



## Project Delivery Group (Renewals) - Environmental Management Plan

## Document Approval and Issue Notice

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## Part A – Overview

### 1. Purpose

This Environmental Management Plan (the ‘EMP’) describes how the Project Delivery Group (PDG) should plan and manage its environmental responsibilities and ensure contractors meet their responsibilities, in relation to delivery of renewals programs (encompassing the Linear Renewals, Electrical/SCADA and Treatment Plants teams).

This EMP supports the implementation of the TasWater Environmental Policy and Contractor HSE Requirements Procedure through the provision of minimum requirements for environmental management and mitigation measures for projects delivered by the PDG, as detailed in Part C.

Part C can be adopted by the contractor as the Construction Environmental Management Plan (CEMP) for a project (along with a Site Environmental Plan), or the contractor can use their own EMS and develop their own CEMP, provided it addresses the minimum standards of the environmental management and mitigation measures outlined in Part C, noting it must be accepted by TasWater.

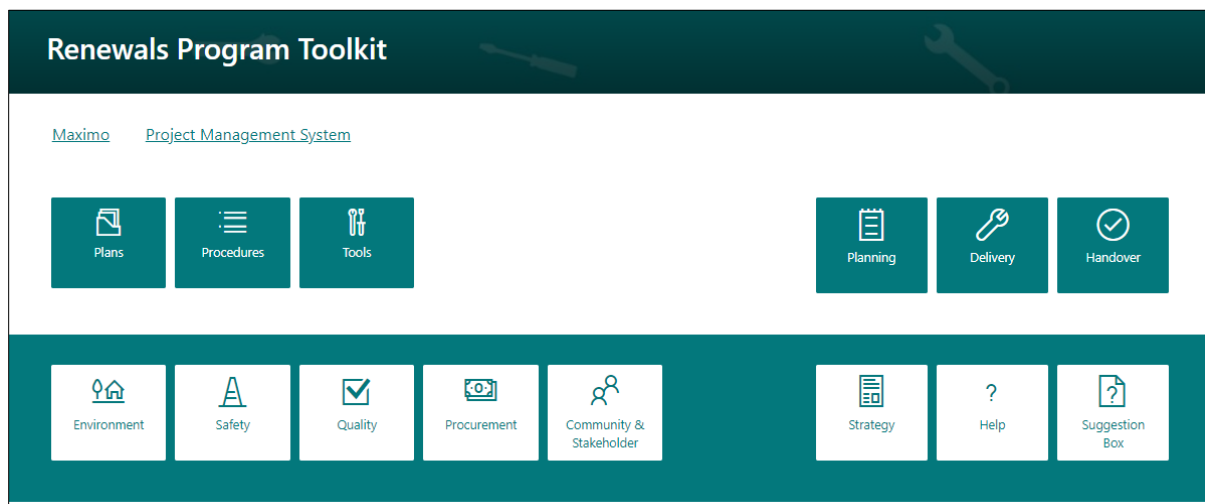
### 2. Scope

<input checked="" type="checkbox"/> Planning	<input checked="" type="checkbox"/> Delivery	<input checked="" type="checkbox"/> Handover
<input type="checkbox"/> Program Management	<input type="checkbox"/> Procurement	<input type="checkbox"/> Community & Stakeholder
<input type="checkbox"/> Safety	<input checked="" type="checkbox"/> Environment	<input type="checkbox"/> Quality

This Plan is applicable to both TasWater personnel and contractors engaged under the PDG.

This Plan is part of an integrated management system known as the Renewals Program Toolkit, comprising plans supported by procedures and tools. The Toolkit is located on the Project Delivery Group intranet page. Figure 1 shows the Toolkit site.

Figure 1 Renewals Program Toolkit



### 3. Definitions

This Plan should be read in conjunction with the Acronyms and Glossary document, located in the Help Section of the Toolkit.

## Part B – PDG Environmental Management System

### 4. Standards, Policies and Regulatory Requirements

This Plan and associated activities are to align with the following standards and policies:

- TasWater Environmental Policy
- TasWater Contractor HSE Requirements Procedure
- Various TasWater Environmental Management Procedures, as detailed in Part C
- Relevant environmental legislation, regulations, codes of practice and guidelines as detailed in each of the relevant procedures.

### 5. Key Roles and Responsibilities

The Programs Leader has overall responsibility for the implementation of this Plan. The Programs Leader will work in collaboration with key stakeholders as detailed in Table 1.

Table 1 Key Stakeholder Responsibilities

Job Title	Duties
General Manager	<ul style="list-style-type: none"> <li>• Govern program management across the PDG</li> <li>• Ensure effective Environmental management on all PDG programs</li> <li>• Support a proactive approach to Environmental management</li> <li>• Ensure Environmental management responsibilities are defined and that the PDG is appropriately resourced to meet these responsibilities.</li> <li>• Ensure the Environmental management systems and compliance strategies are in place and are effective.</li> <li>• Ensure PDG team members are provided with appropriate resources, training and education in the Environmental management system.</li> <li>• Demonstrate behaviours aligned to TasWater values.</li> </ul>
Programs Leader	<ul style="list-style-type: none"> <li>• Ensure effective Environmental management on all PDG programs</li> <li>• Support a proactive approach to Environmental management</li> <li>• Demonstrate behaviours aligned to TasWater values.</li> </ul>
Team Leader	<ul style="list-style-type: none"> <li>• Manage program delivery in accordance with this Plan</li> <li>• Ensure Environmental management responsibilities are allocated and held accountable</li> <li>• Ensure procedures are followed</li> <li>• Ensure Environmental risks are identified and managed in accordance with this Plan</li> <li>• Demonstrate behaviours aligned to TasWater values.</li> </ul>
Project Manager	<ul style="list-style-type: none"> <li>• Manage project delivery in accordance with this Plan</li> <li>• Coordinate/participate in meetings, reporting, audits, checks and other activities</li> <li>• Ensure contractors are aware of their responsibilities</li> <li>• Demonstrate behaviours aligned to TasWater values.</li> </ul>
Design Manager	<ul style="list-style-type: none"> <li>• Manage engineering design of projects</li> <li>• Ensure environmental considerations are included in engineering design tasks</li> <li>• Demonstrate behaviours aligned to TasWater values.</li> </ul>
TasWater Environment Team (System Performance & Productivity)	<ul style="list-style-type: none"> <li>• Support delivery of projects by providing background data and sampling services where required</li> <li>• Participate in meetings as required</li> <li>• Demonstrate behaviours aligned to TasWater values.</li> </ul>
TasWater Environment Team (Environmental Performance)	<ul style="list-style-type: none"> <li>• Provide quarterly updates to EPA Tasmania on projects with regulatory commitments</li> <li>• Provide point of liaison related to EPA approvals for Level 2 facilities</li> <li>• Demonstrate behaviours aligned to TasWater values.</li> </ul>
Environmental Advisor	<ul style="list-style-type: none"> <li>• Coordinate/participate in meetings, reporting, audits, checks and other activities</li> </ul>

Job Title	Duties
(Renewals)	<ul style="list-style-type: none"> <li>• Ensure contractors are aware of their responsibilities</li> <li>• Audit and upskill the staff involved in project delivery</li> <li>• Demonstrate behaviours aligned to TasWater values.</li> </ul>
Safety Advisor	<ul style="list-style-type: none"> <li>• Coordinate/participate in meetings, reporting, audits, checks and other activities</li> <li>• Ensure contractors are aware of their responsibilities</li> <li>• Audit and upskill the staff involved in project delivery</li> <li>• Demonstrate behaviours aligned to TasWater values.</li> </ul>
Project Supervisor	<ul style="list-style-type: none"> <li>• Supervise project in accordance with this EMP</li> <li>• Coordinate/participate in site meetings, reporting, audits, checks and other site-based activities</li> <li>• Ensure contractors are aware of their responsibilities</li> <li>• Demonstrate behaviours aligned to TasWater values.</li> </ul>
Contractor	<ul style="list-style-type: none"> <li>• Comply with TasWater contract and contractor requirements and statutory obligations</li> <li>• Participate in meetings, reporting, audits, checks and other activities</li> <li>• Ensure contractor's workers comply with TasWater contract and contractor requirements and statutory obligations</li> <li>• Report hazards, incidents and opportunities for improvement</li> <li>• Demonstrate behaviours aligned to TasWater values.</li> </ul>

## 6. Planning

Procedure	Tools
Environmental Management Procedure	PEPA HSE Risk Register Site Environmental Plan

### 6.1. PDG Environmental and Planning Approvals Checklist

The initial step in the environmental management of a project within the PDG is the completion of a Programs Environmental and Planning Approvals (PEPA) Checklist. These investigations are generally undertaken based on a preliminary project design or Task Notice / Definition Statement and are intended to:

- Highlight the potential environmental constraints associated with a scope of works.
- Identify potential environmental or planning approvals and permits required.
- Identify potential environmental investigations or studies required to inform required approvals and/or permits.
- Identify specific environmental management and mitigation that may be required to be implemented by the Contractor during construction.

The conclusions from these investigations are then used to guide the development of all approvals and permits required for the project, including studies and investigations. Findings of studies and investigations and any required permits or approvals are communicated via the Site Environmental Plan (SEP).

### 6.2. HSE Risk Register

Prior to the commencement of a project, a HSE risk assessment is undertaken and a HSE Risk Register developed by the project team. This register captures all environmental risks for the project. This task initially utilises information included on the PEPA Checklist that has been completed for the project as well as any knowledge from the wider project team.

The resultant HSE Risk Register for each project is used to identify all the environmental hazards and risks that are present, lists how to manage and mitigate those risks and identifies any site-specific environmental controls required to be implemented and documented in the SEP.

### 6.3. Site Environmental Plan

The SEP pulls together the information within this EMP, or contractor's CEMP, and the completed PEPA Checklist to develop an overall site-specific environmental management document. The SEP provides:

- A summary of project information including contacts, working hours, inspection requirements, and any applicable permits and approvals.
- A summary of environmental management and mitigation measures for each of the identified sub-plans to be implemented for the project. This includes the measures outlined in this EMP plus any additional measures that may be required as a result of an approval, permit, or specific site condition.

- A site plan, or series of site plans, showing environmental constraints on site, environmental management aspects and environmental monitoring points. Examples include sediment and erosion controls, waste area designations, and traffic flow directions.

The SEP is initially developed by the Project Manager and Environmental Advisor utilising the SEP template and then provided to the Contractor for review and input. Every project delivered by the PDG, that has any component of site work, must have an SEP in place.

#### 6.4. Construction Environmental Management Sub-Plans

A series of environmental management sub-plans has been developed by TasWater based on a combination of legislative requirements and industry best practice and can be used by contractors engaged by TasWater to form the basis of their Construction Environmental Management Plan (CEMP). The environmental sub-plans apply to all projects, with only the relevant mitigation and management measures transferred to the SEP.

The environmental management and mitigation for each environmental sub-plan identifies which TasWater PDG procedures and permits (or contractor equivalents) are required to be followed.

The sub-plans are provided in Part C of this document and are outlined in Table 2.

Table 2: Environmental Sub-Plans

Section	Sub-Plan
Section 9.1	Sediment and Erosion Control Management
Section 9.2	Flora and Fauna Management
Section 9.3	Weed, Pest and Disease Management
Section 9.4	Noise and Vibration Management
Section 9.5	Air Quality Management
Section 9.6	Heritage Management
Section 9.7	Environmentally Hazardous Materials Management
Section 9.8	Bushfire Risk Management
Section 9.9	Waste Management
Section 9.10	Contaminated Land Management
Section 9.11	Acid Sulfate Soils Management
Section 9.12	Energy and GHG Management
Section 9.13	Water Management



## 7. Delivery

Procedure	Tools
Environmental Management Procedure Environmental Monitoring Procedure	Construction Environmental Management Sub-Plans Environmental Inspection Checklists TasWater incident reporting system (IRIS).

### 7.1. Environmental Objectives and Key Performance Indicators

Environmental objectives and Key Performance Indicators (KPI's) are to be developed by the Project Manager, in consultation with the Environmental Advisor and the selected Contractor prior to works commencing. Basic Environmental Objectives are included on each of the Sub-Plans in Part C, these objectives should be reviewed for relevance by Project Manager and Environmental Advisor and amended objective adopted where necessary. The objectives and KPI's form the starting point for what TasWater considers environmental compliance for projects delivered by the PDG.

### 7.2. Environmental Monitoring, Inspection and Reporting

Environmental monitoring is performed to ensure environmental objectives, approvals and/or permit conditions are met, and to identify potential non-compliances before they occur.

The Environmental Monitoring Procedure outlines how to undertake monitoring for various environmental management aspects, detailing topics such as equipment requirements, monitoring site selection, and data collection. Monitoring and analysis of data will be carried out by a competent person. Evidence of competence must be retained.

During project delivery / construction, monitoring, inspection, reporting, review and audits (MIRRA) will be planned, scheduled and conducted to ensure compliance with the EMP. It is the accountability of the Environmental Advisor, with contractor and Project Manager support, to ensure all monitoring is performed according to these requirements.

A series of Environmental Inspection Checklists have been developed to assist the PDG and the contractor to assess the effectiveness of environmental mitigation measures. Inspection Checklists can be provided to the Contractor for use while delivering projects for the PDG.

Required environmental reporting data (as detailed in Part C) is to be provided to TasWater by the contractor on or before the 27<sup>th</sup> of each month.

### 7.3. Environmental Incident Reporting

An **environmental incident** is an occurrence that has caused, or has the potential to cause, an adverse impact to the environment, as a result of the project. Specific examples include, but are not limited to:

- Any event that results in actual or potential serious or material environmental harm or environmental nuisance as defined by Section 5 of EMPCA.
- Fauna death or injury within the project site boundary
- Unauthorised vegetation or land clearing
- Damage to heritage items, places or values
- Spills of environmentally hazardous materials such as hydrocarbons or paints to land or waterways

- Release of sewerage to surrounding environment / waterways\*
- Non-compliant monitoring results (water, noise, vibration, air quality etc)
- Enforcement notices and penalties received from regulators
- Community or stakeholder complaints related to an environmental nuisance received by TasWater, Council or the EPA

**All environmental incidents or near-misses must be immediately reported to the TasWater PDG Environmental Advisor and subsequently entered into the TasWater incident reporting system (IRIS).**

When entering incidents or near-misses into IRIS ensure that the item is entered as having either a primary or secondary consequence listed as Environmental. This will enable the entry to be correctly classified.

\*Sewerage spill notifications are to be completed in accordance with the TasWater Incident & Emergency Management Plan: Sewage Incident Response Procedure (IEM-PRO25).

## 8. Handover

Procedure	Tools
Environmental Management Procedure Environmental Monitoring Procedure	Environmental Inspection Checklist – Practical Completion

Upon completion of each project that has a construction component, a practical completion walk through shall be completed utilising the Environmental Inspection Checklist – Practical Completion. Completion of this task is the responsibility of the TasWater Environmental Advisor, this task can be delegated to an appropriately experienced person. Practical completion can only be achieved when all relevant items on the inspection checklist have been met.

## Part C – Construction Environmental Management

Sub-Plans	Procedure	Tools
Erosion and Sediment Control Flora and Fauna Weed, Pest and Disease Noise and Vibration Air Quality Heritage Environmentally Hazardous Materials Environmentally Hazardous Materials Bushfire Risk Waste Contaminated Land Acid Sulphate Soil Energy and Greenhouse Gas (GHG) Water	Erosion and Sediment Control Establishing and Monitoring Environmental No-Go Zones Weed, Pest and Disease Management Dewatering and Bypass Pumping Flora and Fauna	Environmental Inspection Checklists: Erosion and Sediment Control Dewatering and Bypass Pumping Flora and Fauna Management Weeds, Pests and Diseases Management Heritage Management  Permits: Dewater or Bypass Pump Enter a No-Go Zone Disturb Land or Vegetation  Other Checklists: Machinery, Plant & Vehicle Clean- Down Herbicide and Pesticide Weekly Inspection

Part C comprises a series of environmental sub-plans developed by TasWater for use by the Contractor for each environmental management area generally encountered during construction projects.

Each Environmental Sub-Plan contains the following key information:

- Environmental Objectives
- Applicable environmental legislation
- A set of management or mitigation measures to prevent and control environmental impacts.
- Minimum monitoring requirements.

## 8.1. Sediment and Erosion Control

SEDIMENT AND EROSION CONTROL MANAGEMENT				
Environmental Objectives	Metric/Measure	Objective	Time Frame	Accountability
	Number of actions taken by regulators.	Zero (0)	At all times	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. <i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i></li> <li>2. <i>Environmental Management and Pollution Control Act 1994 (Tas)</i></li> <li>3. <i>Environmental Management and Pollution Control (Waste Management) Regulations 2020 (Tas)</i></li> <li>4. <i>Water Management Act 1999 (Tas)</i></li> <li>5. <i>Water Management (Safety of Dams) Regulations 2015 (Tas)</i></li> <li>6. <i>Water and Sewerage Industry Act 2008 (Tas)</i></li> <li>7. <i>State Policy on Water Quality Management 1997 (Tas)</i></li> <li>8. <i>State Coastal Policy 1996 (Tas)</i></li> </ol>			
Procedures & Tools	<ol style="list-style-type: none"> <li>1. Erosion and Sediment Control Procedure</li> <li>2. Dewatering and Bypass Pumping Procedure Environmental Inspection Checklist – Erosion and Sediment Control</li> <li>3. Environmental Inspection Checklist – Dewatering and Bypass Pumping</li> <li>4. Permit to Dewater or Bypass Pump</li> </ol>			

Mitigation Measure	Accountability
Erosion and sediment controls must be designed, developed and implemented in consultation with the Environment Advisor.	EA / Contractor
Erosion and sediment controls, including clean water diversions, must be installed prior to commencement of ground disturbance. These controls must be maintained and remain in place until ground stabilisation has occurred.	Contractor
Cleared areas must be kept to a minimum and be progressively rehabilitated/revegetated as they become available.	Contractor
All materials must be stockpiled away from water flow paths or suitable clean water diversions installed.	Contractor
Dewatering and Bypass Pumping activities must occur in accordance with the <b>TasWater Dewatering and Bypass Pumping Procedure</b> (or similar, as accepted by the Project Manager and EA) and a Permit to Dewater or Bypass Pump must be in place prior to any transfers/discharges occurring.	Contractor
If concrete washout is required, an adequate number of concrete washout facilities must be installed and maintained. The washout facilities will be isolated from surface water flows using bunds to prevent contamination of clean surface waters and will be lined to prevent contamination of soil and groundwater.	Contractor
Excess concrete (including washout) must not be discharged to stormwater or to the ground, excess concrete must be disposed of to an appropriate facility.	Contractor
Existing ground conditions and weather forecasts will be taken into consideration prior to conducting civil works. Excavation works will not be conducted if ground conditions are unsuitable or pose environmental risk.	Contractor
The type and location of environmental control equipment and devices to manage, mitigate and monitor water quality and soil impacts shall be detailed and maintained in the SEP. Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk must be included in the SEP.	EA / Contractor

	Aspect	Monitoring Requirements	Frequency	Accountability
Minimum Monitoring Requirements	Erosion and sediment control structure(s)	Visual Inspection	Weekly	Contractor
	Erosion and sediment control structure(s) – Rain event	Visual Inspection	<ul style="list-style-type: none"> <li>• Within one hour of the commencement of any runoff resulting from rain events during working hours</li> <li>• Every four hours during periods of continuous rain during working hours</li> <li>• Within 12 hours of a rain event outside working hours</li> </ul>	Contractor

## 8.2. Flora & Fauna Management

FLORA & FAUNA MANAGEMENT				
	Metric/Measure	Objective	Time Frame	Accountability
Environment Objectives	Number of native fauna injured	Zero (0)	At all times	Project Manager
	Area of unauthorised vegetation cleared	Zero (0)	At all times	Project Manager
	Number of enforcement notices / penalties issued by regulators	Zero (0)	At all times	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. <i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i></li> <li>2. <i>Environmental Management and Pollution Control Act 1994 (Tas)</i></li> <li>3. <i>Nature Conservation Act 2002 (Tas)</i></li> <li>4. <i>Wildlife (General) Regulations 2010 (Tas)</i></li> <li>5. <i>Forest Practices Act 1985 (Tas)</i></li> <li>6. <i>National Parks and Reserves Management Act 2002 (Tas)</i></li> <li>7. <i>National Parks and Reserved Land Regulations 2009 (Tas)</i></li> <li>8. <i>Threatened Species Protection Act 1995 (Tas)</i></li> <li>9. <i>Wellington Park Act 1993 (Tas)</i></li> </ol>			
Procedures & Tools	<ol style="list-style-type: none"> <li>1. Flora and Fauna Management Procedure Environmental Inspection Checklist – Flora and Fauna</li> <li>2. Permit to enter a No-Go Zone</li> <li>3. Permit to Disturb Land or Vegetation</li> </ol>			

Mitigation Measure	Accountability
<p>Prior to any disturbance, clearing or grubbing activities in any locations the following must be in place:</p> <ul style="list-style-type: none"> <li>• A <b>Permit to Disturb Land or Vegetation</b> (or similar, as accepted by the Project Manager and EA);</li> <li>• No-Go Zones for significant flora and fauna habitat must be established, fenced/flagged and sign posted prior to commencement of land or vegetation disturbance;</li> <li>• A qualified fauna handler must conduct a search for any wildlife that may need to be removed and relocated;</li> <li>• All required statutory pre-clearance surveys must be completed by a qualified and suitably experienced ecologist; and</li> <li>• All Permits to Take for species that may be impacted by the project (including kill, injure, pursue, catch, damage, destroy and collect) must be acquired in accordance with the <i>Threatened Species Protection Act 1995 (Tas)</i>.</li> </ul>	Contractor / Environmental Advisor
Where a threat to any fauna onsite is evident, the Environmental Advisor must be notified immediately. Works may need to cease, if fauna is in danger or harmed, until it has been relocated. Only qualified wildlife handlers should attempt to relocate fauna.	All
Speed limits must be obeyed at all times.	All
All vehicles must use designated access tracks and laydown areas as designated.	All
Access to No-Go Zones is prohibited unless a Permit to Enter a No-Go Zone is in place. Any damage to No-Go Zone fencing or signage must be reported to the site supervisor and Environmental Advisor immediately.	All
Cleared/removed vegetation shall be beneficially reused where practicable (e.g. for habitat, chipped for mulch etc.).	Contractor
Where possible revegetation activities will preferentially use only species that are indigenous to the area.	Contractor
Boundaries of allowable site disturbance must be clearly marked and delineated in accordance with accepted plans (included on SEP).	EA / Contractor

Mitigation Measure	Accountability
Trees to be retained will be clearly marked. Tree protection areas will be delineated by markers, construction tape webbing or other barriers. No equipment, plant, vehicle and material should be stored within the drip line of a tree.	Contractor
Dead fauna shall be removed from site trenches/excavations/access tracks and disposed of accordingly to reduce potential impacts to scavenging species	All
No domestic pets are allowed on site.	All
Trenches shall be covered and/or fenced at the end of a shift, or fauna egress provided, to prevent animals becoming trapped.	Contractor
The type and location of environmental control equipment and devices to manage, mitigate and monitor flora and fauna impacts shall be detailed and maintained in the Site Environment Plan (SEP). Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk to be included in the SEP.	EA / Contractor

Minimum Monitoring Requirements	Aspect	Monitoring Requirements	Frequency	Accountability
	Flora and fauna mitigation measures	Visual Inspection	Weekly	Contractor



### 8.3. Weed, Pest and Disease Management

WEED PEST & DISEASE MANAGEMENT				
	Metric/Measure	Objective	Time Frame	Accountability
Environment Objectives	Number of non-compliant monitoring results	Zero (0)	At all times	Project Manager
	Number of enforcement notices / penalties issued by regulators	Zero (0)	At all times	Project Manager
	Reportable incidents of weed or invasive animals' outbreak or infestation	Zero (0)	At all times	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. Biosecurity Act 2015 (Cth)</li> <li>2. Environmental Management and Pollution Control Act 1994 (Tas)</li> <li>3. Plant Quarantine Act 1997 (Tas)</li> <li>4. Weed Management Act 1999 (Tas)</li> <li>5. Weed Management Regulations 2017 (Tas)</li> <li>6. Vermin Control Act 2000 (Tas)</li> <li>7. Cat Management Act 2009 (Tas)</li> <li>8. Cat Management Regulations 2012 (Tas)</li> </ol>			
Procedures & Tools	<ol style="list-style-type: none"> <li>1. Weed, Pest and Disease Management Procedure</li> <li>2. Machinery, Plant &amp; Vehicle Clean-Down Checklist</li> <li>3. Herbicide and Pesticide Checklist</li> <li>4. Environmental Inspection Checklist – Weeds, Pests and Diseases</li> </ol>			

Mitigation Measure	Accountability
All weed, pest and disease management and mitigation used for the site must be in general accordance with the <i>Weed and Disease Planning and Hygiene Guidelines – Preventing the spread of weeds and diseases in Tasmania</i> (DPIPWE, 2015).	Contractor
Weeds, pests or disease infested/infected areas must be identified (on ground and/or on the SEP) prior to undertaking any ground disturbance activities.	EA / Contractor
Wash down and inspection stations shall be established to clean and inspect vehicles and machinery of any dirt or mud that may harbor weeds or seeds as required.	Contractor
All ground engaging plant and equipment shall be cleaned down of all soil and vegetation material in accordance with the washdown procedures outlined in the <i>Weed and Disease Planning and Hygiene Guidelines – Preventing the spread of weeds and diseases in Tasmania</i> (DPIPWE, 2015); a documented inspection of the plant and/or equipment must be completed: <ul style="list-style-type: none"> <li>• Prior to arrival on site.</li> <li>• Prior to movement within the project site from infested/infected areas to non-infested/infected areas</li> <li>• Prior to demobilisation from the project site.</li> </ul>	Contractor
All soils (including sand / gravel fill) or mulch materials brought to the project site must be certified (including documentation) by the supplier as weed-free.	Contractor
Where <i>Phytophthora cinnamomi</i> (root rot), amphibian chytrid fungus, or any other pathogen has been identified, or is considered a potential risk at the project site, hygiene protocols must be included in the SEP in accordance with the <i>Weed and Disease Planning and Hygiene Guidelines – Preventing the spread of weeds and diseases in Tasmania</i> (DPIPWE, 2015).	EA / Contractor
The type and location of environmental control equipment and devices to manage, mitigate and monitor weed, pest, and disease impacts shall be detailed and maintained in the SEP. Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk must be included in the SEP.	EA / Contractor

## 8.4. Noise and Vibration Management

NOISE AND VIBRATION MANAGEMENT				
	Metric/Measure	Objective	Time Frame	Accountability
Environment Objectives	Number of non-compliant monitoring results	Zero (0)	At all times	Project Manager
	Number of nuisance noise and/or vibration complaints	Zero (0)	At all times	Project Manager
	Number of incidents of damage caused by vibration	Zero (0)	At all times	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. <i>Environmental Management and Pollution Control Act 1994 (Tas)</i></li> <li>2. <i>Environmental Management and Pollution Control (Noise) Regulations 2016 (Tas)</i></li> <li>3. <i>Environment Protection Policy (Noise) 2009 (Tas) ("Noise EPP")</i></li> </ol>			
Procedures & Tools	<ol style="list-style-type: none"> <li>1. Noise and Vibration Management</li> <li>2. Environmental Inspection Checklist – Noise</li> <li>3. Out of Standard Hours Work Permit</li> </ol>			

Mitigation Measure	Accountability
No work to be conducted out of approved project work hours (including loading or unloading of plant or equipment) without an Out of Standard Hours Work Permit in place.	Contractor
Undertake project activities in accordance with the Noise and Vibration Management Procedure and within the nominated hours of work to comply with contractual and legal requirements.	Contractor
All equipment must be serviced and maintained according to manufacturer's recommendations, or more frequently if required to minimise noise generated.	Contractor
Undertake high noise generating works in accordance with any project specific approvals.	Contractor
Where intermittent high frequency noise is a high risk, and pending safety requirements, the least noise-intrusive reversing alarms must be used.	Contractor
Locate temporary site access roads and site compounds as far away as practicable from noise sensitive receptors/premises.	Contractor
The Australian Standard AS 2436-2010 shall be used to guide appropriate measures for mitigating construction and demolition noise.	Contractor
Adjust the project Traffic Management Plan to minimise noise impacts as required.	Contractor
Where fitted, engine covers must remain closed when machinery is in use.	Contractor
Position noisy equipment away from noise sensitive areas.	Contractor
Consider neighbors and minimise noise when packing up plant and equipment and/or departing from site.	All
Where a dilapidation survey has been completed management and mitigation controls must be identified on the SEP.	EA / Contractor
Construction machinery, plant and equipment shall be switched off or throttled down to a minimum when not in use.	Contractor
The type and location of environmental control equipment and devices to manage, mitigate and monitor noise and vibration impacts shall be detailed and maintained in the SEP. Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk must be included in the SEP.	EA / Contractor

Minimum Monitoring Requirements	Aspect	Monitoring Requirements	Frequency	Accountability
	Noise and vibration mitigation measures	Visual Inspection	Weekly	Contractor

## 8.5. Air Quality Management

AIR QUALITY MANAGEMENT				
	Metric/Measure	Objective	Time Frame	Accountability
Environment Objectives	Number of non-compliant monitoring results	Zero (0)	At all times	Project Manager
	Number of nuisance complaints	Zero (0)	At all times	Project Manager
	Number of enforcement notices / penalties issued by regulators.	Zero (0)	At all times	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. <i>National Environment Protection (Ambient Air Quality) Measure (Cth)</i></li> <li>2. <i>Environmental Management and Pollution Control Act 1994 (Tas)</i></li> <li>3. <i>Environment Protection Policy (Air Quality) 2004 (Tas)</i></li> <li>4. <i>National Environment Protection (National Pollutant Inventory) Measure 1998 - NPI NEPM</i></li> </ol>			
Procedures & Tools	<ol style="list-style-type: none"> <li>1. Air Quality Management Procedure</li> <li>2. Environmental Inspection Checklist – Air Quality</li> </ol>			

Mitigation Measure	Accountability
Spray carts and/or dust suppressants should be used on dust generating areas as required.	Contractor
Site entries/exits must be equipped with suitable mitigation to minimise soil transport to and from the site to reduce the chance of dust generation as necessary.	Contractor
All construction plant and equipment must be maintained in accordance with manufactures specifications to minimise exhaust emissions.	Contractor
Burning of any materials is prohibited onsite.	All
Loads must be covered where practicable when hauling dust-generating material to or from site.	Contractor
Where light sensitive receptors (incl. migratory birds)/premises have been identified light pollution shall be minimised by: <ul style="list-style-type: none"> <li>• Changing duration of lighting – switching off when not required</li> <li>• Reducing trespass of lighting - shielding / directing</li> <li>• Changing spectrum and/or intensity of lighting</li> <li>• </li> </ul>	Contractor
The type and location of environmental control equipment and devices to manage, mitigate and monitor air quality impacts shall be detailed and maintained in the SEP. Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk must be included in the SEP.	EA / Contractor

## 8.6. Heritage Management

HERITAGE MANAGEMENT				
	Metric/Measure	Objective	Time Frame	Accountability
Environment Objectives	Incidents of damage to heritage items, places or values	Zero (0)	At all times	Project Manager
	Number of avoidable complaints from traditional owners as a result of the works being undertaken	Zero (0)	At all times	Project Manager
	Number of enforcement notices / penalties issued by regulators	Zero (0)	At all times	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. <i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth)</i></li> <li>2. <i>Native Title Act 1993 (Cth)</i></li> <li>3. <i>Aboriginal Heritage Act 1975 (Tas)</i></li> <li>4. <i>Historic Cultural Heritage Act 1995 (Tas)</i></li> </ol>			
Procedures & Tools	<ol style="list-style-type: none"> <li>1. Heritage Management Procedure</li> <li>2. Environmental Inspection Checklist – Heritage</li> </ol>			

Mitigation Measure	Accountability
<p>Prior to any disturbance, clearing or grubbing activities in any locations where heritage issues have been identified the following must be in place:</p> <ul style="list-style-type: none"> <li>• Permit to Disturb Land or Vegetation;</li> <li>• No-Go Zones for heritage sites must be established, fenced/flagged and sign posted prior to the commencement of land disturbance;</li> <li>• All required statutory pre-clearance surveys must be completed by a qualified and suitably experienced heritage consultant</li> <li>• All heritage exemptions must be acquired in accordance with the Tasmanian Heritage Works Guidelines for Historic Heritage Places [2].</li> </ul>	Contractor
An Aboriginal and European Heritage Unanticipated Discovery Plan must be followed for any potential heritage discoveries.	Contractor
Site inductions will include information on Aboriginal and Historic heritage management and mitigation. Specific training will be provided to persons likely to work in close proximity to known heritage areas.	EA / Contractor
<p>The type and location of environmental control equipment and devices to manage, mitigate and monitor heritage impacts shall be detailed and maintained in the SEP.</p> <p>Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk must be included in the SEP.</p>	EA / Contractor

Minimum Monitoring Requirements	Aspect	Monitoring Requirements	Frequency	Accountability
	Heritage mitigation measures	Visual Inspection	Weekly	Contractor

## 8.7. Environmentally Hazardous Materials Management

ENVIRONMENTALLY HAZARDOUS MATERIALS MANAGEMENT				
	Metric/Measure	Objective	Time Frame	Accountability
Environment Objectives	All spills are reported and remediated	Zero (0) spills un-reported or cleaned up	At all times	Project Manager
	Number of enforcement notices / penalties issued by regulators	Zero (0)	At all times	Project Manager
	Number of unauthorised discharges or spills to receiving environment	Zero (0)	At all times	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. <i>Environmental Management and Pollution Control Act 1994 (Tas)</i></li> <li>2. <i>Environmental Management and Pollution Control (Controlled Waste Tracking) Regulations 2010 (Tas)</i></li> <li>3. <i>Environmental Management and Pollution Control (Underground Petroleum Storage Systems) Regulations 2020`1</i></li> <li>4. <i>Work Health and Safety Regulations 2012 (Tas)</i></li> <li>5. <i>Agricultural and Veterinary Chemicals Code Act 1994 (Cth)</i></li> <li>6. <i>Agricultural and Veterinary Chemicals (Control of Use) Act 1995 (Tas)</i></li> </ol>			
Procedures & Tools	<ol style="list-style-type: none"> <li>1. Environmentally Hazardous Materials Management Procedure</li> <li>2. Emergency Response Plan for project</li> <li>3. TasWater Incident &amp; Emergency Management Plan: Sewage Incident Response Procedure</li> <li>4. Environmental Inspection Checklist – Hazardous Materials</li> </ol>			

Mitigation Measure	Accountability
All environmentally hazardous substances on site must be registered on a project chemical register.	Contractor
Storage and handling of environmentally hazardous materials must be in strict accordance with the applicable standards and MSDS for the substance and current MSDS's (published within the previous 5 years) must be available on site.	Contractor
Environmentally hazardous substances must be stored in a bunded area with a minimum holding capacity of 110% of the largest container within the bund or 25% of the total capacity of all containers within it, whichever is the greater.	Contractor
The types and sizes of spill kits on site must be selected based on the types and volumes of materials stored. Aquatic spill kits shall be available at project sites near waterways. Spill kit locations to be included on SEP.	EA / Contractor
Training in the use of spill kits must be provided to relevant personnel.	Contractor
Refueling must not occur within 30m of a waterway (without appropriate controls in place).	Contractor
Management of environmentally hazardous materials must be covered in the site induction / pre-start as required.	Contractor
Containment devices, including bunds, separators and catch trays, will be used wherever there is a risk of spillage.	Contractor
Undertake routine maintenance of plant and equipment for prevention of leaks of hazardous substances, such as fuel and hydraulic fluid.	Contractor
An Emergency Response Plan which incorporates a spill response procedure shall be maintained for the project	Contractor
The type and location of environmental control equipment and devices to manage, mitigate and monitor hazardous substance impacts shall be detailed and maintained in the SEP. Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk must be included in the SEP.	EA / Contractor

Minimum Monitoring Requirements	Aspect	Monitoring Requirements	Frequency	Accountability
	Environmentally hazardous materials mitigation measures	Visual Inspection	Weekly	Contractor

## 8.8. Bushfire Risk Management

BUSHFIRE MANAGEMENT				
Environment Objectives	Metric/Measure	Objective	Time Frame	Accountability
	Number of fire incidents within the Project limits	Zero (0)	At all times	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. <i>Environmental Management and Pollution Control Act 1994 (Tas)</i></li> <li>2. <i>Fire Service Act 1979 (Tas)</i></li> <li>3. <i>General Fire Regulations 2010 (Tas)</i></li> <li>4. <i>National Parks and Reserves Management Act 2002 (Tas)</i></li> <li>5. <i>National Parks and Reserved Land Regulations 2009 (Tas)</i></li> </ol>			
Procedures & Tools	<ol style="list-style-type: none"> <li>1. Environmentally Hazardous Materials Management Procedure</li> <li>2. Environmental Inspection Checklist – Bushfire Risk</li> </ol>			

Mitigation Measure	Accountability
All facilities, containers, storage sheds, vehicles and machinery will be fitted with a serviced fire extinguisher (relevant to works or area), which will be inspected and tagged as required by a suitability qualified person.	Contractor
Smoking must only be permitted in designated areas. These shall be clearly marked, communicated to site personnel, and their locations shown on the Site Environment Plan (SEP).	All
Proximity of stationary plant and machinery exhaust systems to combustible materials and vegetation must be taken into account during siting of equipment.	Contractor
All flammable materials will be stored in accordance with relevant Australian Standards and MSDS.	Contractor
Hot works will only be performed on a Total Fire Ban day with an approved exception from Tasmanian Fire Service.	Contractor
No open fires shall be permitted on the project site at any time.	All
The type and location of environmental control equipment and devices to manage, mitigate and monitor bush fire risk shall be detailed and maintained in the SEP. Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk must be included in the SEP.	EA / Contractor

	Aspect	Monitoring Requirements	Frequency	Accountability
Minimum Monitoring Requirements	Bushfire mitigation measures	Visual Inspection	Weekly	Contractor
	Fire Danger Rating	Check Current Fire Danger Rating at <a href="http://www.fire.tas.gov.au">http://www.fire.tas.gov.au</a> during summer months	Weekly or daily during heat wave periods	Contractor



## 8.9. Waste Management

WASTE MANAGEMENT				
	Metric/Measure	Objective	Time Frame	Accountability
Environment Objectives	Contractor Waste Reporting Completed	100%	At all times	Project Manager
	% of regulated/hazardous wastes for which transfer certificates are retained	100%	At all times	Project Manager
	Number of enforcement notices and penalties received from regulators	Zero (0)	At all times	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. <i>National Environment Protection Measures (Movement of Controlled Waste between States and Territories) Measure (2004) (the Controlled Waste NEPM) (Cth)</i></li> <li>2. <i>Environmental Management and Pollution Control Act 1994 (Tas)</i></li> <li>3. <i>Environmental Management and Pollution Control (Waste Management) Regulations 2020</i></li> <li>4. <i>Litter Act 2007 (Tas)</i></li> <li>5. <i>Plumbing Regulations 2004 (Tas)</i></li> <li>6. <i>Water and Sewerage Industry Act 2008 (Tas)</i></li> <li>7. <i>Water and Sewerage Industry (General) Regulations 2009</i></li> </ol>			
Procedures & Tools	<ol style="list-style-type: none"> <li>1. Waste Management Procedure</li> <li>2. Environmental Inspection Checklist – Waste</li> </ol>			

Mitigation Measure	Accountability
All wastes streams must be classified, stored, tracked, transported and treated in accordance with the <b>Waste Management Procedure</b> and any contractual or regulatory requirements, including the use of licensed transport and treatment facilities	Contractor
The relevant licenses of waste facilities utilised for the disposal or handling of waste should be obtained to ensure legal compliance.	EA/Contractor
Adequate and appropriate waste storage must be present onsite at all times for all waste streams present.	Contractor
Waste storage must be clearly sign posted to inform all project personnel of the correct material to be placed within each storage type. Waste containers must be regularly.	Contractor
Burial or burning of waste is not permitted on project sites.	All
Excess concrete and concrete washout is not to be discharged to land or stormwater; a concrete washout facility must always be used (including offsite facilities).	Contractor
All waste volumes must be recorded and provided to TasWater utilizing the Contractor Waste and Water Report Form.	Contractor
Where temporary toilet facilities are used, periodic inspections must be undertaken and a pump out schedule implemented and maintained for longer duration projects.	Contractor
The type and location of environmental control equipment and devices to manage, mitigate and monitor waste management shall be detailed and maintained in the SEP. Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk must be included in the SEP.	EA / Contractor

	Aspect	Monitoring Requirements	Frequency	Accountability
Minimum Monitoring Requirements	Waste mitigation measures	Visual Inspection	Weekly	Contractor
	Waste management	Recording of waste volumes by waste type, including receipts for any disposal.	Reported Monthly to TasWater	Contractor

## 8.10. Contaminated Land Management

CONTAMINATED LAND MANAGEMENT				
	Metric/Measure	Objective	Time Frame	Accountability
Environment Objectives	Minimise contamination / degradation to the environment within the Project area	All contaminated soil is managed and disposed in accordance with EPA Tas IB105	At All times	Project Manager
	All sites with identified contaminated soils or groundwater are managed in a way to mitigate the potential risk to site users (current and future) and the environment.	No unacceptable risk to site users or the environment.	At All times	Project Manager
	All spills are reported and remediated	Zero (0) spills un-reported or cleaned up	At All times	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. <i>National Environment Protection (Assessment of Site Contamination) Measure 1999 (Cth), As amended 2013</i></li> <li>2. <i>National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 2004 (the "Controlled Waste NEPM") (Cth)</i></li> <li>3. <i>Environmental Management and Pollution Control Act 1994 (Tas)</i></li> <li>4. <i>Environmental Management and Pollution Control (Waste Management) Regulations 2020 (Tas)</i></li> </ol>			
Procedures & Tools	<ol style="list-style-type: none"> <li>1. Materials Tracking Form</li> <li>2. Environmental Inspection Checklist – Contaminate Land</li> </ol>			

Mitigation Measure	Accountability
<p>A site contamination management plan must be developed for sites with known contaminated soils and materials in accordance with <i>Information Bulletin No. 105 - Classification and Management of Contaminated Soil for Disposal</i>. The plan must:</p> <ul style="list-style-type: none"> <li>• Identify areas of contamination</li> <li>• Identify the classification of soils in accordance with Information Bulletin No. 105</li> <li>• Provide procedures for the management of the soil for stockpiling, remediation, treatment, reuse or disposal (including completion of <b>Materials Tracking Form</b>) in accordance with Information Bulletin No. 105 and other relevant guidelines and standards.</li> <li>• Identify approval requirements for remediation, treatment, reuse or disposal.</li> </ul>	Contractor
<p>In the event unanticipated contaminated materials are discovered or suspected, works must cease and the EA notified immediately.</p> <p>Classification of potentially contaminated soils is to be undertaken by a suitably qualified and competent person and a management plan developed if required. The assessment must be suitable to classify material in accordance with <i>Information Bulletin No. 105 - Classification and Management of Contaminated Soil for Disposal</i>.</p>	All
Disposal (and transport) of contaminated soil must be undertaken in accordance with the requirements of EPA Tas IB 105 and relevant legislation.	EA / Contractor
All vehicles, plant and other machinery operating in contact with contaminated soil must be decontaminated prior to leaving site.	Contractor
Temporary water management works will be put in-place to capture contaminated runoff from stockpiles and confirmed areas of contamination. Water and sediment will be monitored for quality and managed in accordance with regulatory requirements.	Contractor
<p>The type and location of environmental control equipment and devices to manage, mitigate and monitor contaminated land shall be detailed and maintained in the SEP.</p> <p>Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk must be included in the SEP.</p>	EA / Contractor

	Aspect	Monitoring Requirements	Frequency	Accountability
Minimum Monitoring Requirements	Contaminated land mitigation measures	Visual Inspection	Weekly	Contractor
	Earthworks stripping	Contaminated soils and material - Visual inspection	During stripping	Contractor
	Excavation	Contaminated soils and material - Visual inspection	During excavations	Contractor
	Importing fill material	Contaminated soils and material - Visual inspection	When importing filling material:	Contractor

## 8.11. Acid Sulphate Soil Management

ACID SULFATE SOIL MANAGEMENT				
	Metric/Measure	Objective	Time Frame	Accountability
Environment Objectives	Any disturbed soil identified as exceeding the ASS soil trigger values is treated in accordance with the requirements of the Tasmanian Acid Sulfate Soil Management Guidelines (DPIPWE 2015)	All disturbed ASS is controlled or treated	At all times	Project Manager
		All leachate from ASS stockpiles is captured and treated	At all times	Project Manager
	Develop and implement adequate measures to prevent impact to the surrounding environment.	Zero (0) leachate released to the environment	At all times	Project Manager
		Zero (0) harm to the surrounding environment	At all times	Project Manager
		Water quality monitoring result are below the nominated trigger levels	At all times	Project Manager
	Number of enforcement notices / penalties issued by regulators	Zero (0)	At all times	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. <i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i></li> <li>2. <i>Environmental Management and Pollution Control Act 1994 (Tas)</i></li> <li>3. <i>Environment Protection (Sea Dumping Act) 1981</i></li> <li>4. <i>State Coastal Policy 2006 (Tas)</i></li> </ol>			
Knowledge, Procedures & Tools	<ol style="list-style-type: none"> <li>1. Acid Sulphate Soil Management Procedure</li> <li>2. Materials Tracking Form</li> <li>3. Environmental Inspection Checklist – ASS</li> </ol>			

Mitigation Measure	Accountability
<p>An acid sulfate soils management plan must be developed for sites with known ASS/PASS soils in accordance with the <i>Tasmanian Acid Sulfate Soil Management Guidelines</i> (DPIPWE 2015). The plan must:</p> <ul style="list-style-type: none"> <li>• Identify areas of PASS/ASS materials within the site</li> <li>• Provide procedures for the management of ASS/PASS soils, including stockpiling, remediation, treatment (lime dosing), reuse or disposal in accordance with relevant guidelines and standards.</li> <li>• Identify approval requirements for disposal.</li> </ul>	Contractor
<p>In the event unanticipated PASS materials are discovered or suspected, the following must be undertaken:</p> <ul style="list-style-type: none"> <li>• Works must cease, and the EA notified immediately, with works to remain ceased until the all clear to proceed has been given.</li> <li>• Field screening tests must be conducted in accordance with the <i>Tasmanian Acid Sulfate Soil Management Guidelines</i> (DPIPWE 2015) by a suitably qualified person.</li> <li>• Laboratory testing must be undertaken in the event PASS are identified from the screening test.</li> <li>• In the event ASS soils are identified from the laboratory testing, an acid sulfate soils management plan must be developed in accordance with the <i>Tasmanian Acid Sulfate Soil Management Guidelines</i> (DPIPWE 2015).</li> </ul>	EA / Contractor
All known areas of ASS/PASS will be communicated to site personnel via site induction, toolbox	Contractor

Mitigation Measure	Accountability
talks, pre-starts and Site Environmental Plans.	
The movement of ASS/PASS materials must be tracked via a <b>Materials Tracking Form</b> .	Contractor
Water runoff from ASS/PASS stockpiles must be contained, treated and suitably disposed of.	Contractor
A spill of ASS/PASS material outside of the ASS/PASS storage and/or treatment areas must be reported to the EA immediately.	All
The type and location of environmental control equipment and devices to manage, mitigate and monitor ASS/PASS shall be detailed and maintained in the SEP. Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk must be included in the SEP.	EA / Contractor

Minimum Monitoring Requirements	Aspect	Monitoring Requirements	Frequency	Accountability
	Acid Sulfate Soil mitigation measures	Visual Inspection	Weekly	Contractor

## 8.12. Energy and Greenhouse Gas (GHG) Management

ENERGY & GHG MANAGEMENT				
	Metric/Measure	Objective	Time Frame	Accountability
Environment Objectives	100% of all contractor fuel use by the is reported monthly.	All contractor fuel use reported and collated in Rapid Global.	Monthly	Project Manager
Legislation	<ol style="list-style-type: none"> <li>1. <i>Climate Change Act 2010 (Cth)</i></li> <li>2. <i>National Greenhouse and Energy Reporting Act 2007 (Cth)</i></li> <li>3. <i>National Greenhouse and Energy Reporting Regulations 2008 (Cth)</i></li> <li>4. <i>National Greenhouse and Energy Reporting (Measurement) Determination 2008 (Cth)</i></li> <li>5. <i>Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 (Cth)</i></li> <li>6. <i>Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995 (Cth)</i></li> </ol>			
Procedures & Tools	1. Environmental Inspection Checklist – Energy and GHG			

Mitigation Measure	Accountability
Project fuel consumption to be recorded.	Contractor
Energy efficiency principles will be communicated through tool box talks and other site communication forums and tools.	Contractor
Construction machinery, plant and equipment shall be switched off when not in use.	All
Construction machinery, plant and equipment shall be modern to maximise efficient use of fuel	All

Minimum Monitoring Requirements	Aspect	Monitoring Requirements	Frequency	Accountability
	Fuel Usage Monitoring	Record volumes and types of fuels used	Monthly reporting	Contractor

### 8.13. Water Management

WATER MANAGEMENT				
	Metric/Measure	Objective	Time Frame	Accountability
Environment Objectives	Number of enforcement notices / penalties issued by regulators	Zero (0)	At all times	Project Manager
	Number of recorded marine fauna injuries or fatalities resulting from in-water construction activities	Zero (0)	At all times	Project Manager
	Number of floating and submersible plant and equipment entering marine areas of the project without a documented invasive marine pest risk assessment	Zero (0)	At all times	Project Manager
	Water use monitored	>=90% of water use activities metered	At all times	EA
Legislation	<ol style="list-style-type: none"> <li>1. <i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i></li> <li>2. <i>Biosecurity Act 2015 (Cth)</i></li> <li>3. <i>Environmental Management and Pollution Control Act 1994 (Tas)</i></li> </ol>			
Knowledge, Procedures & Tools	<ol style="list-style-type: none"> <li>1. Working In and Around Water Procedure</li> <li>2. Weed, Pest and Disease Management Procedure</li> <li>3. Invasive Marine Pests Risk Assessment</li> <li>4. Plume Observation Form</li> <li>5. Dewatering and Bypass Pumping Procedure</li> <li>6. Environmental Inspection Checklist – Water</li> </ol>			

Mitigation Measure	Accountability
All floating and submersible plant and equipment to be used for the project must be disinfected and clean prior to use in an aquatic environment.	Contractor
Silt curtains must be used in waterways around activities that present a risk of sediment disturbance or sedimentation.	Contractor
Aquatic spill kits must be present at activities that occur near or within waterways.	Contractor
Refueling must not occur within 30m of a waterway (without appropriate controls in place).	Contractor
Sediments to be disturbed must be sampled for contamination in non-pristine environments such as ports and polluted waterways prior to disturbance.	Contractor / EA
A dredge management plan must be developed for sites requiring dredging activities.	Contractor
Marine vessels and equipment must have all required Introduced Marine Pest (IMP) inspections completed and documentation in place prior to mobilisation to the project site.	Contractor
When working in or around drinking water catchments, all potential public health threats to the water supply must be reported to the TasWater EA immediately.	Contractor
The type and location of environmental control equipment and devices to manage, mitigate and monitor impacts to aquatic environments shall be detailed and maintained in the SEP. Additional management and mitigation measures required to address site-specific conditions, legal requirements, and risk must be included in the SEP.	EA / Contractor



Minimum Monitoring Requirements	Aspect	Monitoring Requirements	Frequency	Accountability
	In-water mitigation measures	Visual Inspection	Daily	Contractor
	In-water construction	Plume Observations	Hourly	Contractor
	In-water construction	Marine Fauna Observation	Continuous	Contractor