

Project Controls

Master Specification

PC-ENV1 Environmental Management

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PC-ENV1 Environmental Management

1 General

- 1.1 This Part specifies the requirements for the Contractor's Environmental Management and Environmental Management Systems (EMS) Requirements.
- 1.2 The work shall be undertaken in accordance with all applicable environmental legislation, including but not limited to:
 - a) Aboriginal Heritage Act 1988.
 - b) Development Act 1993.
 - c) Environment Protection Act 1993.
 - d) Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth).
 - e) Heritage Places Act 1993.
 - f) Native Title (South Australia) Act 1994.
 - g) Native Vegetation Act 1991.
 - h) Natural Resources Management Act 2004.
- 1.3 DPTI environmental publications are available from:
<https://www.dpti.sa.gov.au/standards/environment>.
- 1.4 The Contractor, except to the extent prohibited by law, indemnifies the Principal against any loss that the Principal suffers or incurs arising out of a failure by the Contractor to comply with any of its environmental obligations under this Contract.
- 1.5 If any damage to the environment occurs as a result of non-compliance with the requirements of this Contract, the Contractor shall, at its own expense, reinstate or rectify the damaged or impacted area to the condition existing prior to the commencement of work or as otherwise directed by the Principal. This includes, but is not limited to damage to vegetation and contamination of soil or water. If the damage is not satisfactorily reinstated or rectified, the cost incurred by the Principal for the reinstatement or rectification of the damage (or the loss in value where the damage cannot be adequately reinstated or rectified) is a debt due from the Contractor to the Principal.
- 1.6 If the Contractor impacts vegetation without the required approvals (obtained prior to impact), the Contractor will be liable to pay the offset amount in accordance with the Native Vegetation Act 1991 for native vegetation, the Development Act 1993 for regulated and significant trees, or the DPTI Vegetation Removal Policy for amenity vegetation. The Contractor shall obtain any retrospective approvals as required.

2 Contractor's Environmental Obligations

- 2.1 The Contractor's works under this Contract shall meet or exceed all environmental requirements specified in this Contract.
- 2.2 Where the Contractor's design and / or construction activities vary from that contemplated in the design and environmental documentation provided by the Principal, the Contractor:
 - a) shall undertake all additional environmental assessments to ensure compliance with legislation and the Contract, resulting from the Contractor's design;
 - b) bears all risks associated with compliance with legislation and the Contract, associated with a varied design;
 - c) shall obtain any additional authorisations, approvals and licences necessary; and
 - d) shall update the Contractor's Environmental Management Plan to address all environmental protection matters resultant from the varied design and / or construction activities.

- 2.3 The Contractor, except to the extent prohibited by law, indemnifies the Principal against any loss that the Principal suffers or incurs arising out of a failure by the Contractor to comply with any of its environmental obligations under this Contract.
- 2.4 If any damage to the environment occurs as a result of non-compliance with the requirements of this Contract, the Contractor shall, at its own expense, reinstate or rectify the damaged or impacted area to the condition existing prior to the commencement of work or as otherwise directed by the Principal. This includes, but is not limited to damage to vegetation and contamination of soil or water.
- 2.5 If the damage is not satisfactorily reinstated or rectified, the cost incurred by the Principal for the reinstatement or rectification of the damage (or the loss in value where the damage cannot be adequately reinstated or rectified) is a debt due from the Contractor to the Principal.
- 2.6 If the Contractor impacts vegetation without the required approvals (obtained prior to impact), the Contractor will be liable to pay the offset amount in accordance with the Native Vegetation Act 1991 for native vegetation, the Development Act 1993 for regulated and significant trees, or the DPTI Vegetation Removal Policy for amenity vegetation. The Contractor shall obtain any retrospective approvals as required.

3 Environmental Authorisations

- 3.1 "Environmental Authorisation" includes environmental and planning approvals, licences, permits or exemptions.
- 3.2 The Contractor shall:
 - a) obtain all Environmental Authorisations for works under the Contract required by law or as specified by the Principal, other than those already obtained by the Principal;
 - b) comply with the requirements of all Environmental Authorisations, including those obtained by the Principal;
 - c) identify any required amendment or variance to the environmental authorisations obtained by the Principal, and prepare all relevant documentation and resubmit an amended / varied application for the Environmental Authorisation, unless otherwise agreed with the Principal;
 - d) allow for and program the appropriate authority or statutory assessment and approval timeframes; and
 - e) document the Environmental Authorisations in the Contractor's Environmental Management Plan (CEMP).
- 3.3 Provision of the DRAFT and amended / varied environmental authorisation documentation prior to submission shall constitute a **Hold Point**.
- 3.4 Provision of any Environmental Authorisations obtained by the Contractor shall constitute a **Hold Point**.

4 Environmental Objectives

- 4.1 Subject to the requirements outlined by the Principal, the Contractor's planning, design and construction methodology shall be undertaken to maximise the achievement of the following environmental objectives.
- 4.2 Methods used to address the Environmental Objectives shall be documented in the appropriate Planning or Design Report(s) or the Contractor's Environmental Management Plan (CEMP).
- 4.3 The following environmental objectives apply to the Works under this contract. The Sustainability Objectives provided in PC-ED-M4 (Sustainability in Design), also apply to this Contract.
 - a) avoid mobilisation of contaminants and where feasible or required by the Contract, remediate of contaminated land on the Site;
 - b) avoid acid sulphate soils where possible or mitigate impacts;

- c) manage pollutants generated from the operation and maintenance of the infrastructure and incorporate Water Sensitive Urban Design (WSUD) / Water Sensitive Road Design (WSRD) elements;
- d) prevent pollution of surface, ground and marine waters;
- e) protect and avoid damage, disturbance and / or interface to Aboriginal archaeological / anthropological sites, objects or remains;
- f) avoid where possible areas where native title has been determined not to be extinguished, unless otherwise authorised by the Native Title Act 1994.
- g) protect and prevent disturbance of non-Aboriginal heritage sites;
- h) minimise the destruction or disturbance of native vegetation and other high value vegetation (refer PC-ENV2 Environmental Protection Requirements);
- i) protect and prevent disturbance of non-target vegetation;
- j) eliminate and prevent the spread of declared and environmental weeds;
- k) minimise the destruction or disturbance of fauna habitat and provide safe fauna passage and habitat connection, where feasible during construction and operation of the project (e.g. fish passage, koala ladders, etc.);
- l) prevent the spread or eradicate pest plants or animals on and adjacent to the site;
- m) protect noise sensitive receivers from transport and construction noise; and
- n) implement the principles of the waste hierarchy and dispose of waste to an appropriately licensed waste and / or recycling facility.

5 Contractor's Environmental Management System

- 5.1 The Contractor shall establish, implement and maintain an Environmental Management System (EMS) in accordance with the requirements of AS/NZS ISO 14001 for the duration of this Contract. The Contractor's EMS shall make provision for the work of subcontractors.
- 5.2 No part of the Contractor's EMS shall be used to pre-empt, preclude or otherwise negate the technical requirements of the Contract.
- 5.3 Prior to commencement of any work on Site, the Contractor shall submit evidence of a certificate certifying the Contractor's accreditation to AS/NZS ISO 14001 during the duration of the Contract. The Certification shall be provided by an appropriately qualified accredited organisation. Provision of the EMS Certification shall constitute a **Hold Point**.

6 Contractor's Environmental Management Plan

- 6.1 The Contractor shall establish, implement and maintain a Contractor's Environmental Management Plan (CEMP), which addresses the management of the environmental issues for this Contract. The CEMP shall comply with the DPTI "Contractor's Environmental Management Plan Guidelines", available from: <https://www.dpti.sa.gov.au/standards/environment>.
- 6.2 In addition to the CEMP content requirements listed in the above document, the CEMP shall also include:
 - a) Construction Work Method Statements (or similar) for activities identified as high risk or above (pre-treatment) in the environmental risk assessment;
 - b) details of the Contractor's Activity Zone (refer PC-SM3 "Construction Activity Zone and Access Management"); and
 - c) issue-specific (sub) management plans, where required (refer PC-ENV2 "Environmental Protection Requirements").
- 6.3 Prior to commencement of any work on Site, the Contractor shall submit an electronic controlled copy of the CEMP and associated sub-plans, including all supporting documentation.

- 6.4 Provision of the CEMP including any stand-alone Management Plans, and any proposed amendments to the CEMP, and supporting documentation, shall constitute a **Hold Point**.
- 6.5 At a minimum the Contractor shall review and update the CEMP and associated sub-plans, identifying amendments to the previous version, every six months during the Contract period.

7 Contractor's Personnel

Environmental Management Representative

- 7.1 The Contractor shall provide an Environmental Management Representative (EMR) for the duration of the Contract who is directly responsible to the Contractor's senior management and has responsibility for ensuring that the requirements of the EMS and the environmental requirements of the Contract are complied with.
- 7.2 At all times, the duties of the EMR in regard to ensuring compliance with the environmental requirements of this Contract shall take precedence over any other activity undertaken by the EMR.
- 7.3 The EMR shall:
 - a) possess a recognised tertiary environmental qualification and have at least 5 years of recent relevant experience to the position; be available to attend the Site at any time that work is in progress; and
 - b) be on Site whenever activities are in progress that are identified in the CEMP as being of high risk to the environment.
- 7.4 Where a Contamination Specialist is not required for the works, as specified by the Principal, the EMR shall possess relevant industry experience in contamination management and remediation.

8 Training and Induction

Environmental Awareness Training

- 8.1 Prior to any works commencing on Site, the Contractor shall ensure that at least two of its staff who will be based on Site have attended DPTI Environmental Awareness training or equivalent training within the last 5 years. The Contractor's Site representative / supervisor shall have attended the training. Recognition of equivalent training requires approval from the Principal.
- 8.2 Information about the DPTI Environmental Awareness training is available from the following web site:
https://www.dpti.sa.gov.au/contractor_documents/contractor_environmental_training_programs.
- 8.3 The Contractor shall provide copies of the training certificates to the Principal prior to works commencing on Site and upon request.

Induction

- 8.4 The Contractor shall ensure that the Contractor's (and any subcontractor's) personnel attend an environmental induction before they commence work on Site. The induction shall be delivered by the EMR and shall address all environmental issues that are relevant to the person's activities on Site as identified in the CEMP.
- 8.5 The Contractor shall provide evidence of environmental induction content and induction attendance records to the Principal upon request.

9 Inspections, Auditing and Reporting

- 9.1 The Contractor shall monitor its environmental performance, and that of its subcontractors, for the duration of this Contract. Environmental performance shall be measured against the Contractor's EMS and CEMP, and the requirements of this Contract.

- 9.2 Unless otherwise agreed with the Principal, non-conformance reports (NCR) shall be raised for non-compliance with the requirements of the Contract and the CEMP(s). NCR's shall be submitted to the Principal.

Inspections

- 9.3 The Environmental Management Representative shall undertake environmental inspections of the works being carried out under the Contract, no less than weekly, to assess compliance with the environmental requirements of the Contract and the CEMP(s). The frequency of inspections shall be greater during activities or events that have potential to cause environmental harm throughout the Contract period.
- 9.4 The Contractor's EMR shall inspect and maintain records / register of any temporary and permanent siltation and erosion control devices:
- a) before, during and immediately after a rain event; and
 - b) once per week during dry weather.
- 9.5 The Contractor shall rectify any defects revealed during an inspection immediately unless otherwise agreed with the Principal.
- 9.6 The Weekly Environmental Inspection Report shall include for that period, as a minimum, a summary of:
- a) environmental issues identified and the date they were initially identified;
 - b) environmental incidents;
 - c) non-conformances, corrective actions raised and associated timeframes;
 - d) monitoring results and summary report (noise, vibration, water quality, air quality) including any exceedances of related limits / criteria;
 - e) details of any Aboriginal heritage monitoring and reported outcomes undertaken by Aboriginal groups or representatives;
 - f) evidence of weekly inspections being undertaken; and
 - g) other relevant data.
- 9.7 Completed environmental inspection checklist shall be provided to the Principal upon request.

Audits

- 9.8 The Contractor shall ensure that environmental audits of all works underway are conducted at intervals of no less than 3 months and at the completion of work on Site. Additional audits shall be undertaken for activities or events that have potential to cause environmental harm throughout the Contract period.
- 9.9 Environmental audits shall be conducted in accordance with AS/NZS ISO 19011: Guidelines for Auditing Management Systems.
- 9.10 In addition to the Contractor's own audit schedule, the Contractor shall allow external audits of the Contractor's environmental performance to be undertaken at any time. The Contractor shall make available relevant staff to be involved in the audit.
- 9.11 Where a non-conformance is detected during an audit, the Contractor shall take immediate action to rectify the non-conformance.

Vegetation Removal Register

- 9.12 Every three months, or as requested by the Principal, the Contractor shall provide to the Principal a register and plan of all vegetation (including individual areas of native vegetation and regulated / significant trees) that has been removed as a result of the Works.
- 9.13 The register and plan shall show all vegetation removed using the associated number in the vegetation survey(s) and approval documentation.

- 9.14 The register shall include a summary of vegetation impacted during the reporting period as well as cumulative impact since commencement of the Contract and any SEB payments made under the Native Vegetation Act 1993.

Monthly Environmental Performance Status Report

- 9.15 At the end of each calendar month, the Contractor shall submit a Monthly Environmental Performance Status Report to the Principal which as a minimum includes:
- A register showing status of all environmental and heritage related Hold Points;
 - summary of all environmental inspections and audits, including an action list with timeframes for rectification of issues identified;
 - details of any non-conformances / environmental incidents and corrective actions taken;
 - current Vegetation Removal Register and measures taken to minimise impacts to remaining vegetation;
 - details of all resource use and waste transfers inclusive of soil disposal and all other waste streams controlled by the Contractor; and
 - summary of any environmental monitoring / investigations undertaken by the Contractor or other documentation submitted to the Principal. Raw data for monitoring activities shall be provided to the Principal upon request.
- 9.16 Where this Contract has additional requirements for monthly reporting to a Joint Leadership Team (JLT), or equivalent, the Monthly Environmental Performance Status Report can be incorporated into that document.

Quarterly Environmental Conformance Certificate

- 9.17 The EMR shall prepare a report at intervals not greater than 3 months and at Completion, which identifies that:
- the Contractor's EMS is in accordance with AS/NZS ISO 14001 and the requirements of the Contract;
 - the Subcontractor's EMS, which forms a part of the Contractor's Environmental Management System, was in accordance with AS/NZS ISO 14001 and the requirements of the Contract;
 - the Contractor has complied with and satisfied the requirements of the Contract and the CEMP with the exception of any non-conformance reports (NCRs) raised during the period (details of NCRs to be provided);
 - environmental incidents have been managed and rectified in accordance the requirements of the Contract and relevant legislation; and
 - documentation was recorded and submitted to the Principal in accordance with the Specification.
- 9.18 The report shall be forwarded to the Principal and signed by the EMR and Project Manager / Director.

10 Environmental Incidents and marine spills

- 10.1 The Contractor shall develop and maintain an Environmental Emergency Response Plan / Procedure which is based on an environment-related risk assessment of all Site activities. It may form part of the Project's Emergency Response Plan.
- 10.2 The plan shall ensure that all Personnel are able to identify and respond to environmental emergencies or incidents and ensure that relevant authorities are notified.
- 10.3 Environment incidents / accidents are those which:
- lead to a warning, notice or order being issued by the EPA;
 - contravene applicable environmental legislation and / or an Environmental Authorisation (including the Principal's internal approvals process);

- c) cause environmental harm or nuisance (as defined by the Environment Protection Act 1993 or other applicable legislation); and / or
 - d) result in the spillage / release of noxious or hazardous substances (such as but not limited to hydrocarbons or any other machinery fluids) into sea or watercourses.
- 10.4 In the event of an environmental incident or accident, the Contractor shall:
- a) take whatever remedial action is necessary as soon as practicable;
 - b) immediately notify the Principal and the EPA if the spill could cause serious and material environmental harm or other relevant authority;
 - c) provide an initial written notification report to the Principal within 24 hours of the incident occurring; and
 - d) provide a full written investigation report within 72 hours of the incident occurring.
- 10.5 In the event of a chemical spill in the marine environment, the Contractor shall:
- a) Dial 000 if there is a fire or injury requiring medical attention or if the size of the spill or nature of the spilled material makes it readily apparent that the situation is dangerous;
 - b) Control access to the spill area and, if possible without risking injury, control the source of the spill and limit the spread of contamination;
 - c) Not apply dispersant / detergent or other substance - the spill should just be contained and ensure the safety of those on site and in the vicinity;
 - d) Report the spillage (no matter how small) to the Outer Harbour Signal Station on (08) 8248 3505 - who will contact the on-duty DPTI Incident Controller;
 - e) Comply with the direction of the DPTI Incident Controller;
 - f) Inform the Signal Station and the Principal of the circumstance, type and volume of the contamination as soon as possible after the occurrence along with contact details; and
 - g) Bear any cost to the Principal in cleaning up the spillage or clean up the spillage to the satisfaction of the DPTI Incident Controller.

11 Hold Points

11.1 The following is a summary of Hold Points referenced in this Part:

Document Ref.	Hold Point	Response Time
3.3	Amended / varied environmental authorisation documentation prior to submission	5 days
3.4	Environmental Authorisations obtained by the Contractor	5 days
5.3	Contractor's Environmental Management System Certification	3 days
6.2	Contractor's Environmental Management Plan / sub-plans or any proposed amendments, and supporting documentation	10 days