

Master Specification Part PC-ENV2

Environmental Protection Requirements

September 2024



Government of South Australia
Department for Infrastructure
and Transport

Build.
Move.
Connect.

Document Information

| Document Information | |
|----------------------|------------|
| K Net Number: | 13562691 |
| Document Version: | 1 |
| Document Date: | 30/09/2024 |

Document Amendment Record

| Version | Change Description | Date |
|---------|--------------------|------------|
| 0 | Initial issue | 31/08/2023 |
| 1 | Updated cover page | 30/09/2024 |

Document Management

This document is the property of the Department and contains information that is confidential to the Department. It must not be copied or reproduced in any way without the written consent of the Department. This is a controlled document and it will be updated and reissued as approved changes are made.

Contents

| | |
|---|----|
| Contents | 3 |
| PC-ENV2 Environmental Protection Requirements | 4 |
| 1 General | 4 |
| 2 Documentation | 4 |
| 3 Construction methods and Temporary Works | 5 |
| 4 Vegetation impacts and protection | 6 |
| 5 Fauna protection | 8 |
| 6 Weed, pest and disease control | 9 |
| 7 Protecting waterways | 10 |
| 8 Sand management - marine environments | 11 |
| 9 Construction noise and vibration management | 11 |
| 10 Air quality protection | 12 |
| 11 Materials, fuels and waste management | 13 |
| 12 Contamination management | 14 |
| 13 Aboriginal heritage | 14 |
| 14 Non-Aboriginal heritage | 14 |
| 15 Environmental handover documentation | 14 |
| 16 Hold Points | 15 |

PC-ENV2 Environmental Protection Requirements

1 General

- a) This Master Specification Part specifies the minimum environmental protection requirements that the Contractor must comply with, including:
 - i) the documentation requirements, as set out in section 2;
 - ii) the construction methods and Temporary Works requirements, as set out in section 3;
 - iii) the vegetation impacts and protection requirements, as set out in section 4;
 - iv) the fauna protection requirements, as set out in section 5;
 - v) the weed, pest and disease control requirements, as set out in section 6;
 - vi) the protecting waterways requirements, as set out in section 7;
 - vii) the sand management - marine environment requirements, as set out in section 8;
 - viii) the construction noise and vibration management requirements, as set out in section 9;
 - ix) the air quality protection requirements, as set out in section 10;
 - x) the materials, fuels and waste management requirements, as set out in section 11;
 - xi) the contamination management requirements, as set out in section 12;
 - xii) the Aboriginal heritage requirements, as set out in section 13;
 - xiii) the non-Aboriginal heritage requirements, as set out in section 14;
 - xiv) the environmental handover document requirements, as set out in section 15; and
 - xv) the Hold Point requirements, as set out in section 16.
- b) The requirements of this Master Specification Part must be read in conjunction with PC-ENV1 "Environmental Management".
- c) The Contractor's Activities must comply with all environmental related Reference Documents, including:
 - i) Department Environment and Heritage Technical Manual (EHTM), including all attachments and supporting documentation (available from: <https://dit.sa.gov.au/standards/manuals>);
 - ii) SA Environment Protection Authority (EPA) standards and guidelines (available from: <https://www.epa.sa.gov.au/>);
 - iii) AS 1940 The storage and handling of flammable and combustible liquids;
 - iv) AS 4373 Pruning of amenity trees; and
 - v) AS 4970 Protection of trees on development sites.
- d) The Contractor's Activities must comply with all Laws including all relevant environmental legislation.

2 Documentation

2.1 Project Plans

- a) Unless otherwise specified in the Contract Documents, the Contractor must prepare, submit, and update the following documents as sub-plans to the Contractor's Environmental Management Plan (CEMP):

- i) a Weed Management Plan, in accordance with section 6.1b);
 - ii) a Soil Erosion and Drainage Management Plan (SEDMP), in accordance with section 7.2 including where applicable a Water Quality Monitoring Plan, in accordance with section 7.3 as a sub-plan to the SEDMP;
 - iii) a Construction Noise and Vibration Management Plan (CNVMP), in accordance with section 9.2 including where applicable a Night Works Management Plan (NWMP), in accordance with section 9.3 as a sub-plan to the CNVMP;
 - iv) where applicable, an Underwater Noise and Vibration Management Plan, in accordance with section 9.4;
 - v) an Air Quality Management Plan, in accordance with section 10c);
 - vi) where applicable, a Cultural Heritage Management Plan (CHMP), in accordance with section 13b);
 - vii) where applicable, a Contamination Remediation Management Plan, in accordance with section 12;
 - viii) where applicable, a Conservation Management Plan, in accordance with section 14b); and
 - ix) any other sub-plans as nominated in the Contract Documents.
- b) Where agreed with the Principal, the Contractor may elect to integrate the requirements of an individual sub-plan directly into the main body of the CEMP.
 - c) The CEMP, must be prepared and submitted in its entirety with all required sub-plans in accordance with the requirements of PC-PM1 "Project Management and Reporting". Individual sub-plans to the CEMP must not be submitted separately.

2.2 Construction Documentation

In addition to the requirements of PC-CN3 "Construction Management", the Construction Documentation must include:

- a) details of how the Construction Methodology complies with the requirements of section 3.1a);
- b) where relevant, the vegetation impact documentation required by section 4.1c);
- c) the arborists recommendation report, including the Construction Methodology to protect ongoing tree health as required by section 4.2e); and
- d) a NWMP, where the Contractor elects to submit a separate NWMP for each individual work activity.

2.3 Quality Management Records

In addition to the requirements of PC-QA1 "Quality Management Requirements" or PC-QA2 "Quality Management Requirements for Major Projects" (as applicable), the Quality Management Records must include:

- a) the results of water quality monitoring, required in section 7.3e); and
- b) all other environmental monitoring results, including noise, vibration, and dust monitoring.

3 Construction methods and Temporary Works

3.1 General

- a) The Contractor's Construction Methodology, including all Temporary Works, must be planned and undertaken to avoid environmental nuisance and harm and to minimise direct and indirect impacts to wetlands, watercourses, fauna habitat, High Value Vegetation, the local community and other important environmental areas to the greatest extent possible.

- b) All Environmental Authorisations required must be obtained by the Contractor in accordance with PC-ENV1 "Environmental Management".
- c) The Contractor must rehabilitate or remediate (as applicable) all disturbed areas progressively throughout the duration of the Works and Temporary Works. This includes all areas used for construction activities (such as compound sites, stockpile sites and access and haul roads) to as a minimum, their original condition (as previously recorded by the Contractor) as at the Commencement Date, unless specified otherwise by the Principal.
- d) The design and establishment of temporary creek crossings must ensure no changes to environmental flows, water quality and velocity, and maintain fish and fauna passage.
- e) The design of Temporary Works must address the management of contaminated material, wherever possible considering alignment with the waste management hierarchy within the *Green Industries SA Act 2004* (SA).

3.2 Borrow pits

The Contractor must rehabilitate or remediate (as applicable) any new or existing borrow pits that were established or utilised during the Project. At a minimum, the Contractor must ensure:

- a) implementation of any Development Approval conditions, where required;
- b) the batter faces are flattened to a slope of 6:1 (horizontal: vertical) to reduce erosion potential;
- c) the over-burden with vegetation that was removed prior to beginning of quarrying operation is spread over the new floor;
- d) the existing floor of the pit is scarified to improve soil permeability and water infiltration; and
- e) diversion drains are constructed around the edge of the pit to minimise erosion caused by water flowing into the pit across exposed soil surfaces (batter slopes).

3.3 Stack sites

If the Works or Temporary Works requires the use of existing stack sites, the Contractor must:

- a) ensure that the stack sites are left in a neat and tidy state, with any remaining material supplied by the Contractor removed;
- b) avoid contamination of the stack sites by bituminous products and clean up any accidental spills in accordance with all EPA requirements (including notification of the EPA);
- c) prevent leachate contamination of sites where pre-coated materials are used; and
- d) ensure weed hygiene controls are in place during stack site use.

4 Vegetation impacts and protection

4.1 Vegetation clearing and pruning

- a) The Contractor must not remove, disturb or damage any vegetation, including aquatic vegetation, unless otherwise approved by the Principal.
- b) The Contractor must obtain all Approvals required in accordance with Department EHTM Attachment 4B - Vegetation Impact Assessment Guideline and relevant Laws, prior to commencing vegetation clearance or pruning work.
- c) Provision of vegetation impact documentation which complies with the requirements of 4.1d) (including approval documentation) to the Principal prior to vegetation pruning or removal will constitute a **Hold Point**. Vegetation pruning or removal must not occur until the Hold Point has been released.
- d) To obtain release of the Hold Point set out in section 4.1c), the Contractor must provide vegetation impact documentation that demonstrates the following:

- i) the vegetation requiring removal or pruning is justified and corresponds with the vegetation impacts indicated on the drawings, and that the mitigation hierarchy has been followed in accordance with Department EHTM Attachment 4B - Vegetation Impact Assessment Guideline;
 - ii) the vegetation offset requirements are in accordance with Department EHTM Attachment 4B - Vegetation Impact Assessment Guideline;
 - iii) the Contractor has obtained all necessary Approvals required by the Contract Documents (including all Laws); and
 - iv) the Contractor has undertaken all necessary stakeholder engagement regarding the vegetation impacts.
- e) The Contractor must:
- i) undertake all tree pruning and removal in accordance with PR-LS-C11 "Tree and Shrub Pruning and Removal" and AS 4373 Pruning of amenity trees;
 - ii) not prune, remove, or otherwise damage any vegetation beyond the Contractor's Activity Zone (CAZ) (refer PC-SM2 "Site and Access Management"). Vegetation clearance beyond the CAZ is only allowed with prior approval of the Principal or where pruning is required to meet AS 4373 Pruning of amenity trees, however it must be limited to the minimum amount practicable;
 - iii) identify and relocate tree hollows in accordance with Department EHTM Attachment 5A - Fauna Impact Assessment Guideline;
 - iv) liaise and obtain any authorisations or Approvals from the relevant landowner (e.g. private owners, local council, government agencies), and other key stakeholders, and obtain any necessary authorisations, prior to vegetation removal, canopy pruning or works within the Tree Protection Zone (TPZ) (including root pruning); and
 - v) dispose of excess vegetative material in accordance with PR-LS-C11 "Tree and Shrub Pruning and Removal" and PR-MA-M1 "Herbaceous and Woody Weed Control".
- f) All tree pruning and removal must be undertaken by a suitably qualified arborist, unless the vegetation removal:
- i) is limited to clearing and grubbing; and
 - ii) is wholly undertaken by plant such as an excavator, front end loader or grader.
- g) The Contractor must allow for and program the appropriate statutory assessment and approval timeframes (e.g. State Commission Assessment Panel, local government or Native Vegetation Council).
- h) The Contractor is responsible for offsetting the vegetation removal and pruning in accordance with Department EHTM Attachment 4B - Vegetation Impact Assessment Guideline.

4.2 Protection of non-target vegetation

- a) "Non-target vegetation" means vegetation that is not authorised or approved to be impacted.
- b) The Contractor must ensure that any non-target vegetation is not damaged as a result of the Contractor's Activities.
- c) The Contractor must:
 - i) not damage roots within the Structural Root Zone (as defined in AS 4970 Protection of trees on development sites) of any remaining tree;
 - ii) not park or store vehicles, plant or equipment, or stockpile material within the Tree Protection Zone (TPZ, as defined in AS 4970 Protection of trees on development sites), or on any remaining native or amenity vegetation;

- iii) minimise root damage within the TPZ and clean saw cut any roots exposed during Works or Temporary Works;
 - iv) undertake Works or Temporary Works close to trees using non-destructive methods (e.g. hydro-vacuum) or by hand to avoid damage by equipment;
 - v) minimise the number of anchoring points (in marine environments); and
 - vi) ensure Works and Temporary Works are planned to avoid impacting High Value Vegetation unless otherwise authorised by legislation or the Principal.
- d) The Contractor must determine the TPZ for High Value Vegetation in accordance with AS 4970 Protection of trees on development sites, and must comply with the tree protection measures set out in AS 4970 Protection of trees on development sites. The TPZ must be included on the relevant Design Drawings or Construction Documentation (as applicable) including any notes required to protect the trees.
- e) Non-destructive excavation techniques (e.g. hydro vacuum / under boring) must be undertaken within the TPZs of High Value Vegetation, unless otherwise approved by the Principal. A suitably qualified arborist must oversee and recommend a Construction Methodology to protect ongoing tree health and stability for working within the TPZ of High Value Vegetation. The Contractor must comply with the arborist's recommendations.
- f) Provision of the arborist's recommendation report to the Principal will constitute a **Hold Point**. The Contractor must not carry out any Works or Temporary Works in the TPZ of non-target vegetation until the Hold Point has been released.
- g) Methods for protecting non-target vegetation must be included in the CEMP required in PC-ENV1 "Environmental Management".

4.3 High Value Vegetation

"High Value Vegetation" is considered to be:

- a) vegetation covered under the *Native Vegetation Act 1991* (SA);
- b) regulated / significant tree under the *Planning, Development and Infrastructure Act 2016* (SA) (including those that may be exempt from Development Approval);
- c) native and non-native vegetation located in and on the margins of waterways;
- d) vegetation covered by any other environmental legislation;
- e) vegetation that is located on land owned by a Third Party;
- f) any other vegetation that may be identified by the Principal or the community as providing localised amenity or ecological value; or
- g) rail and roadside significant sites (as defined in the Department Rail and Roadside Significant Sites Environmental Instruction (available from: <https://dit.sa.gov.au/standards/manuals>).

5 Fauna protection

- a) The Contractor must:
 - i) implement all reasonably practicable measures to minimise disturbance to fauna (including marine mammals and other marine fauna, where applicable) and prevent injury to fauna;
 - ii) where applicable, implement fauna protection measures and habitat protection / creation measures in accordance with conditions of Native Vegetation Council authorisation;
 - iii) contact Fauna Rescue SA, the RSPCA or a veterinarian for advice if any injured fauna is found on the Site;

- iv) under the supervision of a suitably qualified specialist and with an appropriate wildlife permit (refer to: <https://www.environment.sa.gov.au/licences-and-permits/wildlife-permits>), relocate any native fauna to a similar habitat if that fauna's habitat will be destroyed by the Works or Temporary Works;
 - v) provide fauna ladders and fish passage devices to enable fauna to pass through or around the construction Site and permanent Works as required;
 - vi) instigate work practices which allow marine fauna that are sensitive to noise to depart without risk of harm; and
 - vii) notify the Principal if any injured or dead native fauna is found on the Site.
- b) Fauna protection measures must be adopted, as a minimum, in accordance with Department EHTM Attachment 5A - Fauna Impact Assessment Guideline.
- c) Methods for protecting fauna on the site must be included in the CEMP required by PC-ENV1 "Environmental Management".

6 Weed, pest and disease control

6.1 General

- a) The Contractor must:
- i) ensure that declared animals, declared plants and environmental weeds (including seeds and other propagules) are not introduced to the Site or spread as a result of any site activities. Effective hygiene practices must be used on all vehicles, plant, and equipment. Refer to the Department Environmental Weeds List (available from: <https://www.dit.sa.gov.au/documents/manuals>);
 - ii) consult, obtain the required authorisations and comply with the requirements of the *Landscape South Australia Act 2019 (SA)*, in regard to declared animals and plants, including control, transport and disposal (advice can be obtained from the Landscape Boards and Primary Industries and Regions SA (PIRSA) BiosecuritySA <https://www.pir.sa.gov.au/biosecurity>);
 - iii) undertake all weed control activities in accordance with PR-MA-M1 "Herbaceous and Woody Weed Control";
 - iv) notify the Principal in the event of any outbreak of declared animal, declared plant or environmental weed resulting from activities associated with the Project;
 - v) in the event of an outbreak, develop and implement a management plan to control the outbreak of declared and environmental weeds, up to the end of the Defects Liability Period, until the outbreak is eradicated or as agreed to by the Principal;
 - vi) ensure that any dredged sand or material being deposited in a location where it could reasonably return to the water is free of declared pests and weeds; and
 - vii) ensure that, where relevant, marine vessels and floating plant are cleaned in accordance with the EPA publication "Code of practice for vessel and facility management (marine and inland waters)", to avoid depositing exotic aquatic plants.
- b) Methods for controlling weeds, pests, and disease on or from the site must be included in a Weed Management Plan, submitted as a sub-plan to the CEMP required by PC-ENV1 "Environmental Management".

6.2 Phytophthora control

- a) Phytophthora is a plant pathogen that can result in dieback of vegetation. The Contractor must plan and undertake its construction activities in accordance with the Department Phytophthora (Dieback) Control Environmental Instruction (available from: <https://www.dit.sa.gov.au/documents/manuals>).

- b) The Contractor must undertake a Phytophthora risk assessment to determine the required hygiene procedures and disposal requirements, and must implement those procedures during the Works and Temporary Works.
- c) The Phytophthora risk assessment must be submitted as a part of the CEMP required by PC-ENV1 "Environmental Management".

7 Protecting waterways

7.1 General

- a) The Contractor must ensure that any water entering the natural watercourse system, marine environment or stormwater drainage system from areas disturbed by the Contractor complies with the *Environment Protection (Water Quality) Policy 2015 (SA)*.
- b) When working in a waterway the Contractor must:
 - i) not cause destabilisation of the bed and banks of the watercourse;
 - ii) adhere to the *Landscape South Australia Act 2019 (SA)*, and Landscape Board requirements, including, where applicable, those forming conditions of a Water Affecting Activities Permit;
 - iii) ensure all excavated material that needs to be removed from the watercourse is placed and stabilised in a location where it will not return to the watercourse;
 - iv) compact loose material placed in and around the bed and banks of the watercourse to prevent downstream sedimentation; and
 - v) install temporary measures to prevent erosion or control sediment:
 - A. immediately after the completion of earthworks areas (including batters, drains, cut and fill areas); or
 - B. if earthworks areas are to remain essentially the same for 2 days or more.
- c) The Contractor must not:
 - i) pollute groundwater sources; or
 - ii) extract or reinject groundwater unless appropriate Environmental Authorisations (refer to PC-ENV1 "Environmental Management") (including those under the *Landscape South Australia Act 2019 (SA)*) have been obtained where required.

7.2 Soil Erosion and Drainage Management Plan (SEDMP)

- a) The Contractor is responsible for the design, construction, operation and maintenance of drainage and temporary erosion control measures.
- b) The Contractor must develop, implement, and maintain a Soil Erosion and Drainage Management Plan (SEDMP). The SEDMP must be developed in accordance with:
 - i) EPA Stormwater Pollution Prevention Code of Practice for Local, State and Federal Government; and
 - ii) Department EHTM Attachment 6A - Protecting Waterways Guideline.
- c) The SEDMP must include the following, as required (refer to Department EHTM Attachment 6A - Protecting Waterways Guideline, for further requirements):
 - i) objectives, targets, responsibilities, permits / licences, control measures, monitoring and environmental incident / emergency response;
 - ii) any management requirements from a Water Affecting Activities Permit (refer to Department EHTM Attachment 6B - Water Affecting Activities Best Practice Operating Procedure) or EPA licence or other authorisations as required;

- iii) details on how any stormwater and intercepted groundwater collected during the course of the construction activities will be managed and treated prior to release;
 - iv) details on how stormwater systems and waterways will be protected to ensure that no untreated stormwater is able to leave the Site;
 - v) a register of all proposed site plans (e.g. site environmental plans / project control plans) that identify types of sediment and erosion control measures and their locations for all stages of construction Works and Temporary Works; and
 - vi) the Water Quality Monitoring Plan (in accordance with Department EHTM Attachment 6A - Protecting Waterways Guideline).
- d) The SEDMP must be updated prior to any changes to construction processes that may impact upon erosion or sedimentation.
 - e) The SEDMP must be a sub-plan to the CEMP required by PC-ENV1 "Environmental Management").

7.3 Water quality monitoring

The Contractor must:

- a) determine the required level of water quality monitoring in accordance with Department EHTM Attachment 6A - Protecting Waterways Guideline;
- b) develop and implement a Water Quality Monitoring Plan (refer to Department EHTM Attachment 6A - Protecting Waterways Guideline) to the level determined by the assessment in section 7.3a). The monitoring regime and frequency must be designed to verify that site activities have not caused serious or environmental harm;
- c) include the Water Quality Monitoring Plan in the SEDMP;
- d) undertake the required level of monitoring until Completion or as specified by the Principal; and
- e) provide results of water quality monitoring required in section 7.3d) as part of the Quality Management Records, and to the Principal upon request.

8 Sand management - marine environments

- a) This section 8 applies where the Works or Temporary Works involve movement of sand in the marine environment.
- b) The Contractor must ensure the sand is free of litter, debris and weeds of any kind generated by the Works or Temporary Works.
- c) All vehicles must give way to all pedestrian and bicycle traffic on the beach and at shared paths. Appropriate signage indicating heavy machinery in use and the speed of vehicles on the beach must not exceed 25 km/h.
- d) Access points to the beach must remain clear of any deposited sand stockpiles so as to allow vehicle and pedestrian access at all times.
- e) The Contractor must advise the local council when the sand movement will be undertaken.

9 Construction noise and vibration management

9.1 General

- a) The Contractor must manage noise and vibration in accordance with Department EHTM Attachment 7D - Guideline for the Management of Noise and Vibration: Construction and Maintenance Activities.

- b) The Contractor has liability for and must bear all costs associated with any damage caused to existing structures, buildings, and services as a result of any construction / maintenance activity. This extends to responding to any claims of vibration induced damage, reinstatement or rectification of the damaged or impacted structures, buildings and services to the condition existing prior to the commencement of Works or Temporary Works (as applicable) or as otherwise directed by the Principal.
- c) The Contractor must assess and implement methods to monitor and manage the risk of vibration-induced damage, and identify and implement any required pre and post condition surveys to be undertaken.

9.2 Construction Noise and Vibration Management Plan

- a) The Contractor must prepare and implement a Construction Noise and Vibration Management Plan (CNVMP) in accordance with Department EHTM Attachment 7D - Guideline for the Management of Noise and Vibration: Construction and Maintenance Activities.
- b) The CNVMP must be a sub-plan to the CEMP required by PC-ENV1 "Environmental Management".

9.3 Night Works Management Plan

- a) The Contractor must prepare and implement Night Works Management Plans (NWMPs), where required in accordance with Department EHTM Attachment 7D - Guideline for the Management of Noise and Vibration: Construction and Maintenance Activities.
- b) NWMPs must be prepared as one of the following:
 - i) an all of Project NWMP included as a sub-plan to the CNVMP, that adequately covers all construction activities (including noise contour plans) and mitigation throughout the course of the Project; or
 - ii) a separate NWMP for each individual work activity, submitted as part of the Construction Documentation.

9.4 Works in marine environments

- a) Where piling or other activities (e.g. dredging) potentially disturbing to marine mammals are to be undertaken, the Contractor must prepare and implement an Underwater Noise and Vibration Management Plan in accordance with Department EHTM Attachment 7E - Underwater Piling Noise Guidelines.
- b) The Underwater Noise and Vibration Management Plan must be a sub-plan to the CEMP required by PC-ENV1 "Environmental Management".

10 Air quality protection

- a) The Contractor must suppress nuisance dust from any construction activities including access tracks, haul roads and stockpile sites and ensure that effective dust control measures are in place.
- b) The Contractor must:
 - i) cease any activity where that activity creates a dust hazard of nuisance to the public, personnel working on the Site or properties in the vicinity of the Works or Temporary Works;
 - ii) where dust is likely to be raised, ensure that appropriate dust control measures are planned and implemented including ensuring that an adequate number of water carts are on-site at all times during the Project and that they are used appropriately (separate payment will not be made for the use of the water cart); and
 - iii) not permit the emission of odorous substances or particulates, which create or are likely to create objectionable conditions for the public.

- c) If specified in the Contract Documents or identified as an outcome of the risk assessment forming part of the CEMP, the Contractor must prepare and implement an Air Quality Management Plan that:
 - i) includes a dust monitoring regime to enable verification that applicable air quality criteria has not been exceeded and air quality conditions have not caused an environmental nuisance; and
 - ii) includes a Dust Management Plan for the construction of the Project including a Trigger and Action Response Plan (TARP) outlining monitoring and mitigation measures to be implemented during construction. Soil binders or other dust suppression measures should be investigated by the Contractor to reduce water used in dust suppression and to better stabilise surfaces reducing potential dust impacts during construction.
- d) Air quality protection and monitoring measures must be included in the CEMP required by PC-ENV1 "Environmental Management".

11 Materials, fuels and waste management

11.1 General

Environmental management requirements identified in this section 11 must be included in the CEMP required by PC-ENV1 "Environmental Management".

11.2 Construction water

- a) The water source(s) to be used for construction purposes (including dust control) must be identified in the CEMP.
- b) The Contractor must comply with any permanent water conservation measures and current SA Water restrictions applicable to the Site.

11.3 Storage and handling of hydrocarbons and hazardous liquids

- a) The Contractor must ensure that any fuel, oil, lubricants, and other chemicals stored on site:
 - i) are stored in accordance with:
 - A. all relevant Laws including the *Dangerous Substances Act 1979* (SA) and its subordinate instruments; and
 - B. all relevant Reference Documents, including AS 1940 The storage and handling of flammable and combustible liquids;
 - ii) are stored within a bund with an impervious floor; and
 - iii) are not stored in an area which is subject to flooding or is within 20 m of a natural or built drainage line.
- b) The Contractor must ensure that:
 - i) fuel, oil or lubricants do not leak from machinery;
 - ii) appropriate methods during refuelling and maintenance are implemented to ensure that any spills or leaks are contained (including refuelling activities being attended at all times);
 - iii) when operating in the marine environment, refuelling must be undertaken in accordance with the EPA publication "Code of practice for vessel and facility management (marine and inland waters)";
 - iv) appropriate spill kits (e.g. marine, hydrocarbon) available for the purpose of cleaning up oil and fuel spillage is accessible at all times and personnel trained in the efficient deployment of the spill kit are readily available in the event of a spill;

- v) appropriately trained personnel are present and supervise refuelling activities at all times;
 - vi) maintenance of vehicles and machinery is carried out off-site where practicable; and
 - vii) if maintenance of vehicles and machinery is to occur on-site, the location and procedure is documented in the CEMP.
- c) In the event of a spill to the terrestrial and marine environments, the Contractor must implement its Emergency Response Plan and incident control systems in accordance with PC-ENV1 “Environmental Management”.

11.4 Waste management

- a) The Contractor must implement the principles of the waste hierarchy.
- b) The Contractor must dispose of waste to an appropriately licensed waste or recycling facility.
- c) Except for any vegetative material to be mulched:
 - i) all waste material resulting from the Works or Temporary Works is the property of the Contractor and must be removed from the Site within 7 days or placed in a container with fitted lids for disposal at a later date, but prior to Completion; and
 - ii) disposal of vegetative material is to be undertaken in accordance with PR-LS-C11 “Tree and Shrub Pruning and Removal”.
- d) At Completion of the Works and Temporary Works, all rubbish and waste must be removed and the Site must be left in a clean and tidy condition.

12 Contamination management

All site contamination considerations and assessment must be undertaken in accordance with PC-SC1 “Site Contamination”, including the requirement for a Contamination Remediation Management Plan (where required).

13 Aboriginal heritage

- a) All Aboriginal heritage assessments and management must be undertaken in accordance with PC-H1 “Aboriginal Heritage and Native Title”.
- b) The Contractor must document in the CEMP (required by PC-ENV1 “Environmental Management”) or as sub-plan (e.g. CHMP) any actions required to manage Aboriginal heritage and associated risks.

14 Non-Aboriginal heritage

- a) All non-Aboriginal heritage assessments and management must be undertaken in accordance with PC-H2 “Non-Aboriginal Heritage”.
- b) The Contractor must document in the CEMP (required by PC-ENV1 “Environmental Management”) or as a sub-plan (e.g. Conservation Management Plan as per Department EHTM Part 10A - Guideline for the Preparation of a Contractor’s Environmental Management Plan) any actions required to manage non-Aboriginal heritage and associated risks.

15 Environmental handover documentation

At completion of the Project, or as requested by the Principal, the Contractor must handover any reports, monitoring data, models and raw data, spatial information, and details of any ongoing management measures or Environmental Authorisation(s) conditions (refer to PC-ENV1 “Environmental Management”) relevant to the ongoing operation and maintenance of the infrastructure.

16 Hold Points

Table PC-ENV2 16-1 details the review period or notification period, and type (documentation or construction quality) for each Hold Point referred to in this Master Specification Part.

Table PC-ENV2 16-1 Hold Points

| Section reference | Hold Point | Documentation or construction quality | Review period or notification period |
|--------------------------|--|--|---|
| 4.1c) | Provision of vegetation impact documentation | Documentation | 10 Business Days review |
| 4.2f) | Arborist's recommendation report | Documentation | 10 Business Days review |