separator</li> <li>• Annual stack test monitoring and servicing of compressors</li> <li>• Ensuring <del>PIW</del> <a href="#">priority waste</a> (such as waste oils, oily water mixtures, oily rags and oil filters, etc) are segregated, labelled and securely stored and transported to a <a href="#">Lawful Place, facility licensed to accept these wastes</a></li> <li>• Appropriately classifying and disposing <del>of</del> waste, including using a <del>regulated</del> waste contractor <a href="#">registered or permitted to transport the relevant materials</a> and completion of <del>Waste Tracker transport certificates/records</del> for <del>priority waste</del> <a href="#">PIW</a></li> <li>• Maintain spill kits onsite at all times and providing training for use of spill kit</li> <li>• Inducting all staff and contractors into APA HSE policies and procedures including risks and controls associated with: waste management, chemical management and refuelling, weed and pest management and incident response</li> <li>• Carrying out toolbox meetings including specific awareness on chemical management /refuelling and differences between waste types to facilitate correct segregation, storage and disposal</li> <li>• Pre-start checks of plant, equipment and vehicles will be conducted to check for oil leaks</li> <li>• Storing any fuels or chemicals on site in an AS1940 compliant bund or double skinned tanks to prevent any spills impacting soil or water</li> <li>• Regular inspections on spill controls/bunding</li> <li>• Designating chemical and waste storage and refuelling areas away from watercourses to minimise the risk of contamination during handling and use</li> <li>• Refuelling to be carried out on hardstand or over a drip tray to capture spills and minor leaks</li> </ul>	Operation

	<ul style="list-style-type: none"><li>• Collecting spilt material into regulated waste bins to be taken offsite by an EPA licenced third party to an approved facility. Regulated waste disposal records must be provided</li><li>• Providing designated covered bins for general waste to minimise litter generation</li><li>• Providing a detailed process for monitoring, recording and tracking waste handling.</li></ul>	
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