# Pollution Incident and Emergency Response Management Plan for Windsor Sewerage Scheme and South Windsor Recycled Water Scheme

**(Windsor Sewerage Scheme covers the environment protection licences of:**

- **1684 – McGraths Hill Sewage Treatment System**
- **3306 – South Windsor Sewage Treatment System)**

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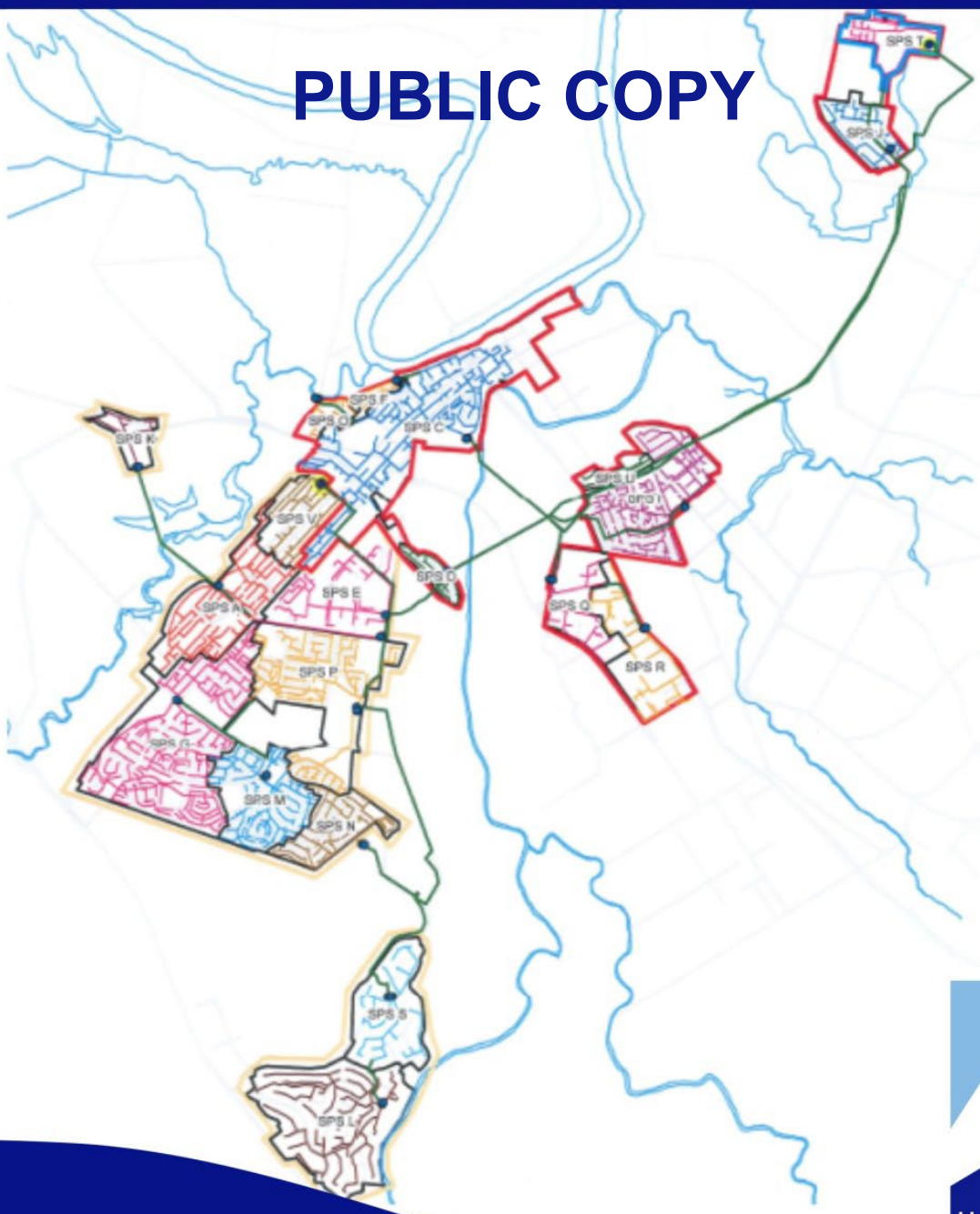


Hawkesbury City Council

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Date of last update: 4 June 2025

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**PIRMP (Pollution Incident Response Management Plan) Test**

| Date Tested | By Whom Tested |
|---|---|
| 24 March 2014 | Krish Thiyagaraja and Wastewater Staff that involved in Pollution Incidents |
| 3 March 2015 | Krish Thiyagaraja and Wastewater Staff that involved in Pollution Incidents |
| 15 September 2015 | Krish Thiyagaraja and Wastewater Staff that involved in Pollution Incidents |
| 3 March 2016 | Andrew Doig (Trainer) from 'Australian Sustainable Business Group (ASBG) and Wastewater Staff that involved in Pollution Incidents |
| 9 March 2017 | Andrew Doig (Trainer) from 'Australian Sustainable Business Group (ASBG) and Wastewater Staff that involved in Pollution Incidents |
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| 27 April 2021 | Andrew Doig (Trainer) from 'Australian Sustainable Business Group (ASBG) and Wastewater Staff that involved in Pollution Incidents |
| 19 May 2022 | Andrew Doig (Trainer) from 'Australian Sustainable Business Group (ASBG) and Wastewater Staff that involved in Pollution Incidents |
| 7 June 2023 | Andrew Doig (Trainer) from 'Australian Sustainable Business Group (ASBG) and Wastewater Staff that involved in Pollution Incidents |
| 24 April 2024 | Krish Thiyagaraja and Wastewater Staff that involved in Pollution Incidents |
| 14 May 2025 | Krish Thiyagaraja and Wastewater Staff that involved in Pollution Incidents |



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# Table of Contents

# 1 Incident and Emergency Management Overview

## 1.1 How to use this document

This document is divided into a number of sections:

Section 1 Outlines what an incident and emergency is and what the notification processes are for these levels.

Section 2 Contains protocols for the management of an incident and emergency. This advice should be read and understood by the team members prior to an event.

Section 3 Describes team member roles.

Section 4 Contains the protocols for notifying NSW Health.

Section 5 Contains emergency procedures for a number of pre-considered scenarios.

Section 6 Contains information on training for incident and emergency management.

Section 7 Contains information on location maps, description and likelihood of hazards, pollution inventory and emergency contacts.

## 1.2 Purpose

The purpose of this document is to provide the Windsor Sewerage Scheme with a standardised response and recovery protocol to prevent, minimise and mitigate injury and damage resulting from emergencies or disasters of man-made or natural origin. The Windsor Sewerage Scheme is currently owned and operated by Hawkesbury City Council. The scheme lies within the South Creek catchment and serves the areas of Windsor, South Windsor, Bligh Park, Windsor Downs, Clarendon, McGraths Hill, Mulgrave and Pitt Town. This scheme also includes the South Windsor Recycle Water System.

## 1.3 Goals

The goals of the Incident and Emergency Response Plan are to document and understand the steps needed to:

- rapidly restore service after an emergency
- minimise system damage
- minimise customer impacts
- minimise adverse effects on the environment
- provide emergency public information concerning customer service
- provide wastewater system information for first responders and other outside agencies.

## 1.4 Introduction

### 1.4.1 What is an Emergency?

An emergency is any unplanned event which can cause deaths, significant injuries or public health impacts to employees, customers or the public; or that can shut down the business, disrupt operations, cause physical or environmental damage or threaten the financial standing or public image of Council.

### 1.4.2 What is Emergency Management?

Emergency management is the process of preparing for, responding to and recovering from an emergency.

### 1.4.3 Preparation Measures

Every member of Council has a responsibility to know what they must do in the event of an incident.

This knowledge should be gained through Council's up-to-date Standard Operating Procedures (SOPs) and through regular training and briefing sessions (including tool box sessions, incident debriefings and team meetings). Preparation is also gained through stringent work safety practices (e.g. inductions to site and hazard analysis, materials handling procedures, reminders on personal hygiene, etc), and by regular maintenance and inspection systems.

Documentation is a vital tool to assist in preparing for an incident. Internal documentation that may have been prepared and incorporated into SOPs or Safety Management Systems includes:

- Risk Management Plan
- Fire Protection and Evacuation Plan
- Safety and Health Program
- Environmental Policies
- Security Procedures
- Site induction procedures
- Employee manuals
- Operations and Maintenance Procedures
- Safety Data Sheets (SDS)
- Insurances
- Finance and procurement procedures.

# 2 Managing Incidents and Emergencies

## 2.1 Response Levels

Depending on the severity of an event, a response may be handled at different levels within Council. For Windsor Sewerage Scheme and South Windsor Recycled Water Scheme a two-tiered structure has been developed.

Level 1 — *Incident* – a small event which can be addressed by normal work crews with reference to standard operating procedures. No material harm to the environment is caused or threatened. The incidence is easy to clean up without additional assistance.
**Note:** If you can not decide what level the emergency is, check with engineer/management otherwise assume level 2.

Level 2 — *Emergency* – a serious event with impacts on e.g. water quality/Public health incident, assets or a large number of staff requiring coordination by a management team and possibly support from Emergency Services. Material harm to the environment is caused or threatened. That is, an incident which involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial or results actual or potential loss or damage exceeding $10,000.

Examples of Level 1 and Level 2 emergencies can be found in the table below.

**Table 1: Example of Level 1 and 2 emergencies**

| Specific Examples | Incident (Level 1) | Emergency (Level 2) |
|---|---|---|
| **Major asset failure (incl. power failure, fire or explosion)** | Short outage, little effect<br>Minor fire extinguished by staff | Outage, short sewage discharge<br>Fire causing injury and some damage |
| **Sewerage Main** | Minor main break or blockage with highly localised consequence | Main failure with environmental impact or requiring alternate housing or toilet facilities<br>Spill to properties |
| **Sewage plant/pump station** | Contained overflow<br>Pump choke<br>Minor plant breakdown | Short term biological failure<br>Failure that threatens treatment process or threatens overflow from SPS |
| **Safety** | Injury needing first aid<br>Part of site declared unsafe and closed to staff | Injury needing hospitalisation<br>Site/equipment declared unsafe and closed to staff and public |
| **Chemical Spill** | Contained minor spill | Contained major spill<br>Some health or safety impacts |
| **Criminal Acts (including Terrorism)** | Minor vandalism to facilities<br>Trespass/break in at facility | Fraud/theft by employees<br>Criminal charges against water business managers<br>Threats received and taken seriously |
| **Natural Disaster** | Local flooding or small fire causing minor asset damage<br>Local storm damage | Bushfire, major storm, or significant flooding threatening assets |
| **Building/Office/IT/Business systems** | Minor damage<br>Short term loss of part of office<br>Minor outage of key system | Evacuation of office<br>Partial damage/loss of office<br>Loss of major SCADA |

| Specific Examples | Incident (Level 1) | Emergency (Level 2) |
|---|---|---|
| **Civil action/Media** | Complaints received and routinely dealt with | Protest action/threats<br>Unfavourable media reports<br>Angry or physical action taken towards staff |
| **Staff absence** | Localised illness<br>Other staff can cover | Loss of a number of staff causing re-prioritising of work<br>Industrial action reducing maintenance |

## 2.2 Incident Response

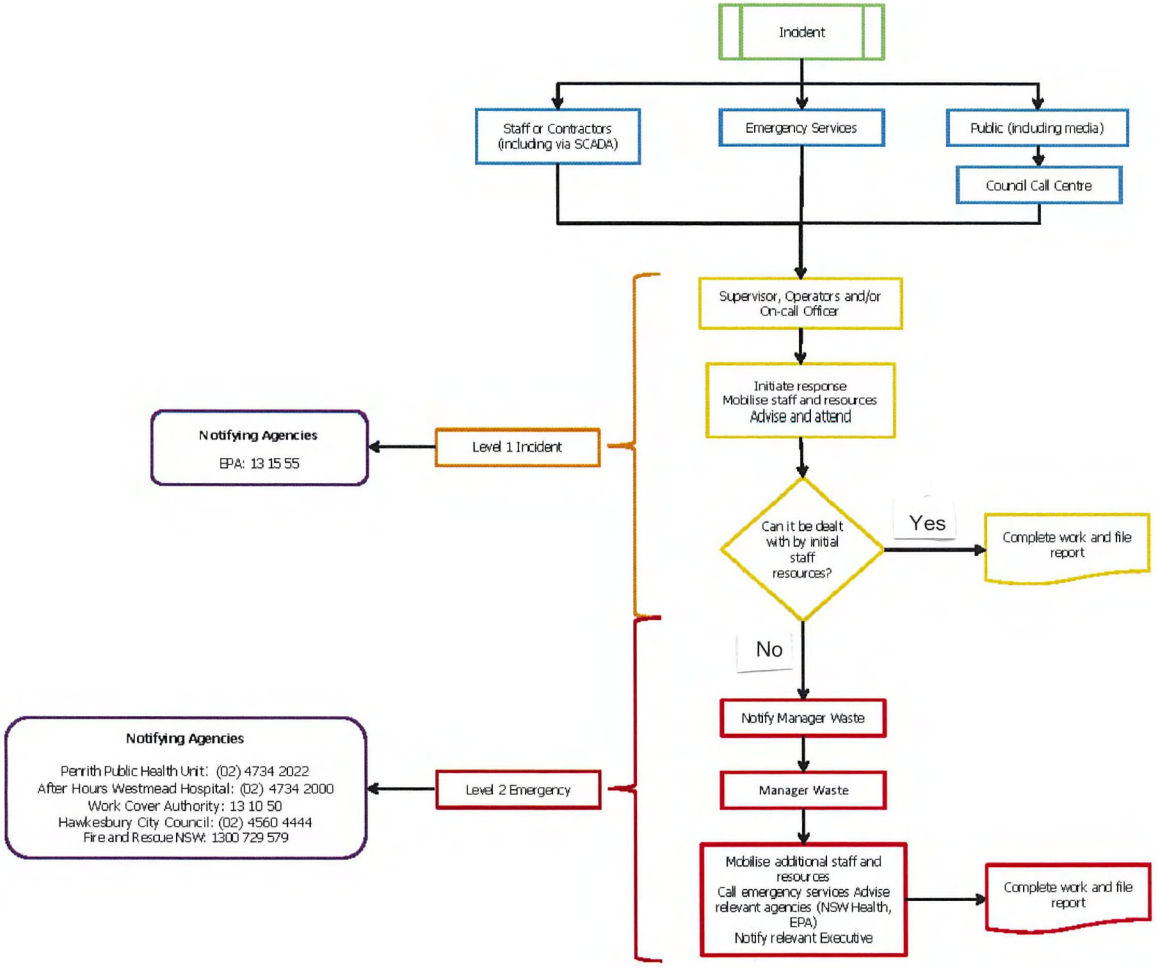
This section details the response requirements in the event of an incident in all situations:

In the event of an incident the steps summarised in Table 2 and Figure 1 should be followed in all situations:

**Table 2: Incident Response Process**

| Step | | |
|---|---|---|
| 1 | Identify and assess incident severity | Level 1- Incident |
| | | Escalate to Level 2 - Emergency |
| 2 | Take any necessary immediate action | If necessary, contact emergency services<br>Provide any emergency assistance to injured personnel<br>Reduce the probability of any additional injuries or damage<br>Isolate cause if possible (e.g. close valve, stop pump) |
| 3 | Notify | Follow EPA notification protocol if there is a pollution incident where "a material harm to the environment is caused or threatened" |
| 4 | Manage the incident | Implement relevant Emergency Operating Plans |
| 5 | Reporting | Complete site incident/debrief report |

**Figure 1: Incident Response Diagram**



## 2.3 Communication and Notification

### 2.3.1 Pollution Notification Protocol

It is a legal requirement for pollution incidents to be notified to particular agencies immediately when they occur.

The following protocol will be followed for the notification of pollution incidents.

- **Identify the Need for Notification Requirement**

The following notification requirements apply for incidents with level 1 and level 2.

Pollution incident with level 1 - Incident - Report to EPA only.

Pollution incident with level 2 - Emergency - Report to all relevant agencies as detailed below.

**Note:**

1. What is Trivial - Is a contained pollution incident. There is no risk of material harm to the health or safety of a person or an ecosystem. The incident is easy to clean up without additional assistance

2. If a fire unit and/or other emergency services are called for a sub material harm incident, provide a courtesy call to the EPA, informing them that this is not a material harm incident, but called fire unit and/or other emergency services as a safety precaution.

3. What is Non Trivial - All Level 2 incidents are classified as Non Trivial. That is, they are the incidents involving in actual or potential harm to the health or safety of human beings or to ecosystems or results actual or potential loss or damage exceeding $10,000.

- **Identify the Person responsible to action the notification requirement:**

The Council has the duty to notify all pollution incidents under the legislation. This duty is to be performed by the person / persons as detailed below.

If the incident is Level 1- Incident, it must be reported by the supervisor or the on-call officer (for after hours).

If the incident is Level 2 - Emergency, it must be reported by the Wastewater Maintenance and Operation Engineer.

If the Wastewater Maintenance and Operation Engineer cannot be located, the incident must be referred to the Project / Works Engineer.

If both the Wastewater Maintenance and Operation Engineer or Project / Works Engineer cannot be located promptly or without delay, the staff member who has identified the incident has the duty to notify the relevant agencies in the manner described below.

The information required for notification shall be provided by the Supervisor / on-call officer.

The responsible officer calling in the incident must ensure the Manager - Waste Water is also advised of the incident.

- **Follow Procedure for the notification of material harm pollution incident**

In the event of a material harm pollution incident (Level 2 - Emergency):

1. Immediate action should be taken to ensure the safety of people and containment of pollution if it is safe to do so.

2. Call 000 if the incident threatens human health or property. This will mobilise Fire and Rescue NSW, the NSW Police and/or the NSW Ambulance Service (combat agencies) as required.

3. If a combat agency is not required then:

   As soon as it is safe to do so, the following agencies must be notified in the following order:

   - EPA 13 15 55
   - Penrith Public Health Unit (02) 4734 2022; After hours (02) 4734 2000 (Westmead Hospital)
   - Safe Work NSW 13 10 50
   - Hawkesbury City Council Corporate Communications (02) 4560 4444 and Regulatory Services (02) 4560 4444
   - Fire and Rescue NSW 1300 729 579.

4. PIRMP must be implemented immediately

- **Information required for notification**

  - The time, date, nature, duration and location of the incident.
  - The location of the place where pollution is occurring or is likely to occur.
  - The nature, the estimated quantity or volume and the concentration of any pollutants involved, if known.
  - The circumstances in which the incident occurred (including the cause of the incident, if known).
  - The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known.
  - The ABN number of the Hawkesbury City Council is 54 659 038 834.
  - Other information such as photo evidence of the incident and cleanup works.

  If information is not known at the time of initial notification, but becomes known at a later time, then additional notification should be made.

- **Notification Forms (Internal)**

  Fill out the appropriate forms.

  Example: 1 Emergency Overflow Incident Report - Sewer Reticulation (EMS 010 - 001)

  Example 2 Emergency Overflow Incident Report - Sewage Pumping Station (EMS 010 - 002)

  Example 3 Pollution Incident Report (For all incidents other than the Emergency Overflow Incident) (EMS 010-003)

- **Notifiable Incident Written Report to EPA**

  Prepare and submit a written report within seven days after the incident to the EPA. This report will be prepared and submitted by the Project / Works Engineer. The information and updates required as part this reporting shall be provided by the Supervisor / Operations Engineer.

- **Other points of note**

  - The EPA may require others (such as community members or property owners) to be notified by Council. These instructions must be followed.
  - If, at the time of making the notification, you believe that some of the above authorities do not need to attend the incident, you may provide that advice. However, the authorities must be notified and all of the information regarding the incident must be passed on to the authorities. It is the responsibility of each authority to decide whether they need to attend the incident.
  - The EPA can escalate an incident to Material Harm even if this is not required under the site's PIRMP.
  - Feedback shall be given to the Operational staff on the information provided by them to the reporting agencies.
  - High level of communication shall be maintained between the operational staff and the management in the process.
  - A group email to be set up involving the internal staff concerned for effective communication and reporting relevant agencies.
  -

**Note:** The EPA will be contacted to reverse the material harm incident notification, if an incident was first considered a level 2 incident and later identified it was not.

### 2.3.2 Communication with the Community

Impacts on the community due to sewage distribution and treatment incidents are variable and depend on location, volumes of spills and other factors. Communication methods will be used on a case by case basis and in all situations Council will attempt to provide early warning to directly affected premises (either upstream or downstream depending on tidal impacts where relevant) by phone call or site visit. Early warning is to include details of what the imminent incident is how those affected can prepare and respond, and provide important advice such as avoiding contact and use of affected waterways.

Where early warning is not possible Council will provide notification and communication during and after an incident to advise those affected with information, advice and updates. Notification and communication methods will be determined on a case by case basis and the following methods may be used:

- phone calls
- site visits/door knocking
- letter drops
- warning signs (example: No Swimming, Fishing and Boating)
- media releases (radio/television/newspaper/internet/social media as required)
- other methods as the situation requires.

In the event of a chemical or sewage spill into stormwater or waterway, Council staff are to go to prominent and/or high use areas of the affected waterway and erect signage. The signs are to warn water users of the contamination and advise them to avoid activities such as swimming, fishing and boating until contamination has cleared. Additionally, if the event occurred or was occurring during dry weather, Council staff are to attend popular sites and advise users directly. Contaminated land is to be disinfected, ponded sewage pumped out and faecal coliforms are to be monitored until background levels are reached.

Regular communication and notification is to be provided until the incident and clean-up of impacted site and affected areas has been complete (e.g. faecal coliforms have returned to background levels). Council is to take signs down and advise the public that regular activities can be resumed by (as required):

- phone calls
- letter drops
- media releases (radio/television/newspaper/internet/social media as required)
- other methods as the situation requires.

## 2.4 Level 1 Routine Incidents

By far the greatest number of events that Council will experience will be routine matters which occur daily and can be resolved quickly by a service crew or the operators of a facility.

These can be defined as those incidents that require attention but have no operational effect (e.g. a minor chemical spill within a bounded area).

### 2.4.1 Response Focus

The primary responsibility of a Routine Incident Response Team is to assess the impact of the incident with regard to life and public safety; on the Council's assets, and to public and private property and to take such action as necessary.

The employee/crew attending the incident should follow the standard Council operating procedure (SOP) for Spill Control and Clean up (EMS 011) to deal with the matter.

### 2.4.2 Incident Site Coordinator (Operators/On-call Officers)

This position is responsible for incident site operation, control and response.

**Responsible to:** Wastewater Supervisor - Transport Network/Wastewater Supervisor - Treatment Works

**Responsibilities:** Determine scale of incident
Determine initial response required (including alerting emergency services)
Establish clear command and communications
Coordinate all Council teams at site
Liaise with internal and external agencies on a plan of action for all damages to be repaired with the minimum disruption to customers
Liaise with customer services and expert technical personnel at site
Provide update information to the Wastewater Supervisor/Engineer to ensure information flow to stakeholders is maintained
Maintain a Site Incident Log
Control access to site for all Council employees
Grade incident as situation changes and advise Supervisor/ Engineer/Manager of appropriate action.

### 2.4.3 Incident Protocols

Key protocols that should be established early on escalation are as follows.

- The chain of command, the Incident Site Coordinator is on site.
- When the receiving party (Supervisor/Engineer) receives a situation report (SITREP), the information should be noted in a log.
- Communications should be sent in such a way to allow time for the recipient to request clarification, or to allow other parties to transmit emergency information.
- No other member of staff should attend the scene unless they have been dispatched by the Supervisor/Engineer or requested by the Incident Site Coordinator.
- The Incident Site Coordinator may be replaced only by the Supervisor/Engineer/Manager.

- Once each routine incident is completed, crews or staff members should complete and return a log entry. This entry will help managers assess future risk of the incident reoccurring and develop an appropriate maintenance or asset replacement program.

## 2.5 Escalation to Level 2 – Emergency

The Supervisor or Incident Site Coordinator will contact the relevant Engineer/Manager then relay the information describing the incident.

A decision will be jointly taken as follows:

Call for a situation report (SITREP) from the person attending the site; consider the situation when the SITREP is received.

OR

Decide that the incident is manageable with normal operational resources, and that it should not be escalated further.

OR

Refer the matter to the next level of management.

OR

Declare an emergency and activate an Emergency Management Team.

If the supervisor considers the incident is manageable, they should continually monitor the event and refer to management if the situation changes.

If the incident is assessed as more serious than can be dealt with by the initial response team, the most senior staff member responding to the incident should take on the role of Incident Site Coordinator.

After having notified the appropriate authority (if at the site), the Incident Site Coordinator should secure the site; remain at the incident (or at a distance, if the site is unsafe) until such time that emergency resources arrive and facilitate emergency services' access to the site, liaise and assist.

The Incident Site Coordinator will continue to manage the Council's own staff and resources on site and provide situation updates to the Supervisor/Engineer/Manager .
Key triggers for activating an Emergency Management Team are as follows.

- Injuries, fatality, or significant ongoing threat; serious supply or service problem; serious infrastructure damage (whether owned by Council or others); investigation by statutory authorities; recurring related incidents.
- Serious injuries, affecting the operation of a wastewater asset, depot or office; minor building fire; health issues.
- Significant or widespread impact on supply and service operations; bomb threat/search. significant asset failure or vandalism.
- Spill/emission which requires external resources to mitigate; high volume spill impacting the environment; contamination/failure of a depot storage system.
- Disruption requiring corporate/external resources to address; limited industrial action; communications/IT failure; significant power outage.

## 2.6 Level 2 Emergency Management

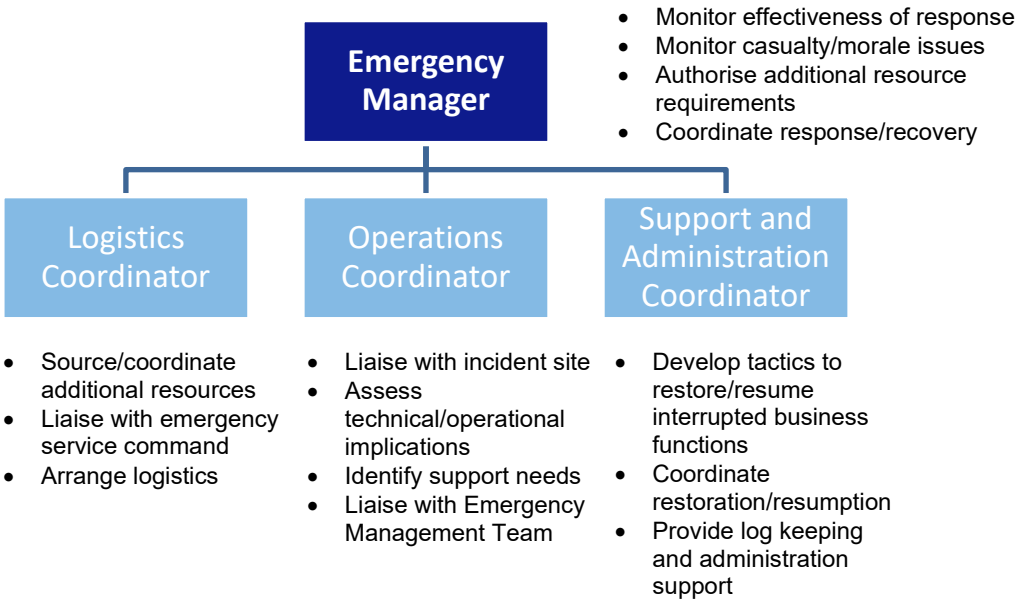
### 2.6.1 Emergency Management Team (EMT)

The Emergency Management Team will be led by the most senior person appropriate to the emergency (e.g. Manger Wastewater).This person is the Emergency Manager. In the event that an incident is escalated to a Level 2 Emergency, the Emergency Manager should notify his/her direct manager (e.g. Director Technical Services).

The Emergency Manager will appoint and convene their own Emergency Management Team that will include:

- an Operations Coordinator, who will liaise with the Incident Site Coordinator
- a Logistics Coordinator, who will source and coordinate additional resources and skills
- the Support and Administration Coordinator will coordinate log keeping, depot liaison and business needs.

**Emergency Management Team Organisational Structure**




### 2.6.2 Responsibilities of the EMT

The key responsibilities of the Team are to manage the operational and business implications of an incident, including:

- restoration of operations
- liaison with external agencies
- coordination of resources
- management of communications
- notification to General Manager.

### 2.6.3 Activation of the Emergency Operations Centre (EOC)

At any time, during a Level 2 (Emergency) event, the Emergency Manager may elect to establish an Emergency Operations Centre. This may be done if significant issues are present or if the emergency requires coordination of internal and external resources from two or more facilities or locations and/or cannot be managed at a local depot or facility.

The location of an Emergency Operations Centre should, where possible, be identified in advance and be equipped with facilities on hand to enable it to be activated quickly.

Typical locations for an EOC would be the STP operations Control Centre or an adjacent office or meeting room.

If the incident takes place in a facility such as a treatment works, the Emergency Operations Centre should be set up in a meeting room with close access to the Control Room.

### 2.6.4 General Working Methods

After the Emergency Management Team has been mobilised and individual roles confirmed, and the Emergency Operation Centre facilities and equipment activated and tested; the following general working methods and response actions will be required to be undertaken by all Team members.

- Commence and maintain group logs and information boards.
- Ensure all key officers have been briefed and ongoing communication protocols established and implemented.
- Ensure appropriate functional specialists have been activated and briefed.
- Advise the Director Infrastructure Services and establish a communication strategy and updates protocols (may include a communications liaison officer to the Emergency Operations Centre or site).
- Review incident for impact on customers, establish and maintain regular liaison with customers.
- Advise and maintain regular liaison with a designated contact at all appropriate regulators.
- Determine and continually review operating rules and decision-making processes for the EMT, including support resources.
- Under the direction of the Emergency Manager, conduct regular reviews (every 2 hours or better) and assess the issues identified, provide updates and progress reports on actions taken, and contribute to the development and implementation of the overall response strategies.
- Ensure that all members of the EMT are appraised of major new developments.
- Establish and continually update relevant executives.
- Monitor the morale and welfare of affected staff and ensure all necessary support, counselling, and relief is organised.
- Make arrangements for team member breaks every four hours, and, in the event of prolonged emergency, relief shifts every twelve hours.

### 2.6.5 Termination and Recovery

**Termination**

The decision to terminate an emergency will be made by the Emergency Manager in consultation with the Site Coordinator and a senior executive. Issues they will consider will be the attendance of emergency services at the site, and the impact on customers and the water business.

Termination may proceed if the following have been attended to:

- injured persons have been hospitalised or otherwise taken care of
- next-of kin of staff who have been injured, have been advised and taken care of
- staff suffering from trauma have entered a counselling program
- any spills and leaks have been stopped, contained and recovered
- the incident site is free of flammable or toxic vapours
- any fire has been extinguished, there is no possibility of fire starting again, and the fire brigade has given the all clear

- a head count has been carried out by the Council's Incident Site Coordinator, taking account of all staff and visitors to the premises where the incident occurred
- all relevant evidence has been preserved to the satisfaction of police and/or WorkCover
- all immediate restorations/repairs have been effected to restore services/supply
- any offenders have departed the site, or have been apprehended by police
- unidentified or suspicious packages have been removed by the police.

**Recovery**

The aim of the recovery phase is to identify, document and manage through to a satisfactory conclusion all operational and strategic issues, including the welfare of staff, members of the public and Council owned assets, which will enable the return to a normal level of function.

The recovery phase may continue for a period of time after an emergency has been terminated, and will require ongoing attention from management and staff until all issues arising from the emergency have been resolved.

Issues to be addressed include:

| | |
|---|---|
| **Customer needs** | • Immediate needs and wants (welfare, health and convenience)<br>• Alternative service arrangements, until normal operations reinstated (bottled water, portable toilets etc.)<br>• Public communications advising customers of alternate arrangements<br>• Other assistance to customers affected by the incident (e.g. insurance etc.)<br>• Assistance to next of kin |
| **Staff needs** | • Staff rehabilitation<br>• Welfare of staff and next of kin<br>• Staff communications strategy |
| **Community and stakeholder reaction** | • Damage to community profile<br>• Actions to restore goodwill<br>• Two way communications strategy<br>• External public relations strategy<br>• Media relations arrangements |
| **Environmental impact** | • Impact on drainage system and water catchment areas<br>• Impact on other public infrastructure (roads, railways, power lines etc.)<br>• Isolation and containment measures<br>• Rehabilitation and clean-up |
| **Business operations restoration** | • Repair or replacement of damaged facilities and/or equipment<br>• Additional resources required to support business operations<br>• Replenishment of all emergency equipment used in the emergency<br>• Strategy to restore revenue losses<br>• Cooperation with other agencies (especially telecoms and electricity utilities) |
| **Regulators and compliance with their reporting requirements** | • SafeWork NSW<br>• Department of Health<br>• Local Authorities<br>• Emergency Services<br>• Environment Protection Agency<br>• Council policies and procedures |

# 3 Team Member Roles

The roles for the following team members are described in this section:

- Incident Site Coordinator (Level 1 – Incident)

- Emergency Manager (Level 2 – Emergency)
- Emergency Operations Coordinator (Level 2 – Emergency)
- Emergency Logistics Coordinator (Level 2 – Emergency).

## 3.1 Incident Site Coordinator Role

The Incident Site Coordinator will normally be the Operators/On-call Officer at the scene of an incident.

Where the incident occurs at a facility or a remote site, the Site Coordinator should:

- ensure the safety of all personnel and those of other organisations
- ensure emergency services are called, gain access to the site and are given any information they need
- manage the local water utility's activity at the incident site
- ensure the incident is controlled by making the site safe.

## 3.2 Emergency Manager

**Who:** This role is usually filled by the Manager Wastewater.

**Responsibility:** Manage the overall incident from available resources.

Specific actions include:

- appoint and coordinate an Emergency Management Team
- assess operational and business implications
- identify support requirements (especially non-operational, e.g. Communications)
- inform, advise and liaise Executive
- ensure regular flow of information to the EMT (when activated)
- maintain log
- conduct incident debrief on termination.

## 3.3 Emergency Operations Coordinator

**Who:** This role is usually filled by the Supervisor/Engineer.

**Responsibility:** Provide support to the Emergency Manager from available resources.

Specific actions include:

- receive briefing and role allocation, and co-ordinate own group
- establish communications channels and protocols with Emergency Manager and Incident Site Coordinator, then obtain detailed situation update and assessment
- identify additional resources required if indicated
- assess incident details and collate appropriate reference material (system maps, directories, operating procedures etc.)
- review technical/operational implications and solution options, then provide instructions and advice accordingly to incident site team
- maintain master event log – issue regular update copies to EMT
- assess impact on operability of the Council's facilities, and consider contingency options to maintain services
- provide advice, information updates, and resource support to the EMT
- coordinate inputs of specialists and other technical advisors
- advise Communications personnel on the technical content of media releases
- act as liaison point with regional emergency services' staff
- handle communication with other external groups as advised by the Communications personnel (e.g. emergency services and the regulator)

- stand down as instructed and contribute to debrief/investigation.

### 3.4 Emergency Logistics Coordinator

**Who:** For operational emergencies this role will normally be filled by the senior specialist area supervisor, usually the branch Engineer/s.

**Responsibility:** Source and coordinate additional resources required at the incident site, or elsewhere.

Specific actions include:

- liaise with emergency services' command (away from site)
- liaise with other Council operations and external providers of services or equipment.
- liaise with Council centralised functions which may be able/required to provide support (e.g. IT or Communications).

### 3.5 Emergency Support and Administration Coordinator

**Who:** The Emergency Manager will appoint an individual to this role as they see fit.

**Responsibility:** Sources administration support to the EMT and plans longer term implications.

Specific actions include:

- assess long term operations impact
- develop strategies to restore/resume disrupted business functions
- coordinate restoration and resumption of normal operations
- provide log keeping and administrative support to the EMT.

## 4 NSW Health Notification Protocol

Generally no NSW Health participation is required except for notifiable events (Section 4.1).

The NSW Chief Health Officer has the responsibility for issuing advice to the public regarding measures available to minimise risk from disease, including water-borne disease. In relation to wastewater and recycled water, this responsibility requires the Chief Health Officer to rapidly assess any report of:

- potential contamination of receiving water due to Sewage spills that was unable to be contained
- potential contamination of receiving water due to un-disinfected effluent (when disinfection system fails)
- contamination of the recycled water supply that could result in a threat to public health through ingestion of recycled water, skin contact and inhalation of aerosols
- third party (e.g. doctors, medical centre, technical experts) allegation that contact with recycled water supplied by Council is causing or has the potential to cause a threat to public health contamination of the drinking water supply as a result of inadvertent cross connection to the recycled water system.

In addition to the above, NSW Health will provide advice, where appropriate, to Council and recycled water users in relation to the supply of recycled water which is safe to use in accordance with recommended uses and on other public health issues in regard to recycled water.

NSW Health will provide advice to Council in relation to public health impacts of notifiable incidents and events.

## 4.1 Events and Incidents notifiable to NSW Health

The following Events and Incidents are reportable to NSW Health.

| Event or Incident | Measure |
|---|---|
| Sewage Spills | Sewage Spills with potential contamination of receiving water due to Sewage spills |
| Release of undisinfected effluent to receiving water | When the disinfection system fails and there is continual release (> 2 hrs) of undisinfected effluent to receiving |
| Recycled Water delivered to customers due to failure of critical control point shutdown procedures | • **Chlorine residual** <1 mg/L leaving the plant in association with turbidity criteria outside spec (>5 NTU).<br>• **Turbidity** >5 NTU leaving the plant. |
| Identification of microorganisms in the Network (non-compliance with health related criteria) | Test results *E.coli* : >1cfu in 100mL in the reticulation system |
| Cross connections with drinking water systems | Any cross connection with the potential to result in human ingestion of or inappropriate exposure of the public to recycled water. |
| Customer health complaint concerning recycled water quality | Any customer complaint regarding quality and health effects of use of recycled water. |
| Community health complaint concerning recycled water quality | Any community complaint regarding recycled water quality and health effects. |
| Unauthorised disposal of recycled water | Disposal of recycled water outside the guidelines of the Environmental Operating Management Plan (OEMP) approved by NSW Department of Planning with the potential to impacts public health. |
| Post treatment contamination of recycled water | Any contamination incident post treatment e.g. sewage following main break. Could also include backflow from industrial, commercial or irrigation site. |
| Use of water for a purpose not authorised under the licence | Advice from customer/community of use of recycled water for end uses other than those authorised. |
| Harmful chemical component not removed by recycled water plant | Detection of chemical contamination e.g. from unauthorised trade waste discharge into sewerage system not removed by the STP. |

## 4.2 Communication with NSW Health

All notifiable events shall be initially notified verbally to NSW Health by an authorised person from Council as soon as the event becomes apparent. Follow up written notification will be made in accordance with agreed procedures.

During business hours, call (02) 4734 2022 (Penrith Public Health Unit) and ask to speak to an Environmental Health Officer.

After hours, call (02) 4734 2000 and ask Westmead Hospital switchboard operator to page the On-call Public Health Officer.

The following persons have the responsibility and authority to notify NSW Health of a notifiable incident:

- Wastewater Projects / Works Engineer
- Wastewater Maintenance and Operation Engineer
- Manager Waste Water
- Director Infrastructure Services.

### 4.3 Notification to Customers of NSW Health Advice

Council will notify customers of issues related to wastewater and recycled water and public health in accordance with advice provided by NSW Health.

# 5 Emergency Operating Procedures

## 5.1 General Procedure

1. Analyse the type and severity of the emergency (determine status of critical components).
2. Provide emergency assistance to save lives.
3. Reduce the probability of additional injuries or damage.
4. Perform emergency repairs based on priority.
5. Return system to normal.
6. Evaluate emergency response plan.
7. Revise Plan.

## 5.2 Specific Procedures

Specific procedures have been developed for the following emergencies:

- major asset failure
- bomb threat (criminal act security threat)
- critical limit non-conformance
- dangerous goods or chemical spill/leak
- fire/explosion/collision
- health emergency (e.g. cross connection)
- natural disaster
- outbreak of community illness.

## Asset Infrastructure Failure

| | | |
|---|---|---|
| **Summary** | This emergency operating plan applies to the failure or imminent failure of a major asset | |
| **Initiation and Notification** | Initiate this EOP if any of there is a failure or suspected failure of:<br>• treatment plant process or civil structure<br>• major equipment<br>• trunk main<br>• pumping station | 000 Police<br>Internal Use Only Supervisor – Transport Network<br>Internal Use Only Supervisor – Treatment Plants<br>Internal Use Only Engineer – Operations and Maintenance<br>Internal Use Only Engineer – Wastewater Project/ Works<br>Internal Use Only Manager |
| **Equipment Identified** | • Generator<br>• Pump<br>• High Pressure Jetter<br>• CCTV Camera Unit<br>• Gas Monitor<br>• Laptop/ tablet with GIS Access<br>• Mobile Telephones<br>• Backhoe (contractor)<br>• Excavator (Contractor)<br>• Sucker Truck / Tanker (Contractor) | |
| **Specific Activities** | **1. Assess the problem**<br>• Shutdown affected assets and assess damage<br>• Make area safe<br>• Check welfare of staff and public, provide aid | |
| | **2. Isolate and fix the problem**<br>• Alert appropriate staff and emergency response personnel<br>• Communicate with business unit<br>• Communicate and liaise with customer<br>• Communicate with regulators and authorities<br>• Liaise with Emergency Services and assist<br>• Provide temporary supply or reconfigure delivery system if possible<br>• Provide emergency equipment (pumps, generators, manual systems, local needs etc.) | |
| | **3. Monitoring**<br>• A monitoring program may need to be developed in relation to the specific failure of the asset | |
| | **4. Recovery and return to Safety**<br>• Conduct repairs and begin planning for permanent repairs or replacement assets | |
| **Report of Findings** | • Conduct debrief session and develop improvement strategies<br>• Complete forms as appropriate i.e.: Record details of incident on Incident Report Form | |
| **Impacts** | • Harm to employees or public<br>• Releases to environment<br>• Damage to public and private property<br>• Shut down of operating area<br>• Media attention<br>• Attention from regulatory authorities | |
| **Business consequences** | • Inability to supply treated effluent within parameters<br>• Loss of revenue<br>• Additional operational/emergency supply costs<br>• Public litigation and compensation claims<br>• Damage to image and reputation<br>• Repair and restoration time and costs | |

## Bomb Threat/Criminal acts/Security threats

| | |
|---|---|
| **Summary** | This emergency operating plan applies to criminal acts(or the threat of such acts) directed against personnel or infrastructure |
| **Initiation and Notification** | Notify Police 000 Police<br>Notify direct Supervisor/Engineer/Manager Internal Use Only Supervisor – Transport Network<br>Activate the site emergency alarm is warranted Internal Use Only Supervisor – Treatment Plants<br>Internal Use Only Engineer – Operations and Maintenance<br>Internal Use Only Engineer – Wastewater Project/ Works<br>Internal Use Only Manager |
| **Equipment Identified** | • Mobile Telephones<br>• Laptop/ tablet with GIS Access |
| **Specific Activities** | **1. Assess the problem**<br>• Assess damage/level of threat to affected assets<br>• Check welfare of staff and public, provide aid<br>• Check functionality of affected business |
| | **2. Isolate and fix the problem**<br>• Alert appropriate staff and emergency response personnel<br>• Communicate with business unit<br>• Communicate and liaise with customer<br>• Communicate with regulators and authorities<br>• Liaise with Emergency Services and assist<br>• Provide temporary supply or reconfigure delivery system if possible<br>• Provide emergency equipment (pumps, generators, manual systems, local needs etc.) |
| | **3. Monitoring**<br>• Monitor the system to maintain reticulation system operation and STP process if possible.<br>• Alternative operation and more frequent monitoring may be required during the event.<br>• More frequent monitoring is likely to be required and additional parameters may need to be monitored until the process is stable again. |
| | **4. Recovery and return to Safety**<br>• The chief Warden will provide the all clear to staff and others to re-enter the site once clearance is obtained from attending emergency services. |
| **Report of Findings** | • Conduct debrief session and develop improvement strategies<br>• Complete forms as appropriate i.e.: Record details of incident on Incident Report Form |
| **Impacts** | • Damage to/or loss of facilities and assets<br>• Contamination of supply<br>• Loss of supply or treatment (quantity/quality)<br>• Releases to environment<br>• Risk to public/employee health and safety<br>• Public property damage, loss of cash, property<br>• Stress on organisation and staff |
| **Business consequences** | • Loss of operational capacity and capability<br>• Threat to safety of staff and public<br>• Repair and restoration time and costs<br>• High cost of additional security measures<br>• Loss of data/communications<br>• Loss of revenue |

## Failure of Treatment Process

| | |
|---|---|
| **Summary** | This emergency operating plan applies if there is an increased pathogen loads or nutrient loads within the treated effluent and the plant fails to meet the EPA licence requirement. This also applies if the plant fails to treat the incoming sewage fully or partially. |
| **Initiation and Notification** | Alert the Waste Management Manager<br>Communicate and liaise with external authorities (e.g. NSW Health, EPA)<br><br>000 Police<br>Internal Use Only Supervisor – Transport Network<br>Internal Use Only Supervisor – Treatment Plants<br>Internal Use Only Engineer – Operations and Maintenance<br>Internal Use Only Engineer – Wastewater Project/ Works<br>Internal Use Only Manager |
| **Equipment Identified** | • Water testing/ sampling equipment (e.g. spectrometer, pH meter)<br>• Pump and seed sludge<br>• Disinfectant<br>• Communications equipment (mobile phone)<br>• Chemicals for treatment process adjustment.<br>• Bypass pumping systems (storage dam) |
| **Specific Activities** | **1. Assess the problem**<br>• Determine the extent and nature of contamination if possible including the risk to operational staff. This might involve reticulation system tracing or water sampling<br>• Assess if the plant is capable of treating the wastewater, decide if alternative treatment is possible<br>• Communicate regarding alternative processing solutions<br>• Determine risks to end users, public and the environment from the contamination<br>• Expertise outside council may need to be sought e.g. NSW Office of Water officers, consultants, internal/ external communications<br>• Take documented samples for later analysis<br>• Notify Trade Waste Officer |
| | **2. Isolate and fix the problem**<br>• Isolate affected area (catchment) if possible<br>• Communicate and liaise with customers<br>• Communicate with regulators and authorities<br>• Alter treatment process or reconfigure reticulation system if possible<br>• Provide emergency equipment (pumps, generators, manual systems, local needs etc.) |
| | **3. Monitoring**<br>• Monitor treatment process, effluent quality in the reticulation system. |
| | **4. Recovery and return to Safety**<br>• Conduct repairs and begin planning for permanent repairs or replacement assets. |
| **Report of Findings** | • Conduct debrief session and develop improvement strategies<br>• Complete forms as appropriate i.e.: Record details of incident on Incident Report Form |
| **Impacts** | • Loss of supply or treatment (quantity/quality)<br>• Releases to environment<br>• Risk to end users/public/employee health and safety |
| **Business consequences** | • Inability to supply treated effluent within parameters<br>• Loss of revenue<br>• Additional operational/emergency supply costs<br>• Public litigation and compensation claims<br>• Damage to image and reputation |

| | |
|---|---|
| | • Repair and restoration time and costs<br>• Fines due to EPA licence breach |

**Dangerous Goods or Chemical Spill/Leak**

| | |
|---|---|
| **Summary** | This emergency operating plan applies to a spill including sludge spill, hazardous chemical spill or oil spill. |
| **Initiation and Notification** | Alert supervisor/Engineer/Manager<br>Notify emergency services (000) if the situation presents and immediate danger<br>Notify the EPA if necessary<br><br>000 Police<br>Internal Use Only Supervisor – Transport Network<br>Internal Use Only Supervisor – Treatment Plants<br>Internal Use Only Engineer – Operations and Maintenance<br>Internal Use Only Engineer – Wastewater Project/ Works<br>Internal Use Only Manager |
| **Equipment Identified** | • Spill Containment Kit<br>• PPE<br>• Mobile Phone<br>• Water Testing / Sampling Equipment |
| **Specific Activities** | **1. Assess the problem**<br>• Make area safe<br>• Check welfare of staff and public, provide aid<br>• If required Communicate and liaise with police/ emergency services and assist with investigation |
| | **2. Isolate and fix the problem**<br>• Isolate and fix the problem as appropriate (if safe to do so)<br>• Communicate and liaise with contractors (if applicable)<br>• Communicate and liaise with customers<br>• Communicate with regulators and authorities |
| | **3. Monitoring**<br>• Monitor the problem to determine if it has been fixed. |
| | **4. Recovery and return to Safety**<br>• Liaise with Emergency Services and assist with containment and clean up |
| **Report of Findings** | • Conduct repairs and begin planning for permanent repairs or replacement assets. |
| **Impacts** | • Harm to employees or public<br>• Releases to environment<br>• Contamination of area<br>• Contamination of supply<br>• Shut down of operating area or asset<br>• Media attention<br>• Attention from regulatory authorities |
| **Business consequences** | • Inability to supply treated effluent within parameters<br>• Additional operational costs<br>• Fines due to licence breach<br>• Public litigation and compensation claims<br>• Damage to image and reputation<br>• Repair and restoration time and costs |

## Fire or Explosion

| | |
|---|---|
| **Summary** | This emergency operating plan applies to a fire or where smoke is identified |
| **Initiation and Notification** | Raise the alarm.<br>Warn anyone in danger, evacuate people away from immediate area and work site to STP emergency evacuation area.<br>Call Fire Brigade and/or Police. Use 000 and then use emergency contact list.<br><br>000 Police<br>Internal Use Only Supervisor – Transport Network<br>Internal Use Only Supervisor – Treatment Plants<br>Internal Use Only Engineer – Operations and Maintenance<br>Internal Use Only Engineer – Wastewater Project/ Works<br>Internal Use Only Manager |
| **Equipment Identified** | • Fire extinguishers<br>• Fire Hoses<br>• PPE |
| **Specific Activities** | **1. Assess the problem**<br>• Determine the extent and nature of the fire if safe to do so<br>• Verify the presence of all personnel/ contractors/ visitors at this point<br>• Determine the assets and equipment likely to be effected by the fire<br><br>**2. Isolate and fix the problem**<br>• Warn traffic of any hazard which affects traffic (use lights, warning signs, etc.)<br>• Take any practical steps to contain the hazard<br>• Communicate and liaise with customers<br>• Communicate with regulators and authorities<br>• Turn off Methanol dosing as a precaution until situation is resolved<br><br>**3. Monitoring**<br>• Take any practical steps to prevent the hazard from spreading.<br>• Turn off Methanol dosing as a precaution until situation is resolved.<br><br>**4. Recovery and return to safety**<br>• Contact Engineer/Waste Management Manager<br>• Decide with the relevant authority how to manage and secure the site |
| **Report of Findings** | • Conduct debrief session and develop improvement strategies<br>• Complete forms as appropriate i.e.: Record details of incident on Incident Report Form |
| **Impacts** | • Damage to/or loss of assets<br>• Harm to employees or public<br>• Stress to workers<br>• Shut down of business area<br>• Media attention<br>• Loss of accommodation<br>• Loss of critical data/information/systems |
| **Business consequences** | • Lost time injuries/loss of key resources<br>• Unplanned absences<br>• Disruption due to loss of systems/data<br>• WorkCover investigations<br>• Cost to repair and replace damaged accommodation and equipment/systems |

## Building/Office/Infrastructure Problem

| | |
|---|---|
| **Summary** | This emergency operating plan applies when a building has been affected by an incident (e.g. flooding or collapse) |
| **Initiation and Notification** | Contact ambulance if there are injured people (000)<br>Contact supervisor<br><br>000 Police<br>Internal Use Only Supervisor – Transport Network<br>Internal Use Only Supervisor – Treatment Plants<br>Internal Use Only Engineer – Operations and Maintenance<br>Internal Use Only Engineer – Wastewater Project/ Works<br>Internal Use Only Manager |
| **Equipment Identified** | • First aid kit<br>• Mobile Phone |
| **Specific Activities** | |
| | **1. Assess the problem**<br>• Make area safe<br>• Check welfare of staff and public, provide aid<br>• If required, communicate and liaise with police/Emergency Services and assist with investigation |
| | **2. Isolate and fix the problem**<br>• Isolate and fix the problem as appropriate (if safe to do so)<br>• Communicate and liaise with contractors (if applicable)<br>• Communicate and liaise with customers<br>• Communicate with regulators and authorities |
| | **3. Monitoring**<br>• Monitor the problem to determine if it has been fixed |
| | **4. Recovery and return to Safety**<br>• Conduct repairs and begin planning for permanent repairs or replacement assets |
| **Report of Findings** | • Conduct debrief session and develop improvement strategies<br>• Complete forms as appropriate i.e.: Record details of incident on Incident Report Form |
| **Impacts** | • Damage to/or loss of assets<br>• Harm to employees or public<br>• Stress to workers<br>• Shut down of business area<br>• Media attention<br>• Loss of accommodation<br>• Loss of critical data/information/systems |
| **Business consequences** | • Lost time injuries/loss of key resources<br>• Unplanned absences<br>• Disruption due to loss of systems/data<br>• WorkCover investigations<br>• Cost to repair and replace damaged accommodation and equipment/systems |

**Health Emergency (e.g. Sewage spill into receiving water, cross connection etc.)**

| | |
|---|---|
| **Summary** | This emergency operating plan applies if human health may have been impacted by the Windsor Sewerage System or South Windsor Recycled Water System. |
| **Initiation and Notification** | Contact supervisor and advise of the incident<br>Contact Ministry of Health, Parramatta<br>(02) 9840 3603<br><br>000 Police<br>Internal Use Only Supervisor – Transport Network<br>Internal Use Only Supervisor – Treatment Plants<br>Internal Use Only Engineer – Operations and Maintenance<br>Internal Use Only Engineer – Wastewater Project/ Works<br>Internal Use Only Manager |
| **Equipment Identified** | • Watergate<br>• Plumbing equipment<br>• Disinfectant<br>• Water testing/sampling equipment<br>• Mobile phone |
| **Specific Activities** | **1. Assess the problem**<br>• Determine the source and extent of the contamination<br>• Communicate and liaise with Police/ Emergency Services, NSW Health and assist with investigation |
| | **2. Isolate and fix the problem**<br>• Isolate and fix the problem as appropriate (if safe to do so) |
| | **3. Monitoring**<br>• Test receiving water/water supplies to determine the extent of the contamination |
| | **4. Recovery and return to Safety**<br>• Undertake any remediation work (spill management)<br>• Consider additional or more frequent monitoring as required. |
| **Report of Findings** | • Conduct debrief session and develop improvement strategies<br>• Complete forms as appropriate i.e.: Record details of incident on Incident Report Form. |
| **Impacts** | • Damage to/or loss of assets<br>• Harm to employees or public<br>• Stress to workers<br>• Shut down of business area<br>• Media attention<br>• Loss of accommodation<br>• Loss of critical data/information/systems |
| **Business consequences** | • Lost time injuries/loss of key resources<br>• Unplanned absences<br>• Disruption due to loss of systems/data<br>• WorkCover investigations<br>• Cost to repair and replace damaged accommodation and equipment/systems |

## Natural Event or Disaster

| | |
|---|---|
| **Summary** | This emergency operating plan apply to floods, bushfire, earthquake, landslide, bushfire, wind, hail, lightning, drought |
| **Initiation and Notification** | Communicate with manager<br>Communicate with customers<br>Communicate with regulators and authorities<br><br>000 Police<br>Internal Use Only Supervisor – Transport Network<br>Internal Use Only Supervisor – Treatment Plants<br>Internal Use Only Engineer – Operations and Maintenance<br>Internal Use Only Engineer – Wastewater Project/ Works<br>Internal Use Only Manager |
| **Equipment Identified** | • Generator<br>• Pump<br>• High Pressure Jetter<br>• Trailer<br>• CCTV Camera Unit<br>• Gas Monitor<br>• Laptop/ tablet with GIS Access<br>• Mobile Telephones<br>• Backhoe (contractor)<br>• Excavator (Contractor)<br>• Sucker Truck / Tanker (Contractor) |
| **Specific Activities** | **1. Assess the problem**<br>• Shutdown affected assets and assess damage<br>• Make area safe<br>• Check welfare of staff and public, provide aid |
| | **2. Isolate and fix the problem**<br>• Liaise with Emergency Services and assist<br>• Provide emergency equipment (pumps, generators, manual systems etc.). Consider what may be required to maintain the critical system units – e.g. pumps at pump stations, electrical equipment<br>• Use alternative/additional units if practicable – e.g. increase pumped volume<br>• Communicate and liaise with customers<br>• Communicate with regulators and authorities |
| | **3. Monitoring**<br>• Monitor the system to maintain reticulation system operation and STP process if possible.<br>• If repairs have been made, monitor the scheme to determine if repairs have been successful. |
| | **4. Recovery and return to Safety**<br>• Conduct repairs and begin planning for permanent repairs or replacement assets |
| **Report of Findings** | • Conduct repairs and begin planning for permanent repairs or replacement assets. |
| **Impacts** | • Damage to/or loss of facilities and assets<br>• Loss of power/communications<br>• Loss of supply or treatment (quantity/quality)<br>• Spills, leaks and releases to environment<br>• Risk to public/employee health and safety<br>• Public/private property damage<br>• Loss of access to operating sites |
| **Business consequences** | • Inability to supply treated effluent within parameters<br>• Deterioration of stored water quality<br>• Loss of data/communications<br>• Reduction of operational manpower<br>• Repair and restoration time and costs<br>• Additional operational costs |

# 6 Training and Review

## 6.1 Training

To evaluate the effectiveness of the PIRMP and to ensure that procedures and practices in this PIRMP are adequate and are being implemented properly drills should be conducted regularly.

Training on the PIRMP will help determine what works and what does not so that revisions can be made accordingly. Training must be conducted annually or when:

- new employees commence
- new equipment or materials are used
- procedures are updated or revised.

Training may include the following.

- **Orientation Sessions** These should include basic instructions and explanation of the PIRMP and Action Plan procedures
- **Desk Top Workshops** Where employees are presented with a fabricated major event. They verbally respond to a series of questions and evaluate whether their response match the PIRMP.
- **Functional Exercises** are designed to simulate a real major event. A team of simulators is trained to develop a realistic situation.
- **Full Scale Drills** Emergency response personnel and equipment are actually mobilised and moved to a scene. A problem is presented to the response personnel and they responded as directed by the PIRMP and Emergency Response Co-ordinator at the scene.

## 6.2 Review of Document

This document must be reviewed every year in accordance with clause 98 D(2) of the Protection of the *Environment Operations (General) Regulation 2009* with the contact list updated. Other triggers for review include:

- within one month of an emergency (regulatory requirement)
- within two months of a change in the STP or recycled water operation
- immediately upon change in contact information.

# 7 Location Maps, Description & Likelihood of Hazards, Pollution Inventory and Emergency contacts

## 7.1 McGraths Hill Sewerage Treatment Plant Aerial Map

Note: The surrounding areas of the premises are not likely to be affected by a pollution incident as the impacts are confined to the site.

**Map 1**

**Map 2**


HAWKESBURY CITY COUNCIL
PO Box 146, Windsor NSW 2756
Website: www.hawkesbury.nsw.gov.au
Email: council@hawkesbury.nsw.gov.au
Hours: Monday to Friday 8.30am - 5pm
Phone: (02) 4560 4444
8
7
28
26
23
24
4
6
5
20
1
2
27
25
3
22
21
Mulgrave Road
McGraths Hill Sewerage Treatment Plant
Date: 14/11/2017
Legend
Boundary
8 Pollutant Storage Locations
0
12.5
25
50
Metres
1:1,000 @ A3

## 7.2 South Windsor Sewerage Treatment Plant Aerial Map

## 7.3 Description and Likelihood of Hazards

| Hazard | Incident | Impact | Likelihood | Preventative Measures and Pre-emptive Actions |
|---|---|---|---|---|
| Pathogen / nutrients | Pipe break/ blockage in sewer catchment | • Potential health impacts if public contact the sewage<br>• Potential environmental impacts if released to sensitive environments | Preventative measures and pre-emptive actions mean the management of these breaks and chokes make the likelihood of public health and environmental impacts less likely. | • Asset Management Plan<br>• Sewer Main Rehabilitation Program<br>• Call Outs and Emergency Response |
| Pathogen / nutrients | Overflow from the reticulation during dry weather | • Potential health impacts if public contact the sewage<br>• Potential environmental impacts if released to sensitive environments | Overflow is likely. However the emergency procedures are in place to manage the incident promptly and appropriately. | • Asset Management Plan<br>• Sewer Main Rehabilitation Program<br>• Call Outs and Emergency Response |
| Pathogen / nutrients | Overflow from the reticulation during wet weather | • Potential health impacts if public contact the sewage<br>• Potential environmental impacts if released to sensitive environments | Could happen but negligible impact. However sites are monitored for appropriate action as required. | • Asset Management Plan<br>• Sewer Main Rehabilitation Program<br>• Call Outs and Emergency Response |
| Pathogen / nutrients | Breakdown at SPS's causing overflows | • Potential health impacts if public contact the sewage<br>• Potential environmental impacts if released to sensitive environments | Could happen but less likely. | • Asset Management Plan<br>• Preventative Maintenance Program<br>• Call Outs and Emergency Response |
| Pathogen / nutrients | Breakdown at STP causing overflows | Impacts likely to be confined to site | Could happen but less likely. | • Asset Management Plan<br>• Preventative Maintenance Program<br>• Daily site inspection with checklist<br>• Level monitoring and alarm system |
| Chemicals | Chemical Spill | • Potential health impacts if public contact the sewage<br>• Potential environmental impacts if released to sensitive environments<br>• Impact likely to be confined to site | Could happen but less likely. | • Asset Management Plan<br>• Preventative Maintenance Program<br>• Daily site inspection with checklist |

## 7.4 Inventory of Pollutants

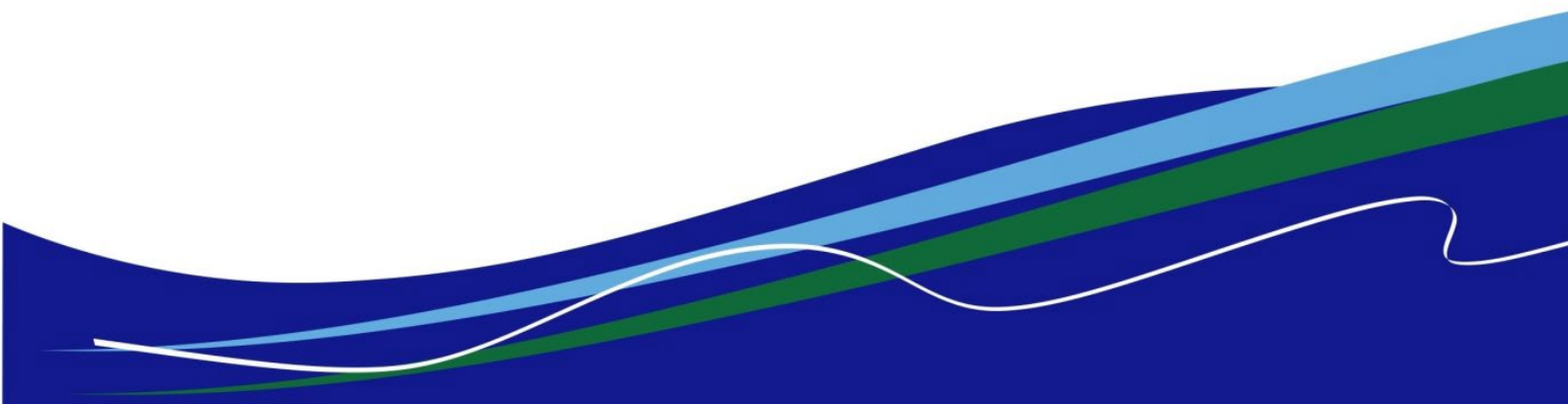
(Internal use only)

## 7.5 Emergency Contact Details – Hawkesbury City Council

| Name | Position Title | Contact Details |
|---|---|---|
| Will Barton | Director Infrastructure Services | (Internal use only) |
| Muhammad Azmeer | Manager Wastewater | (Internal use only) |
| Krish Thiyagaraja | Wastewater Projects/Works Engineer | (Internal use only) |
| Michael Coram | Supervisor – Wastewater Transport Network | (Internal use only) |
| Dale Munday | Supervisor – Wastewater Treatment Plants | (Internal use only) |
| Jessica Tola | Wastewater Maintenance and Operation Engineer | (Internal use only) |

## 7.6 Safety Equipment

| Equipment | Location |
|---|---|
| Utes | South Windsor STP & McGraths Hill STP |
| Sewer Trucks | South Windsor STP |
| Personal Protective Equipment (gloves safe goggles ear plugs) | South Windsor STP & McGraths Hill STP |
| Spill kits | South Windsor STP & McGraths Hill STP |
| Fire extinguisher | South Windsor STP, McGraths Hill STP and Sewer Trucks |
| Gas detectors | South Windsor STP |
| Harness and fall arrestor | South Windsor STP |
| Sandbags | South Windsor STP |
| Disinfectant | South Windsor STP |
| Portable Pumps | South Windsor STP |
| Lay flat pipe | South Windsor STP |
| Traffic management equipment | South Windsor STP |
| First Aid Kits | All STP offices<br>Utes & Council Trucks |
| Mobile Phones | Operators/Engineers/Manager |
| Computer/email/server access | All STP Offices |



**HAWKESBURY CITY COUNCIL**
**Pollution Incident Management Plan**