



Incident & Emergency Management Plan: Sewage Incident Response Procedure

Version 3

Document Approval and Issue Notice

The Sewage Incident Response Procedure is a controlled document. Recipients should remove superseded versions from circulation. This document is authorised for issue once it has been approved.

The development, implementation and revision of this plan are the responsibility of the Leader Sewerage System Performance in consultation with relevant stakeholders.

This plan will be reviewed every five years or earlier if required. The review period may be linked to any activation of the plan.

Major revisions will be endorsed by the Emergency Management Committee and approved by the Executive Management Team. Minor revisions will be approved by the Chair of the Emergency Management Committee.

PREPARED: Peter Januba, Service Performance Manager Date: 17/12/2018

APPROVED: Sonia Green, Chair Emergency Management Committee Date:

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Amendments in this release:

Section Title	Section Number	Amendment Summary
Response	7	Revised process and changes following feedback from EPA
Incident Classification	Appendix A	Revised levels based in feedback from EPA
Shellfish Contacts	Appendix B	New Appendix

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1. Purpose

The purpose of the TasWater Sewage Incident Response Procedure is to provide a framework for TasWater to prevent, prepare, respond and recover from sewage incidents.

The activities in this Incident Response Procedure are intended to reduce the impact of a sewage incident on the community, TasWater customers and/or the environment and provide assistance to a response management authority if required.

The TasWater Sewage Incident Response Procedure is part of the TasWater Incident & Emergency Management Plan and was developed in consultation with key internal stakeholders.

2. Objectives

The objectives of this Incident Response Procedure are to:

- Generally provide guidance for managing the potential and actual impacts of sewage incidents.
- Specifically provide the basis for the provision and coordination of a TasWater response during a sewage incident.
- Provide guidelines for the operation of the plan following its activation.

3. Scope

This document covers all abnormal business situations involving any sewage incidents for which TasWater has legal, ethical or community responsibilities.

A sewage incident is any event, actual or potential, relating to our sewerage systems that is not part of standard operations and is likely to result in adverse consequences to our customers, our people, our systems, our reputation, community health, the environment, damage to property, our financial sustainability or any combination of these. This includes any treated sewage spill from a non-approved or designated discharge location that has the potential to result in any of the adverse consequences listed above.

This includes odour complaints and any discharge from a sewage system, including treatment plant, pump station and reticulation,, which has not received its normal, routine level of treatment.

4. Related Documents

This Incident Response Procedure is to be read in conjunction with:

- TasWater Incident and Emergency Management Plan suite of documents
- TasWater Shellfish Risk Mitigation Plans (site based)
- EPA Sewage Spill Notification Guide.

5. Response

The response phase is how TasWater reacts to and manages a sewage incident. TasWater will activate the IEMP and associated response procedures during this phase. The response may involve nominating an Incident Controller and establishing an Incident Management Team.

Guidance to the relevant Sewage Incident classification levels are shown in [Appendix A](#).

5.1. Sewage Incident response process

The type of incident and impact will determine the kind of response. The process map of Figure 5.1 should be used as an overarching guide.

TasWater's response may be superseded by any directions provided by the Response Management Authority¹ during an incident.

5.2. Shellfish areas

Sewage spills in areas of Shellfish growing will require contact to either growers, growers representatives, Oysters Tasmania and the Shellfish Industry Regulators. The Shellfish Spill Response Flow Chart has been developed outlining the steps required according to the incident. High Risk Shellfish lease site details are listed in Appendix B.

5.3. Notification Forms

In order to capture the relevant information required by EPA, TasWater requires that we complete all details in the Recording & Reporting a Sewage Spill Form.

The Shellfish Regulator (ShellMAP) requires both verbal notification as well as completion of the ShellMAP Sewage Spill Notification Form.

The Sampling Submission Form (TWL-4007) requires completion when submitting microbiological samples of the affected waterways.

The relevant Forms are located on the Intranet under *PART3: Specific Response Procedures for Sewage Spills*.

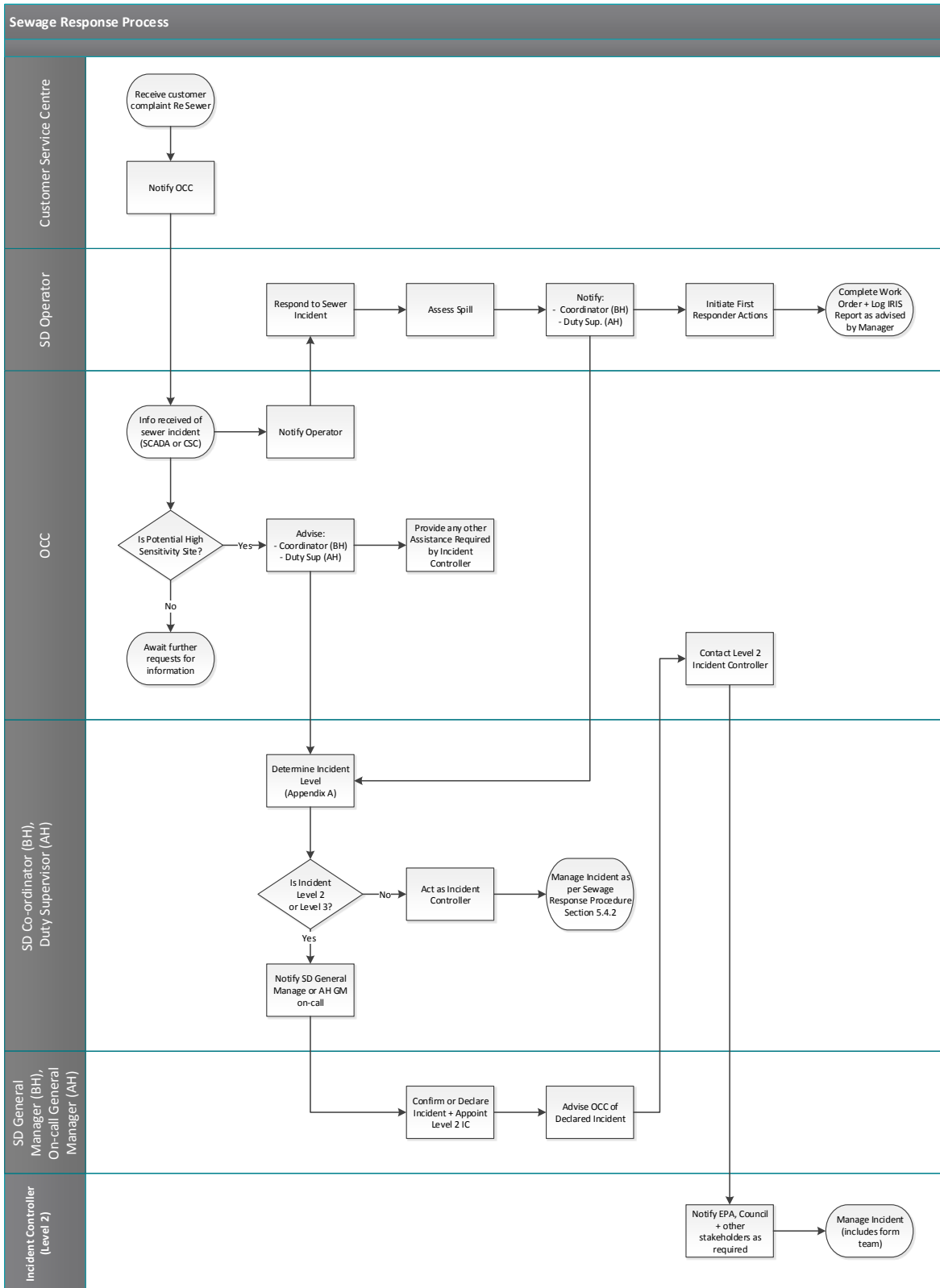
5.4. Individual roles in a response

Depending upon the type of sewage incident, the initial response will involve a number of TasWater employees from different departments. The following sections provide general guidance and considerations for responding.

The response phase process in TasWater IEMP Part 2 should be used in all cases which require a Level 2 Incident Controller (with or without a supporting Incident Management Team).

¹ The Response Management Authority is as stated in the *Tasmanian Emergency Management Plan*, or in regional and municipal level plans.

Figure 5.1 Incident Process Flow



5.4.1. Operator (First Responder)

RESPOND

Arrive on site within Regulatory Response Times with sufficient resources to respond to normal sewerage blockages / spills, including

- Barricading fencing materials
- Approved Warning Signage
- Sewerage Sampling kits
- Disinfectant

ASSESS

ASSESS:
 Safety to operators and public,
 Impact on Environment

- **Sewer spill entering waterway either directly or via the stormwater system?**
- **A change to operation of the STP that significantly affects effluent quality?**

Impact on Customers

- **Sewer spill ponding and accessible to members of the public or livestock?**
- **Sewer odour is strong**
- **Sewer spill is causing health concerns to customer**

Ref: *IEM-GDL02 Adverse Event Notification Guidelines for TW Employees*

NOTIFY

Inform Line Manager (BH) / Duty Supervisor (AH) and provide quick description of the situation

COMMAND & CONTROL

- Respond to directions from relevant manager / Incident Controller
- Provide updated information to manager / Incident Controller

MANAGE & RECOVER

- Isolate spill
- Attend to problem with available resources and request additional resources, if required.
- Barricade public access to spill
- Erect Warning Signage around access points to affected area.



- Undertake water quality sampling, as determined by Manager and ensure Form TWL-4007 is completed
- Clean up and disinfect site
- Request additional resources if required
- Complete Work Order

IMPROVE

Register incident details in [IRIS](#) Reporting System for assessment by Management teams

5.4.2. Line Manager / Duty Supervisor or Level 2 Incident Controller

RESPOND

Answer phone calls from SD Operator or OCC in response to a Sewerage Incident

ASSESS

ASSESS:

Safety to Operators and Public

Impact on Environment

Environmental Nuisance

- Sewage spills < 1,000 lt in low sensitivity areas
- Sewer Odour complaint from single customer

Environmental Harm

- As per EPA Guideline matrix for sewer spills
- Chemical spills to environment
- Sewage or Chemical spills that are ponding but accessible to Public or Livestock
- Changes to operation of STP that may significantly affect effluent quality
- Sewer Odour complaint from multiple customers

Impact on Customers

- Sewer spill causing health concerns to customer

Impact on Other Stakeholders

- Check Shellfish leases
 - Appendix D
 - layer on GeoCortex mapping system
 - Utilise OCC to assist
- Check for other stakeholders

Ref: *IEM-GDL01 Adverse Event Notification Guidelines for Managers*

NOTIFY

TW Management

- If meets Escalation requirements of *IEM-GDL01 Adverse Event Notification Guidelines for Managers*

Relevant Council EHO

- If deemed *Environmental Nuisance* (within 24hrs via automated process)

EPA

- If deemed *Environmental Harm* (as outlined above, noting that some events are Critically Notifiable to both Council EHO and EPA)

Other Key Stakeholders

- As per site usage issues
- Refer Appendix B when impacting Shellfish stakeholders
- Send a brief email notification to the Shellfish Incident Notification Group

Contact details listed in *IEM-MAN10 TasWater*

COMMAND & CONTROL

SD Coordinator / Duty Supervisor to act as On-Site Commander, or Incident Controller as required.

MANAGE & RECOVER

Consult the following plans

- Site specific contingency operation manuals
- Shellfish risk mitigation plans (if developed)

Ensure First Responder tasks are implemented
Where it is safe to do so, ensure Water Quality Samples taken for events which are deemed as *Environmental Harm*, and ensure samples are delivered to Laboratory for Testing within 24 hours.
Ensure incident is recorded in IRIS where required.

IMPROVE

- Investigate root cause of incident registered in [IRIS](#)
- Complete Spill Notification Form and provide to Sewerage System Performance Team for Investigation and follow-up reporting

5.4.3. Operations Control Centre

RESPOND	Respond to SCADA alarms or Public Calls as soon as possible
ASSESS	Determine if event is real and possible impacts from spill site, including impact on shellfish leases, or other high sensitivity sites listed in GEOCORTEX
NOTIFY	<ul style="list-style-type: none"> • Contact SD operator to attend site • Contact SD Coordinator/Duty Supervisor if potentially significant impacts due to site sensitivity • If out of hours contact all Oyster Growers in impacted area advising them of incident
COMMAND & CONTROL	Provide assistance to Incident Controller, as required.
MANAGE & RECOVER	Monitor situation and maintain information flow to and from field/Incident Controller
IMPROVE	Implement changes to SCADA and other monitoring systems to improve readiness in next event, as outlined in Investigation Report

5.4.4. General Manager Service Delivery (BH) / On-Call General Manager (AH)

RESPOND	<p>Be available to accept call and provide guidance and assistance to Incident Team, such as Declaration of Incident (if required), and Appointment of Incident Controller</p>
ASSESS	<p>May require sufficient information to assess the criticality of the incident, such as</p> <ul style="list-style-type: none"> • Description • Location • Timeframes of events which triggered incident • Potential impacts • A plan to address remedial actions
NOTIFY	<p>Confirm Declaration of Incident and ensure all relevant stakeholders are informed. Advise OCC to appoint Incident Controller</p>
COMMAND & CONTROL	<p>Appoint Incident Controller with necessary powers to manage the Incident</p>
MANAGE & RECOVER	<p>Provide any assistance necessary to the Incident Controller to manage the Incident, which may include attending media conferences</p>
IMPROVE	<p>As part of the Executive Team, will review the Incident findings and consider priorities for funding upgrades to reduce likelihood of incidents recurring.</p>

5.4.5. Sewerage System Performance Team

RESPOND	<p>Be readily accessible to respond to calls from the Incident Controller</p>
ASSESS	<p>Provide expert advice to assist in the Incident Classification process, based on previous experience and feedback from the Regulator</p>
NOTIFY	<p>Provide assistance to Incident Controller through notification to Regulator</p> <ul style="list-style-type: none"> • To ensure messages are consistent and in terms the Regulator understands • To build relationships of trust • Because of having better contact knowledge
COMMAND & CONTROL	<ul style="list-style-type: none"> • Assist IC by performing Planning function and follow directions from Incident Controller. • May establish and/or continue communications with Regulator and Council EHOs
MANAGE & RECOVER	<p>Assist with implementation of Contingency Plans, ensuring correct protocols for</p> <ul style="list-style-type: none"> • Sampling • Signage • Isolation
IMPROVE	<ul style="list-style-type: none"> • Complete incident Investigation, referring to completed “Recording & Reporting a Sewage Spill” Form • Ensure learnings from Incident are considered in procedural reviews in discussion with management and Regulator

5.4.6. Public Information Officer

<p>RESPOND</p>	<p>When advised of a sewage incident from an external party (e.g. phone call from customer or member of the public, social media posts):</p> <ul style="list-style-type: none"> • Contact relevant SD Coordinator, • Lodge a complaint • Update the customer request management system (Gentrack) <p>Be readily accessible to respond to calls from the Incident Controller.</p>
<p>ASSESS</p>	<p>The Public Information Officer should assess the impacts of the situation on Customers and Community and prepare messages and plans for Public Information for the Incident Controller to consider for approval</p>
<p>NOTIFY</p>	<p>Update TasWater Emergency outages webpage and Interactive Voice Response System as required</p>
<p>COMMAND & CONTROL</p>	<p>Assist IC by performing Public Information function and follow directions from Incident Controller.</p>
<p>MANAGE & RECOVER</p>	<p>Follow the procedures and guidelines of IEMP – Part 4 Stakeholder & Communication Support Plan and directions from Incident Controller to ensure that the Public and other stakeholders are kept up to date on the Incident</p>
<p>IMPROVE</p>	<p>Ensure learnings from Incident are considered in procedural reviews in discussion with management and other stakeholder feedback</p>

6. Financial arrangements for a response

TasWater is responsible for immediate financial burden as a result of a sewage incident. If TasWater determines that another party is responsible for any impact or losses then TasWater would seek to recover part or all of the costs involved. A Work Order should be created by the Incident Controller to track costs related to the Incident.

In the event that the incident requires specialist financial assistance, a member from the finance department will provide advice as requested. Should an Incident Management Team be established, a member of the finance team will provide this advice within the Logistics function.

7 Recovery

Recovery from a sewage incident may involve activation of the Business Continuity Plan and will involve restoring services to affected areas, both short and long term. It also includes investigation and review activities to identify opportunities to improve TasWater's resilience and response capabilities.

7.1. Responsibility for recovery

Any recovery activities will be managed by the TasWater Recovery Team and will include the identification of any impact that the incident has had on people, environment, assets, reputation and liability.

TasWater is responsible for the coordination of recovery activities that have impacted TasWater infrastructure. If there has been impact on third party property TasWater would consider appropriate recovery actions as per specific incident. Where recovery activities are beyond the capacity of TasWater, support may be sought from external providers.

7.2. Lessons learnt activities

The Incident Controller or a nominated person tasked with managing the incident will determine when stand-down of the incident will occur and ensure that all persons involved in the response conduct debriefs with their staff.

Any lessons learnt activities should be carried out in accordance with the TasWater IEMP.

8 Appendices

Appendix A: Sewage incident levels and recommended Incident Controller

Incident Level	Descriptor	Incident Controller
No level	<ul style="list-style-type: none"> Any event that results in the release of sewage within a TasWater asset and is contained within that property Any sewage spill which is deemed 'not reportable' to the EPA in accordance with EPA published Sewage Spill Notification Guidelines 	N/A
Level 1	<ul style="list-style-type: none"> Any discharge of sewage to a public place that may impact Public or livestock Any event that causes an odour issue that impacts the community Any sewage spill which is deemed 'notifiable' to the EPA in accordance with EPA published Sewage Spill Notification Guidelines 	SD Coordinator or SD Duty Supervisor or OCC Operator or Dispatcher
Level 2	<ul style="list-style-type: none"> Any discharge of sewage into sensitive receiving waters Any discharge of sewage (treated or untreated) with a potential impact on aquaculture facilities, including high risk shellfish zones Any event that causes an odour issue that impacts the community and the number of odour complaints is deemed excessive Any other sewage spill which is deemed 'critically notifiable' in accordance with EPA published Sewage Spill Notification Guidelines 	Qualified Level 2 Incident Controller
Level 3	<ul style="list-style-type: none"> Any of the above where the Incident Management Team deem the impact to the community or TasWater requires a multi-agency response 	Qualified Level 2 Incident Controller

Notes:

SD – Service Delivery

OCC – Operations Control Centre

APPENDIX B Sensitive sites – Shellfish leases

Network	Receiving Water with marine lease	Discharge Watercourse for Sewer Network	Discharge Watercourse for STP	Routine form of effluent discharge
Level 2 STP:				
Cambridge	Lower Pittwater	Pittwater	Sinclair's Creek	Reuse or Watercourse
Cygnets	Huon River	Port Cygnets Bay	Port Cygnets Bay	Watercourse
Dover	Port Esperance	Port Esperance	Port Esperance	Watercourse
Midway Point	Pittwater	Orielton Lagoon	Orielton Lagoon / Pittwater	Reuse via Penna or Watercourse via Sorell
Orford	Spring Bay	Prosser Bay ²	Prosser Bay ²	Reuse or Watercourse
Penna	Pittwater ¹	NA	Pittwater ¹	Reuse
Port Sorell	Rubicon River	Rubicon Estuary	Bass Strait ²	Watercourse
Richmond	Pittwater	Coal River	Coal River	Reuse
Smithton (Pelican Point)	Duck Bay	Duck River	Kemps Bay	Reuse or Watercourse
Sorell	Pittwater	Orielton Lagoon / Pittwater ³	Pittwater	Reuse via Penna or Watercourse
Stieglitz	Georges Bay	Georges Bay	Chimneys Lagoon ¹	Reuse
St Helens	Georges Bay	Georges Bay	Georges Bay	Watercourse
Swansea	Great Oyster Bay	Great Oyster Bay	Great Oyster Bay	Reuse or Watercourse
Triabunna	Spring Bay	Vicarys Rivulet/ Spring Bay	Vicarys Rivulet ⁴	Reuse
Level 1 STP:				
Ansons Bay West/East	Ansons Bay	Ansons Bay	Ansons Bay	Absorption
Kirabati / Barwick Lagoon	Pittwater ¹	Pittwater	Pittwater ¹	Reuse via Penna
Dunalley ⁵	South - Dunalley Bay North - Blackman Bay	South - Dunalley Bay North - Blackman Bay	Dunalley Bay ⁴	Absorption
Woodbridge	D'Entrecasteaux Channel	Peppermint Bay	Peppermint Bay ⁶	Evaporation
Southport	Hastings Bay	Kingfish Beach tributary ²	Kingfish Beach tributary ²	Absorption

Notes:

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1. Nearest receiving water since STP is 100% reuse and no discharge location
2. STP discharge unlikely to impact on shellfish.
3. Receiving water depends on location of sewerage infrastructure
4. Emergency Discharge only
5. Receiving water depends on tidal movement and location of sewerage infrastructure
6. Effluent known to overflow from holding dam on to nearby beach

Shellfish Industry Contacts

In the event of a sewage incident that has the potential to impact an oyster lease then SHELLMAP is to be contacted immediately to assess the lease closure requirement. The Oyster Tasmania Executive Officer or Chair can be contact through the Shellfish Incident Notification Group email address. Oysters Tasmania will provide a list of growers to the OCC for each high risk area that must be contacted during an out of hours event.

Notification process when Shellfish leases impacted

During Business Hours	After Hours	Standby Incident
Notification to internal email group (Shellfish Incident Notification Group)	Notification to internal email group (Shellfish Incident Notification Group)	Notification to internal email group regarding possibility of spill (e.g. large rainfall event in high risk shellfish area)
TW Environment team to provide follow up information/data to SHELLMAP using the ShellMAP Sewage Spill Notification Form	OCC to consult 'Highrisk Shellfish Leases Map' and forward notification to list of growers in the region that may be impacted (list provided by Oyster Tasmania and updated regularly)	
ShellMAP to contact growers re closures ASAP	TW Environment team to provide follow up information/data to SHELLMAP using the ShellMAP Sewage Spill Notification Form	
	ShellMAP to follow up and contact growers re closures ASAP	

For other Shellfish industry contact details, refer to

IEM-MAN10 TasWater Incident & Emergency Management Plan (IEMP) Part 10 – Emergency & After Hours Contact List