

# **Victorian Desalination Project**



## **Environmental Management Plan Attachment 5 – Environmental Incident Response Plan**

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## Table of Contents

1	<b>Purpose</b> .....	5
2	<b>Scope</b> .....	5
3	<b>Identification of Potential Environmental Incidents and Emergencies</b> .....	6
4	<b>Regulatory, Contractual and Other Requirements</b> .....	6
5	<b>Preventative Measures to Minimise the Risk of Environmental Incidents</b> .....	6
6	<b>Location of EIRP, Information on Hazardous Substances and Spill Containment Equipment</b>	6
7	<b>Environmental Roles and Responsibilities</b> .....	7
8	<b>Classification of Environmental Incidents</b> .....	8
9	<b>Environmental Incident Response</b> .....	9
10	<b>Environment Incident Notification</b> .....	11
	10.1 Environmental Incident Notification Requirements .....	11
	10.2 Emergency Services .....	11
11	<b>Environment Incident Investigation</b> .....	11

## Figures

Figure 1.	Environmental Incident Response Flow Chart.....	10
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## Tables

Table 1.	Project Team Structure, Roles, Responsibilities and Authorities for Environmental Incidents. ....	7
Table 2.	Classes of Environmental Incidents.....	9

## Appendices

<b>ATTACHMENT 5-A: ENVIRONMENTAL INCIDENT PROCEDURE</b> .....	12
<b>ATTACHMENT 5-C: ENVIRONMENT INCIDENT CLASSIFICATION MATRIX</b> .....	14

Environmental Management Plan  
Attachment 5 – Environmental Incident  
Response Plan

## Definitions and Acronyms

The following Definitions and Acronyms are used in this document:

Class One Environmental Incident	Class One Environmental Incidents create permanent or long term damage to the environment. This damage will result in the environment taking 12 months or more to return to pre-existing conditions or costs in excess of \$50,000 to remediate (see Attachment 5-C).
Class Two Environmental Incident	Class Two Environmental Incidents create short to medium term damage to the environment. This damage will result in the environment taking up to 12 months to return to pre-existing conditions or costs in excess of \$10 000 but not exceeding \$50,000 to remediate (see Attachment 5-C).
Class Three Environmental Incident	Class Three Environmental Incidents typically cause short term or nuisance damage. The damage is easily rectified usually within one day. Class 3 incidents do not cause medium or long term damage or costs less than \$10 000 to remediate (see Attachment 5-C).
DWSS	Desalinated Water Supply System, including the Desalination Plant, Transfer Pipeline and Power Supply (until the Electricity Handover Date when the Electricity Transmission and Connection Assets are handed over to the State or its nominee such as the Electricity Operator)
DELWP	Department of Environment, Land, Water and Planning (formerly Department of Environment and Primary Industries – DEPI)
EES	Environment Effects Statement
EIRP	Environmental Incident Response Plan
Emergency Response Services	May, as appropriate, mean police, ambulance, fire brigades, state emergency services, hospitals or other specialist groups
EMP	Environmental Management Plan
EMR	Environmental Management Representative
EMS	Environmental Management System
Environmental Hazard	Means a state of danger to human beings or the environment whether imminent or otherwise resulting from the location, storage or handling of any substance having toxic, corrosive, flammable, explosive, infectious or otherwise dangerous characteristics (s.4, <i>Environment Protection Act 1970</i> )
Environmental Incident	Any event that causes, has caused, or has the potential to cause an Environmental Hazard or Pollution (from section 4, Appendix S3, PS&PR). [Please see the definition of Environmental Hazard. Please see the definitions of <i>Pollution of Atmosphere</i> , <i>Pollution of Land</i> and <i>Pollution of Waters</i> for the legislative definitions of 'Pollution' in Victoria.]
EPA	Victorian Environment Protection Authority
EP Act	<i>Environment Protection Act 1970</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth)
MSDS	Material Safety Data Sheets
Near Hit	Any unplanned event in the workplace that, although not resulting in environmental damage, had the potential to do so
O&M	Operation and Maintenance
O&M activities	All things and tasks which are, or may be, required to operate, maintain or repair the Desalinated Water Supply System.
OHS	Occupational Health and Safety
Performance Criteria	The Performance Criteria outline the overarching requirements based on the environmental objective for each Subject Area of Schedule A of Appendix S3 of the Project Scope and Project Requirements

Environmental Management Plan  
Attachment 5 – Environmental Incident  
Response Plan

Pollution of Atmosphere (s.41, <i>Environment Protection Act 1970</i> )	<p>A person shall not pollute the atmosphere so that the condition of the atmosphere is so changed as to make or be reasonably expected to make the atmosphere—</p> <ul style="list-style-type: none"> <li>a) noxious or poisonous or offensive to the senses of human beings;</li> <li>b) harmful or potentially harmful to the health, welfare, safety or property of human beings;</li> <li>c) poisonous, harmful or potentially harmful to animals, birds or wildlife;</li> <li>d) poisonous, harmful or potentially harmful to plants or other vegetation; or detrimental to any beneficial use made of the atmosphere.</li> </ul>
Pollution of Land (s.45, <i>Environment Protection Act 1970</i> )	<p>A person shall not pollute land so that the condition of the land is so changed as to make or be reasonably expected to make the land or the produce of the land—</p> <ul style="list-style-type: none"> <li>a) noxious or poisonous;</li> <li>b) harmful or potentially harmful to the health or welfare of human beings;</li> <li>c) poisonous, harmful or potentially harmful to animals, birds or wildlife;</li> <li>d) poisonous, harmful or potentially harmful to plants or vegetation;</li> <li>e) obnoxious or unduly offensive to the senses of human beings; or</li> <li>f) detrimental to any beneficial use made of the land.</li> </ul>
Pollution of Waters (s.39, <i>Environment Protection Act 1970</i> )	<p>A person shall not pollute any waters so that the condition of the waters is so changed as to make or be reasonably expected to make those waters—</p> <ul style="list-style-type: none"> <li>a) noxious or poisonous;</li> <li>b) harmful or potentially harmful to the health, welfare, safety or property of human beings;</li> <li>c) poisonous, harmful or potentially harmful to animals, birds, wildlife, fish or other aquatic life;</li> <li>d) poisonous, harmful or potentially harmful to plants or other vegetation; or</li> <li>e) detrimental to any beneficial use made of those waters.</li> </ul>
PS&PR	Project Scope and Project Requirements
SEPP	State Environment Protection Policy
SEWPAC	Commonwealth Department of Sustainability, Environment, Water, Population and Communities
VDP	Victorian Desalination Project
WTS	Watersure (Suez Water and Treatment Services Pty Ltd & Ventia Utility Services Pty Ltd, trading as Watersure)

## 1 Purpose

The purpose of this Environmental Incident Response Plan (EIRP) is to provide project specific details for the identification of and response to potential environmental related incidents for Operation and Maintenance (O&M) activities of the Victorian Desalination Project (VDP).

This EIRP is a document for specific use by the Watersure (WTS) Environment Team, to respond to management of potential and actual environmental incidents. It provides guidance on potential environmental incidents, and the mitigation strategies to manage these potential incidents, as well as response to actual incidents, and follow-up and reporting requirements.

This EIRP is a key attachment (Attachment 5) to the O&M Environment Management Plan (EMP). It is also a relevant, but not limited to, the following EMP documents:

- Attachment 2 – Environmental Obligations Register
- Attachment 3 – Environmental Risk Register
- Attachment 4 – Environmental Monitoring Schedule

This EIRP should be read in conjunction with the following WTS documents:

- O&M Manuals
- Incident Management Plan
- Crisis Management Plan
- Risk Management Plan
- Critical Infrastructure Protection Plan.

## 2 Scope

This EIRP has been developed to comply with relevant regulatory requirements for the identified environmental risks, and the environmental incident response requirements of the Project Deed, specifically clause 4 of Appendix S3 to Annexure 3. For ease of reference, the specific Project Deed requirements are clearly identified in this document.

Emergency / Environmental Incident procedures must detail the actions to be followed in the event of an Incident. An Environmental Incident is defined as any event that causes, has caused or has the potential to cause an Environmental Hazard or Pollution. Appendix S3(4) of the Project Deed states that the Emergency / Environmental Incident procedures must provide the following:

- a) an assessment of the types of Incidents and emergencies that might impact on the environment and their potential causes and consequences (refer to section 3)
- b) preventative measures required to minimise the risk of Incidents and emergencies which may be incorporated into the Environmental Management Plan (refer to section 5)
- c) names and contact details of key response authorities including Emergency Services (refer to Attachment 5-A)
- d) names of key project response personnel and contact details (including after hours telephone numbers) (refer to Attachment 5-A)
- e) project personnel responsibilities (refer to section 7)
- f) location of on-site information on hazardous materials and dangerous substances, and spill containment equipment or structures (refer to section 6)
- g) a procedure for site personnel to follow to minimise/control the emergency/incident e.g. spill management (refer to section 9)
- h) procedures for notifying the on-site staff, contractors, regulatory agencies, and public, if required (refer to section 10).

### **3 Identification of Potential Environmental Incidents and Emergencies**

All O&M activities are assessed as part of the risk assessment process undertaken as a requirement of the EMP, and presented in the Environmental Risk Register, which is Attachment 3 to the EMP. The Environmental Risk Register is “live” document.

Types of potential incidents associated with O&M activities that could impact on the environment, and their consequences, are identified and included in the Environmental Risk Register (Attachment 3). An assessment of the potential significance of these risks is included in the Register, based on the ISO 31000:2018 *Risk management – Principles and guidelines*.

The Environmental Risk Register should be referred to for the identification and significance of potential environmental impacts associated with O&M activities.

The Environmental Risk Register also contains details on the O&M control measures.

The Environmental Risk Register will be reviewed at least annually during the O&M phase or at other times such as when new aspects or impacts are identified or new activities proposed, to ensure that all activities and credible potential incident scenarios are identified.

### **4 Regulatory, Contractual and Other Requirements**

The Environmental Obligations Register (presented as Attachment 2 to the EMP) identifies all Commonwealth and State environmental requirements (legislation, approvals, licences, permits and policies), and the Project Deed requirements relevant to the O&M activities.

### **5 Preventative Measures to Minimise the Risk of Environmental Incidents**

The likelihood of potentially significant environmental impacts can be reduced and/or the potential impacts mitigated by implementation of appropriate preventative measures. These preventative measures for identified potentially significant environmental issues are documented in the relevant O&M Manuals and management plans. Refer to the Environmental Risk Register for references to relevant O&M Manuals and management plans respectively.

The Environment Manager will be responsible for providing O&M personnel with guidance on the implementation of effective measures to appropriately manage the possible occurrence of these potentially significant environmental impacts identified through the risk assessment process. Responsibilities for implementing these measures are identified in the relevant O&M Manuals and management plans.

### **6 Location of EIRP, Information on Hazardous Substances and Spill Containment Equipment**

Paper copies of this EIRP are kept in the WTS Emergency Response Packs held by the Duty Manager (Incident Coordinator) and Plant Control Room.

An inventory of hazardous substances and materials is provided and maintained, and will be available at all times. Copies of this inventory and the Safety Data Sheets (SDS) are accessed as follows:

- At the main site entrance,
- At bulk chemical storage locations
- At each First Aid Station
- Attached to Permits to Work (where relevant)
- Electronically via the Chemical Management Database within Paradigm..

In the event of an emergency situation involving hazardous substances, the O&M Manuals contain emergency procedures which reference the SDS on hazardous substances or materials, and inform users with vital information on providing first aid, combating fires and managing spills. O&M Manuals are accessed at the plant control room and from the Integrated Management System (IMS) documentation within Paradigm.

Environmental Management Plan  
Attachment 5 – Environmental Incident  
Response Plan

The Environment Manager ensures that the current version of the O&M Manuals is available to all operation team members and issues controlled or uncontrolled copies to applicable external organisations where necessary.

A detailed map of the Desalination Plant – showing the location of the hazardous substances and materials inventory and database is provided at Attachment 5-B. Emergency management signage is deployed around the site to mark first aid facilities, emergency assembly areas and fire protection services (for further details refer to the Incident Management Plan).

Spill kits are always located near the First Aid Stations and in each active work area along the Transfer Pipeline. Spill kits are checked as part of the monthly environmental inspection (see Environmental Monitoring Schedule – Environmental performance inspection). Additional spill kits and replacement materials are kept onsite in the stores areas.

## 7 Environmental Roles and Responsibilities

Various members of the WTS O&M Team have responsibilities for minimising the potential for and in responding to environmental incidents. Table 1 outlines the key team members and levels of authority. Broader environmental management roles and responsibilities associated with O&M activities are described in the EMP.

**Table 1. Project Team Structure, Roles, Responsibilities and Authorities for Environmental Incidents.**

Title	Responsibility
WTS Plant Director	<p>Implements and ensures compliance with the requirements of the Environmental Incident Response Plan. Ensures adequate funds, resources and allocates responsibilities to effectively develop, implement and maintain the Plan.</p> <p>Manages all formal communication with external authorities and media as per the WTS Stakeholder Engagement Plan.</p> <p>Ensures that appropriate reporting to DELWP, EPA and other regulatory agencies is actioned as appropriate, in accordance with the severity and status of the incident (as defined in Attachment 5-C).</p> <p>Reviews the outcome and close out of all major incidents with the Operations Manager, Contract &amp; Compliance Manager and Environment Manager.</p>
WTS Operations Manager	<p>Ensures O&amp;M Manuals and management plans are implemented to ensure environmental risks are correctly managed in accordance with identified best practices. Reviews the outcome and close out of all major incidents with the Plant Director, Contract &amp; Compliance Manager and Environment Manager.</p>
WTS Contract & Compliance Manager	<p>Ensures WTS satisfies all its contractual, legal and reporting requirements. Coordinates community related activities. Reviews the outcome and close out of all major incidents with the Plant Director, Operations Manager and Environment Manager.</p>
WTS Environment Manager	<p>Participate and lead development of relevant O&amp;M Manuals and management plans to ensure environmental risks are correctly managed in accordance with identified best practices.</p> <p>Ensure environmental systems are functioning correctly through training, awareness, audits and reviews. Training includes Environmental Incident classification (Attachment 5-C) and the notification requirements (Attachment 5-A).</p> <p>Advise Operations Manager to cease work immediately if observed likely damage to environment.</p> <p>Inform Operations Manager and Contract &amp; Compliance Manager of corrective actions.</p> <p>Conduct reviews of the Risk Register at least annually during the O&amp;M phase or at other times such as when new aspects or impacts are identified or new activities proposed</p> <p>The Environment Manager will be informed in the event of a Class 1 or 2 events immediately or a Class 3 during the current shift.</p> <p>Responsible for ensuring that all measures to contain, clean up and rectify the event have been completed and where necessary informing the Contract &amp; Compliance Manager, Operations Manager Plant Director, AquaSure EMR, DELWP, EPA and other</p>

Environmental Management Plan  
Attachment 5 – Environmental Incident  
Response Plan

Title	Responsibility
	<p>appropriate regulatory authorities within the specified timeframes (as nominated in Attachment 5-A).</p> <p>Reviews the outcome and close out of all major incidents with the Plant Director, Operations Manager and Contract &amp; Compliance Manager.</p>
AquaSure Environment Management Representative (EMR)	<p>Responsible for ensuring that all Class 1, 2 and 3 environmental incidents have been appropriately responded to, and that corrective actions have been effectively implemented.</p> <p>Conduct audits and reviews of the EMS and O&amp;M EMP (including implementation).</p> <p>Responsible for ensuring that all measures to contain, clean up and rectify the event have been completed and where necessary ensuring that the Plant Director, DELWP, EPA and other appropriate regulatory authorities have been notified (as nominated in Attachment 5-A).</p> <p>Ensure that all incidents including Class 3 environmental incidents are reported (as a minimum) on a monthly basis in the Monthly Report to AquaSure and DELWP.</p>
WTS Health, Safety & Environment	<p>Conduct surveillance of O&amp;M activities to confirm systems are being implemented, and stop work immediately if observed likely damage to environment. Inform Site Supervisor and Environment Manager.</p> <p>HSE should notify the Environment Manager immediately in the event of a Class 1 or 2 event, during the current shift for a Class 3 event, and ensure that all measures to contain, clean up and rectify the event have been completed.</p>
All WTS staff, employees and contractors	<p>Comply with the management plans and O&amp;M Manuals, particularly environmental risk mitigation measures. Conduct regular environmental inspections in accordance with job responsibilities. If a likelihood of damage occurring to the environment as a result of O&amp;M activities, notify their supervisor, and take appropriate corrective action including following the relevant O&amp;M Manual emergency procedures, Incident Management Plan or similar corrective actions. Ensure communication external to the project regarding incidents occurs through the designated channels.</p> <p>All Staff, employees and contractors should inform the Environment Manager immediately in the event of a Class 1 or 2 event, and during the current shift for a Class 3 event.</p>

All staff will be made aware of the requirement to notify relevant supervisor and the Environment Manager of potential and actual incidents. All personnel working on the site will be made aware of the internal incident notification requirements through inductions and the procedures in relevant O&M Manuals. When on site, all visitors will be under the direction of a fully inducted escort, who will be responsible for that visitor/s at all times including during an emergency event. Any personnel with incident/ complaint response or incident investigation responsibilities shall be appropriately trained.

The EIRP is principally a document for the Environment Manager or delegate to use when responding to potential or actual incidents with environmental issues involved. However all O&M personnel affected by this EIRP have access to a copy via the WTS Management System.

## 8 Classification of Environmental Incidents

For the purposes of response and reporting arrangements, environmental Incidents are classified into three classes, as summarised in Table 2.



**Table 2. Classes of Environmental Incidents**

Class One	Class Two	Class Three
<p>Class One Environmental Incidents create permanent or long term damage to the environment. This damage will result in the environment taking 12 months or more to return to pre-existing conditions.</p> <p>Cost: &gt; \$50,000 to clean up.</p>	<p>Class Two Environmental Incidents create short to medium term damage to the environment. This damage will result in the environment taking up to 12 months to return to pre-existing conditions.</p> <p>Cost: \$10,000 to \$50,000 to clean up.</p>	<p>Class Three Environmental Incidents typically cause short term or nuisance damage. The damage is easily rectified usually within one day. Class 3 incidents do not cause medium or long term damage.</p> <p>Cost: &lt; \$10,000 to clean up.</p>

The classifications, including sub-categories are explained in further detail in Attachment 5-C – Environmental Incident Classification Matrix.

## 9 Environmental Incident Response

All environmental incidents will be responded to in accordance with the following documents:

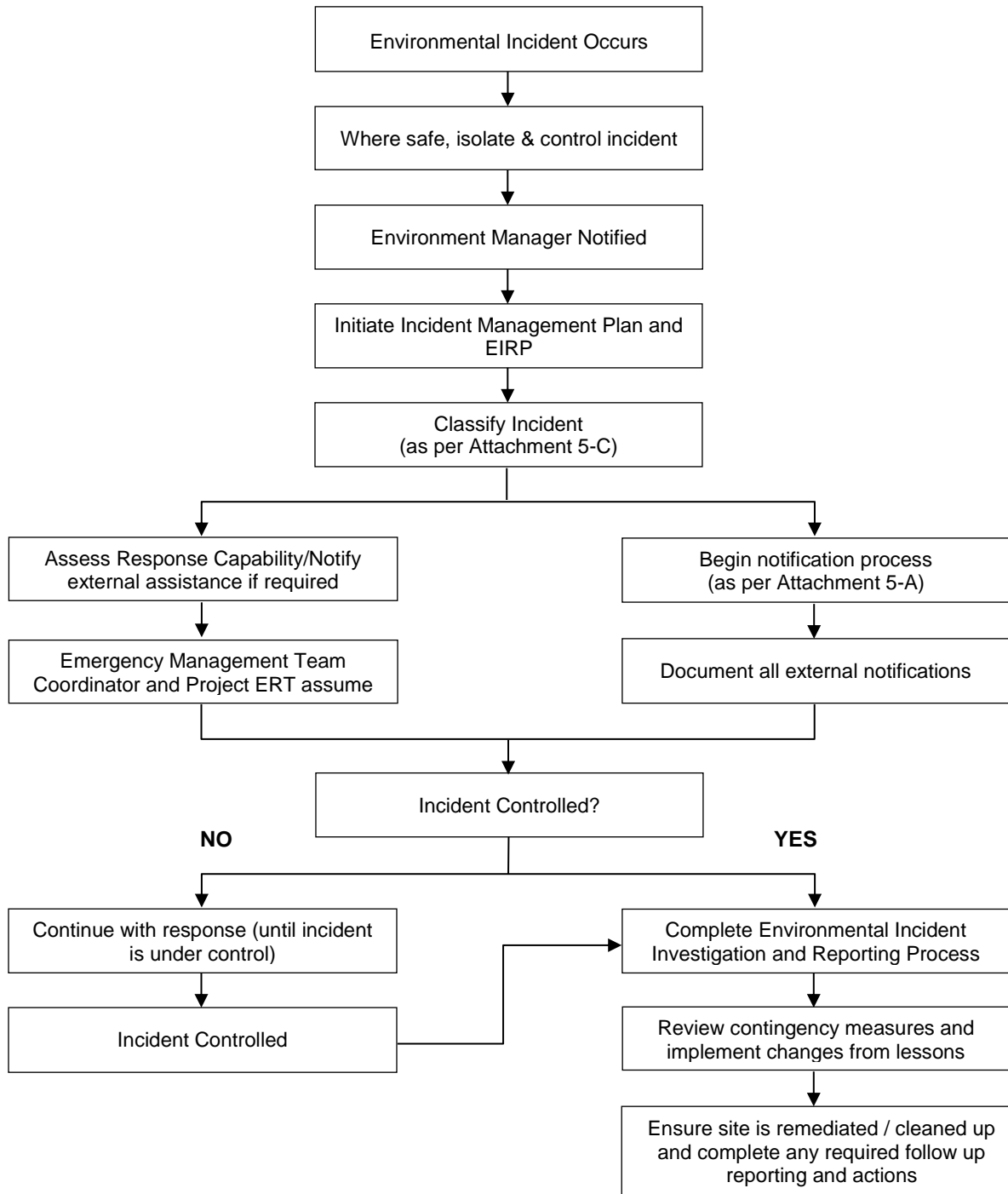
- Relevant O&M Manual emergency procedures.
- Incident Management Plan.
- EPBC Act Emergency Incident Environmental Management Strategy.

Incidents will be responded to as outlined in the environmental incident response flow chart (Figure 1). In summary:

1. STOP WORK and NOTIFY INTERNAL Supervisor and Environment Manager. (Duty Manager to be notified if the Environment Manager is not available).
2. PREVENT further environmental contamination/ spillage / pollution etc. (if safe to do so).
3. CONTAIN environmental contamination/ spill / pollution.
4. CLEAN UP environmental contamination/ spill / pollution.
5. WTS Environment Manager to NOTIFY EXTERNAL contacts (see section 10). (Duty Manager to provide external notifications if the Environment Manager is not available)

Environmental Management Plan  
 Attachment 5 – Environmental Incident  
 Response Plan

**Figure 1. Environmental Incident Response Flow Chart**



## **10 Environment Incident Notification**

### **10.1 Environmental Incident Notification Requirements**

A master contacts list of incident / emergency response personnel will be kept in the EIRP (not distributed widely) and updated as regularly as required (Attachment 5-A). This notification protocol must be strictly complied with for all Classes of Environmental Incidents.

Notification and escalation to AquaSure and other stakeholders will follow the Environmental Incident Procedure (Attachment 5-A). The Environment Manager (or Duty Manager if the Environment Manager is not available) will report Class 1 and 2 environmental incidents to DELWP and EPA (as relevant) as soon as practicable within 30 minutes of the incident occurring.

### **10.2 Emergency Services**

Refer to the Incident Management Plan for notification requirements for all types of incidents. The Emergency Services contact details will be displayed in the plant control room and at first aid facilities (Attachment 5-A).

Additionally, site information will be produced to inform O&M personnel of which personnel are primary responders' e.g. first aiders, wardens, site safety representatives.

The Environment Manager will coordinate the review and updating of the contact listing details and ensure the current qualifications of the listed persons at a minimum of six monthly intervals. All personnel issued with a company mobile phone shall be encouraged to keep emergency numbers in their mobile phone directories.

## **11 Environment Incident Investigation**

In the event of an environmental incident, and regardless of severity, the Plant Director and Environment Manager will ensure that all incidents are thoroughly investigated with the findings and outcomes recorded and identifying corrective action implemented. All incident investigations will be undertaken in a timely manner with investigations and reporting timeframes varying based on incident specifics. All incident investigations will be undertaken in accordance with Incident Management Plan.

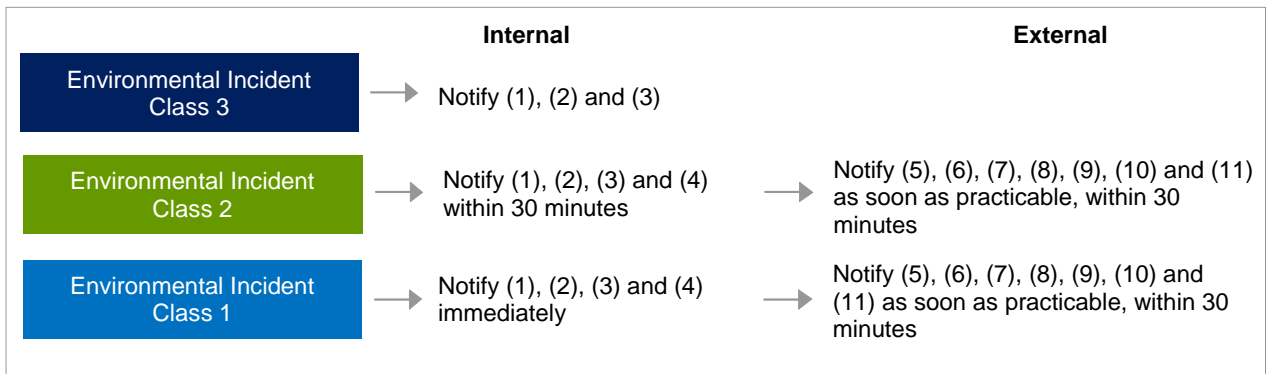
A properly planned, executed and followed up incident investigation will have some or all of the following benefits:

- Reducing the probability of a repeat of the specific incident.
- Reducing the probability of related incidents.
- Reducing the probability of incidents that share some contributing factors with the specific incident.
- Identifying and initiating action on unrelated problems found as a by-product of the investigation.
- Providing the data required to detect developing trends that can be analysed to identify specific or recurring problems.

## ATTACHMENT 5-A: ENVIRONMENTAL INCIDENT PROCEDURE

All Environmental Incidents (e.g. spills/pollution incidents) (class 1, 2 and 3)

1. STOP WORK and NOTIFY INTERNAL Supervisor and Environment Manager (see 6)  
(Duty Manager to be notified if the Environment Manager is not available.)
2. PREVENT further environmental contamination/ spillage/ pollution etc. (if safe to do so)
3. CONTAIN environmental contamination/ spill/ pollution etc.
4. CLEAN UP environmental contamination/ spill/ pollution etc.
5. Environment Manager to NOTIFY EXTERNAL contacts (see 6).  
(Duty Manager to provide external notifications if the Environment Manager is not available.)
6. NOTIFICATION DETAILS:



1. WTS Environment Manager	Name: [REDACTED] Contact: [REDACTED]
2. WTS Contract & Compliance Manager	Name: [REDACTED] Contact: [REDACTED]
3. WTS Operations Manager	Name: [REDACTED] Contact: [REDACTED]
4. WTS Plant Director	Name: [REDACTED] Contact: [REDACTED]
5. AquaSure Environmental Management Representative (EMR)	Name: [REDACTED] Contact: [REDACTED]
6. AquaSure Communications Manager	Name: [REDACTED] Contact: [REDACTED]
7. DELWP representatives	Name: [REDACTED] Contact: [REDACTED]
8. EPA Representative	Name: [REDACTED] Contact: [REDACTED]
9. Victorian EPA Pollution Watch	Hotline: 1300 372 842
10. DELWP Public Land Services	Name: [REDACTED] Contact: [REDACTED]
11. Other relevant regulatory authorities	*See emergency contact details (below)

Environmental Management Plan  
Attachment 5 – Environmental Incident  
Response Plan

<b>*Emergency contacts</b>	<b>Telephone number</b>
Police	000
Ambulance	000
Fire Services	000
Victorian State Emergency Service (SES)	132 500
Environment Protection Authority, Victoria (EPA)	1300 372 842
Cardinia Shire Council	1300 787 624
Bass Coast Shire Council	1300 226 278 or 03 5671 2211
City of Casey	03 9705 5200
VicRoads – Hazard Reporting & Traffic Enquiries	13 11 70
Department of Environment, Land, Water & Planning (DEWLP)- General	13 61 86
DEWLP - Threatened species	13 61 86
Fisheries (DEWLP / DEPI) – General	13 61 86
Fisheries (DEWLP / DEPI) – Cowes	03 5952 5910
Parks Victoria (DEWLP)	13 19 63
Victorian Department of Premier & Cabinet – Aboriginal Victoria (includes Cultural Heritage Enquiries & Aboriginal Heritage Register)	1800 762 003
Victorian Aboriginal Heritage Council	(03) 9208 3243
Electricity Distributor – AusNet Services – Faults & Emergencies	13 17 99
Water Distributor - South Gippsland Water – Faults & Emergencies	1300 851 636 or 03 5682 0444
Telecommunications Provider – Telstra – Business Customer Faults	13 29 99
Hospital - Bass Coast Regional Health, Wonthaggi Hospital	(03) 5671 3333

Note: The last person to be notified in each step is responsible for notifying the next level of management.

Note: The Environment Manager will update the contact details to reflect current project personnel as required.

**For environmental incidents which cannot be dealt with using equipment available on site contact the emergency services.**

**Warnings must be followed for hazardous chemicals. NO SMOKING, EATING or DRINKING in the vicinity of a spill. Used incident response equipment must be collected up and correctly disposed of**

## ATTACHMENT 5-C: ENVIRONMENT INCIDENT CLASSIFICATION MATRIX

### CLASSIFICATION MATRIX

#### ENVIRONMENTAL

Damage Incurred	Incident Type	Environmental Incident Type	Classification		
			Class 1	Class 2	Class 3
Yes	Environmental Harm	B - Controlled & uncontrolled discharges to water	Major and persistent discharge of pollutant to water outside site or workplace. Major long-term impact on water resources e.g. <ul style="list-style-type: none"> <li>acid drainage run-off from mining operations;</li> <li>tailings dam failure;</li> <li>extensive contamination / pollution of groundwater or water catchment areas.</li> </ul>	Major or persistent discharge to water. Short-term impact on water resources e.g. <ul style="list-style-type: none"> <li>oil spill escapes into stormwater or watercourse;</li> <li>operations cause minor pollution of groundwater in localised area(s);</li> <li>uncontrolled discharge from sedimentation basin via emergency spillway above allowable limits.</li> </ul>	Minor pollutant discharge to water. No impact on water resources e.g. <ul style="list-style-type: none"> <li>discharge from sedimentation basin above allowable limits;</li> <li>uncontrolled discharge of site drainage run-off water.</li> <li>placement of material in a location where it could potentially result in pollution.</li> <li>Spill less than 1 litre of oil</li> </ul>
		C - Contamination of land	Major spill or escape of hydrocarbons or chemicals. <ul style="list-style-type: none"> <li>persistent contamination of land.</li> <li>spill may or may not be contained to defined area(s) within site or workplace.</li> <li>extensive cleanup required.</li> <li>spill greater than 5000 litres from operations or storage into ground.</li> </ul>	Significant spill of hydrocarbons or chemicals. <ul style="list-style-type: none"> <li>some residual contamination of land.</li> <li>spill contained to defined area(s) within site or workplace.</li> <li>significant cleanup required over and above removal of contaminated material to land farm or nominated / approved waste area.</li> <li>spill greater than 1000 litres.</li> </ul>	Minor spill of hydrocarbons or chemicals. <ul style="list-style-type: none"> <li>no residual contamination of land.</li> <li>spill contained to defined area(s) within site or workplace.</li> <li>no significant cleanup required other than removal of contaminated material to land farm or nominated / approved waste area.</li> <li>spill less than 1000 litres.</li> </ul>
		D - Controlled & uncontrolled emissions to atmosphere	Major or persistent discharge of hazardous pollutant to atmosphere outside site or workplace e.g. <ul style="list-style-type: none"> <li>explosion or leak of hazardous gas;</li> <li>possible or actual evacuation of local vicinity;</li> <li>risk to human health or the environment.</li> </ul>	Major or persistent release of pollutant to atmosphere outside site or workplace: <ul style="list-style-type: none"> <li>some contained risk to human health.</li> </ul>	Minor discharge of pollutant to atmosphere outside site or workplace e.g. <ul style="list-style-type: none"> <li>overflow of cement silo, cement dust release;</li> <li>no risk to human health.</li> </ul>

Environmental Management Plan  
 Attachment 5 – Environmental Incident  
 Response Plan

	E - Noise, dust, vibration & odour	<p>Generation of dust, noise, vibration or odour causing damage to property outside site or workplace, the environment or human health e.g.</p> <ul style="list-style-type: none"> <li>• noise generated causes damage to hearing and human health;</li> <li>• non-contained hazardous dust generation i.e. asbestos dust with potential long term damage to human health;</li> <li>• vibration causes damage to property.</li> </ul>	<p>Generation of dust, noise, vibration or odour causing sustained periods of inconvenience or disruption to community and the environment e.g.</p> <ul style="list-style-type: none"> <li>• sustained generation of dust with inadequate dust suppression, causing nuisance or local hazard.</li> </ul>	<p>Generation of dust, noise, vibration or odour causing periodic inconvenience or disruption to community and the environment e.g.</p> <ul style="list-style-type: none"> <li>• occasional breach of noise restrictions outside approved hours i.e. concrete pour takes longer than planned.</li> </ul>
	F - Solid and other wastes	<p>Unapproved storage, transport, treatment or disposal of a significant quantity (10,000 lt, 10 tonnes or 10.0 M<sup>3</sup>) of hazardous waste (solid or other) not easily removed to an appropriate location.</p>	<p>Unapproved storage, transport, treatment or disposal of a significant quantity (10,000 lt, 10 tonnes or 10.0 M<sup>3</sup>) of non-hazardous waste or minor quantity (205 lt, 200 Kg or 0.2 M<sup>3</sup>) of hazardous waste (solid or other), easily removed to an appropriate location.</p>	<p>Unapproved storage, transport, treatment or disposal of a minor quantity (205 lt, 200 Kg or 0.2 M<sup>3</sup>) of non-hazardous waste (solid or other), easily removed to an appropriate location.</p>
	G - Effects on the natural environment	<p>Major loss or impact on land or water based flora or fauna. Destruction of ecologically significant habitat. Endangering viability of species, habitat or eco-system. Damage that cannot be remediated without risk of long-term loss e.g.</p> <ul style="list-style-type: none"> <li>• destruction of habitat in a national park;</li> <li>• death of an animal or species that is in danger of extinction.</li> <li>• disruption of protected fauna-breeding cycle for an entire season.</li> </ul>	<p>Medium impact on land or water based flora, fauna and habitat. Short-term impact on eco-system. Damage that can be remediated e.g.</p> <ul style="list-style-type: none"> <li>• partial destruction of native habitat leading to impact on local species numbers or disruption to breeding cycles.</li> <li>• short-term disruption of protected fauna breeding cycle.</li> </ul>	<p>Minor loss or impact on land or water based flora, fauna &amp; habitat, but no negative effect on the eco-system. Limited damage to an area of land of no ecological significance e.g.</p> <ul style="list-style-type: none"> <li>• death of a native animal or species, that is not identified as abundant or a pest;</li> <li>• accidental felling of a tree;</li> <li>• over clearing of an area that is not native bush.</li> </ul>
	H - Archaeological, heritage or cultural issues	<p>Destruction or irreparable damage to highly valued structures / items / locations of cultural or heritage significance or value.</p>	<p>Damage to structures / items of cultural / heritage significance, or significant infringement of cultural values / sacred locations.</p>	<p>Minor repairable damage to commonplace structures, or minor infringement of cultural values.</p>
	I - Use of land, water, fuels & energy, and other natural resources	<p>Operations cause persistent unplanned disruption to the availability of resources to the community or the environment. Exhaustion or serious degradation of natural resources for future use e.g.</p> <ul style="list-style-type: none"> <li>• mining activities cause acid drainage run-off &amp; subsequent deforestation of surrounding land;</li> <li>• operations cause loss of flow in natural watercourses;</li> <li>• operations cause water table to rise increasing salinity problem i.e. unusable grazing pasture.</li> </ul>	<p>Operations cause substantial unplanned disruption to the availability of resources to the community or the environment. Significant impact on other energy / natural resource users outside site or workplace e.g.</p> <ul style="list-style-type: none"> <li>• water usage / de-watering by operations causes loss of pressure or flow to local / adjacent water bores.</li> </ul>	<p>Operations cause temporary unplanned disruption to the availability of resources to the community or the environment. Minor impact on other energy / natural resource users outside site or workplace e.g.</p> <ul style="list-style-type: none"> <li>• short-term loss of water or power supply.</li> </ul>

Environmental Management Plan  
 Attachment 5 – Environmental Incident  
 Response Plan

		K - Public / media	<ul style="list-style-type: none"> <li>• probable public or media attention with national or international coverage;</li> <li>• significant actual or potential damage to reputation;</li> <li>• lobbying of State and/or Federal Governments for action against company.</li> </ul>	<ul style="list-style-type: none"> <li>• may attract attention from local media and/or heightened concern by local community;</li> <li>• negative attitudes towards company – calls for action by Regulatory Authorities.</li> </ul>	<ul style="list-style-type: none"> <li>• public concern restricted to repeated local complaints.</li> </ul>
		L - Total Cost (\$) – fines, remedial, lost time, legal cost	> \$50,000	> \$10,000 - < \$50,000	< \$10,000



**ENVIRONMENTAL CONTINUED**

Damage Incurred	Incident Type	Environmental Incident Type	Classification		
			Class 1	Class 2	Class 3
		Z - General environmental and social effects	Pollution or degradation, which has or may have irreversible detrimental effects on the environment and/or community.	Pollution or degradation, which has persistent (greater than three months) but reversible detrimental effects on the environment and/or community.	Pollution or degradation, which has short-term (less than one month) and reversible detrimental effects on the environment and/or community.
No	Statutory Environmental Breach	J – Legal	<ul style="list-style-type: none"> <li>major breach of regulation identified and/or serious incident notification;</li> <li>investigation by Regulatory Authority with actual or potential prosecution and/or significant financial penalties against company and/or individuals.</li> </ul>	<ul style="list-style-type: none"> <li>possible or potential serious breach of regulation or licence conditions with on-the-spot fine and/or Regulatory Authority notification with possible prosecution.</li> </ul>	<ul style="list-style-type: none"> <li>minor licence non-compliance or non-conformance.</li> </ul>
	Procedural Breach	See categories above for Environmental Harm.	<ul style="list-style-type: none"> <li>Procedural breach where Class 1 environmental harm (as defined above for the respective environmental incident type) could realistically occur.</li> <li>Did not involve a statutory breach.</li> </ul>	<ul style="list-style-type: none"> <li>Procedural breach where Class 1 environmental harm (as defined above for the respective environmental incident type) has some chance of occurring.</li> <li>Did not involve a statutory breach.</li> </ul>	<ul style="list-style-type: none"> <li>Procedural breach where Class 1 environmental harm (as defined above for the respective environmental incident type) has almost no chance of occurring.</li> <li>Did not involve a statutory breach.</li> </ul>
	Near Hit - Environmental	See categories above for Environmental Harm.	Potential to result in class 1 environmental harm as defined above for the respective environmental incident type, but did not involve a statutory or procedural breach.	Potential to result in class 2 environmental harm as defined above for the respective environmental incident type, but did not involve a statutory or procedural breach.	Potential to result in class 3 environmental harm as defined above for the respective environmental incident type, but did not involve a statutory or procedural breach.

Environmental Management Plan  
Attachment 5 – Environmental Incident  
Response Plan

## HIGH POTENTIAL INCIDENT

### General

A “**high potential incident**” is an event, or a series of events, that causes or has the potential to cause a significant adverse effect on the safety or health of a person or the environment.

- A fatality associated with the projects activities
- Multiple serious injuries,
- Permanent disabling injury
- Significant adverse reaction from authorities, media or the general public
- CSW Incidents resulting in:
  - Loss of load
  - Fall from >2m height
  - Electrical shock
- Potential class one plant/property damage.
- Potential permanent disability/fatality.
- Reasonable probability that incident could have been a Class 1 environmental incident