

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

TECHNICAL NOTE NUMBER: TN35

DATE: 11 October 2021

SUBJECT: Response to RFI 121, 122 and 125

SUMMARY This Technical Note provides responses to the request for information queries raised in relation to RFI 121, 122 and 125 for the Western Outer Ring Main (WORM) Environment Effects Statement (EES). This Technical Note should be read in conjunction with Technical Note 12 and Technical Note 34.

REQUEST: RFI 121 - Question 2 in letter dated 5 October 2021. The International Erosion Control Association Guidelines (Appendix P – Pipelines) at p. 8 state that the soil properties ‘of most concern to pipeline projects are the management of dispersive and slaking soils’. Please explain the rationale for deferring the development of management options for managing sodic and dispersive soils to a plan within the CEMP rather than addressing this as part of the EES. Were sodic/dispersive soils considered in the project design and route alignment selection?

RFI 122 - Question 3 in letter dated 5 October 2021. The International Erosion Control Association Guidelines (Appendix P – Pipelines) draws attention to the roles of both geotechnical and soil science expertise in relation to the identification and management of soil hazards. Please outline the skills and experience of the authors and contributors of relevant sections of the EES and additional information relating to land stability and ground movement provided in response to the RFI related to sodic and dispersive soils, including their expertise in relation to geotechnical engineering, soil science and other relevant disciplines.

RFI 125 - Question 6 in letter dated 5 October 2021. Provide advice on any proposed external oversight of the Sodic Soils Management Plan and any potential mitigation measures or contingencies which may be employed to improve revegetation success in areas with sodic and dispersive soils.

Response

RFI Item 121 - The International Erosion Control Association Guidelines (Appendix P – Pipelines) at p. 8 state that the soil properties ‘of most concern to pipeline projects are the management of dispersive and slaking soils’. Please explain the rationale for deferring the development of management options for managing sodic and dispersive soils to a plan within the CEMP rather than addressing this as part of the EES. Were sodic/dispersive soils considered in the project design and route alignment selection?

- 1 The presence of dispersive soils was considered in the multi-criteria analysis of the Pipeline Route Options assessment, within parameter 4 – Operability: Rehab and easement maintenance risks - Extent of alignment with problematic soils, (dispersive, ASS, reactive, saline), slope>10%, or known ground stability issues.

- 2 Linear areas of dispersive soils, associated with some watercourses, were unavoidable and encountered by all route options. The presence of dispersive soils was assessed as a medium or high risk for all options. The chosen route was assessed as medium risk.
- 3 Due to the linear nature of pipelines, problematic soils, including dispersive soils, are regularly encountered and managed during pipeline construction. APA consider it most appropriate that the pipeline construction contractor, who has the most experience in this area, either lead or be involved in the preparation of the Sodic Soils Management Plan (SSMP), in conjunction with a suitably qualified professional. The contractor will not be engaged until 2022 and hence the SSMP has not been prepared.
- 4 The CEMP specifies management measures for risks generally associated with sodic and dispersive soils (summarised in Technical Note 34 section 1), such as erosion and sediment control.
- 5 The CEMP (EMM GM7) does also specify the requirement for the SSMP to be prepared by a suitably qualified professional, the required content of the SSMP and the minimum management measures to be implemented through the SSMP.

RFI Item 122 – Outline the skills and experience of the authors and contributors of relevant sections of the EES and additional information relating to land stability and ground movement provided in response to the RFI related to sodic and dispersive soils, including their expertise in relation to geotechnical engineering, soil science and other relevant disciplines.

- 6 EES Technical Report D *Land stability and ground movement* was prepared by a geologist and engineer with over 25 years' experience in the design and specification for tunnels, caverns, ground investigations and feasibility studies.
- 7 Technical Note 12 – Sodic soils and response to RFI 61, 64 and 65, was prepared by a geotechnical engineer, and geologist and engineer with over 25 years' experience. The technical note and associated report were also reviewed by an environmental scientist with 20 years' experience, including experience with industry guidelines for environmental management and rehabilitation of oil and gas pipeline corridors.

RFI Item 125 - Provide advice on any proposed external oversight of the Sodic Soils Management Plan and any potential mitigation measures or contingencies which may be employed to improve revegetation success in areas with sodic and dispersive soils.

- 8 It is APA's intent and understanding that the Sodic Soils Management Plan (SSMP) would be administered under the Pipeline Act 2005, in accordance with the requirements for an Environmental Management Plan (s133).
- 9 Depending on the timing of preparation of the SSMP, it may either be submitted as an attachment, when the Construction Environmental Management Plan is given to the Minister for acceptance, or submitted separately, noting s133(2) provides that an Environmental Management Plan may be given to the Minister and accepted in stages. In either case, construction cannot commence until the plan has been accepted.
- 10 APA's Closing CEMP will be amended to reflect that the SSMP will be submitted to DELWP for acceptance for the purposes of section 133 of the Pipelines Act 2005 and works cannot commence until the SSMP is accepted.
- 11 As specified in CEMP EMM GM7, additional management measures for the rehabilitation of disturbed areas identified as medium to high dispersion risk will be included within the SSMP, prepared by a suitably qualified professional. These are expected to include the application of gypsum to the levelled Right of Way, prior to topsoil replacement, and increased frequency of monitoring of rehabilitation works during the monitoring and defects period.

- 12 In addition to the SSMP, a Site Restoration Plan (or Plans) will be developed for areas to be revegetated with native flora (CEMP EEM B15). The plan(s) will have input from a qualified and experienced bushland restoration land management contractor. The plan(s) will consider site conditions, including soil type, in determining the appropriate plant species and methods to improve revegetation success.