



**OBERON SEWAGE TREATMENT PLANT AND
COLLECTION SYSTEM
POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN (PIRMP)
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Foreword

The Pollution Incident Response Management Plan (PIRMP) for Oberon Sewerage Scheme is a document that has been developed to be used by Oberon Council in the operation and management of incidents at the Oberon STP and the sewerage collection system. The purpose of this Plan is to ensure that pollution incidents are avoided but if they occur are managed appropriately to minimise the effects on the environment and to human health.

This PIRMP addresses the requirements under the POEO (Protection of Environment Operations) Act 2011.

The objectives of the plan are to:

- communicate in a timely manner and with sufficient detail about a pollution incident to relevant authorities and people outside the facility who may be affected by the impacts of the pollution incident;
- minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks; and
- ensure that the plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability.

This Management Plan is to be continually updated and reviewed by Oberon Council, General Manager, Council's Technical Services Director, Sewerage Plant Operator and Work Health and Safety/ Risk Management Coordinator.

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1 Introduction

The township of Oberon is located approximately 180 km west of Sydney. Oberon currently has a population of approximately 2,600 people.

Oberon Council owns and operates the Oberon Sewerage Scheme that includes a trickling filter type treatment plant and collection system servicing the town.

General Layout of the town is shown in **Figure 1.1**.

1.1 Sewage Treatment Plant and Collection System

The STP at Oberon is located at the south eastern edge of the town. Treatment at the site is based on a conventional trickling filter.

The Oberon STP comprises the following treatment /process units:

- One balance tank;
- Inlet works with grit channel, flow measuring flume, mechanical spiral screen;
- Two sedimentation tanks (2600EP);
- Two trickling filters (3800EP);
- One activated sludge tank;
- One clarifier (6000EP);
- Two sludge digesters (4000 EP);
- Alum dosing facilities;
- Three sludge lagoons (7000EP);
- Sludge drying bed (1000EP) and sludge drying pond;
- Effluent ponds (20 days detention);

The Oberon sewerage collection system comprises the following:

- Gravity mains
- Main SPS (1) with maximum pumping capacity of 130 L/s.
- Other SPS – (2, 3, 4)

The STP and the collection system operate under an Environmental Protection Licence (EPL) 1644.

1.2 Scope of the PIRMP

The scope of the plan is as follows:

- Description and likelihood of hazards
- Pre-emptive actions to be taken
- Inventory of pollutants
- Safety equipment
- Contact details
- Communicating with neighbours and the local community
- Minimising harm to persons on the premises
- Maps showing the location of scheme components
- Actions to be taken during or immediately after a pollution incident;
- Staff training.

Location of Oberon STP

Curtis Street, East (access off Fairfax Street)



2 Context of the Assessment

2.1 Background

A requirement under the *Protection of the Environment Legislation Amendment Act* (POELA) 2011 is to prepare, keep, test and implement a Pollution Incident Response Management Plan (PIRMP) for each environmental protection licence that Council holds.

The objectives of these Plans are to:

- communicate in a timely manner and with sufficient detail about a pollution incident to relevant authorities and people outside the facility who may be affected by the impacts of the pollution incident
- minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks
- ensure that the Plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability.

The NSW EPA defines a 'pollution incident' as:

An incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

A pollution incident is required to be notified if there is a risk of 'material harm to the environment', which is defined in section 147 of the POEO Act as:

- (a) Harm to the environment is material that:
- (i) Involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
 - (ii) Results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and
- (b) 'Loss' includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Industry is now required to report pollution incidents *immediately* to the EPA, NSW Health, Fire and Rescue NSW, SafeWork NSW and the Local Council. '*Immediately*' has its ordinary dictionary meaning of promptly and without delay. These strengthened provisions will ensure that pollution incidents are reported directly to the relevant response agencies so they will have direct access to the information they need to manage and deal with the incident.

The NSW EPA required a Plan to be implemented for all existing licenses by the 1st of September 2012. Council holds EPL 1644 for the Oberon STP and collection system.

2.2 Council Commitment

Oberon Council is committed to protecting the health of Staff, the Public and the environment. This commitment is contained in the current version of the Oberon Community Strategic Plan, Delivery program and Operational Plan.

Council's Charter is shown below.

Local Government Act - Council's Charter

The Local Government Act contains a Charter for Local Government which describes the approach to supplying services and activities. It charges local government with a number of responsibilities:

- to provide directly or on behalf of other levels of government, after due consultation, adequate, equitable and appropriate services and facilities for the community and to ensure that those services and facilities are managed efficiently and effectively
- to exercise community leadership
- to exercise its functions in a manner that is consistent with and actively promotes the principles of multiculturalism
- to promote and to provide and plan for the needs of children
- to properly manage, develop, protect, restore, enhance and conserve the environment of the area for which it is responsible, in a manner that is consistent with and promotes the principles of ecologically sustainable development
- to have regard to the long term and cumulative effects of its decisions
- to bear in mind that it is the custodian and trustee of public assets and to effectively account for and manage the assets for which it is responsible
- to engage in long-term strategic planning on behalf of the local community
- to exercise its functions in a manner that is consistent with and promotes social justice principles of equity, access, participation and rights
- to facilitate the involvement of councillors, members of the public, users of facilities and services and Council staff in the development, improvement and co-ordination of local government
- to raise funds for local purposes by the fair imposition of rates, charges and fees, by income earned from investments and, when appropriate, by borrowings and grants
- to keep the local community and the State government (and through it, the wider community) informed about its activities
- to ensure that, in the exercise of its regulatory functions, it acts consistently and without bias, particularly where an activity of the Council is affected and
- to be a responsible employer.

2.3 Regulatory and Formal Requirements

The regulatory and formal requirements applicable to the scheme are shown in **Table 2.1**. These legislative, licensing requirements and guidelines are to be met to ensure the protection of public health and environmental health and to satisfy WHS requirements. This Management Plan addresses how these requirements are to be met.

Table 2.1: Formal and Regulatory Requirements

Parameter	Instrument	Administered by
Overall Scheme Operation	Water Management Act 2000	NSW Office of Environment and Heritage
	Local Government Act 1993	NSW Office of Water
		Sydney Catchment Authority
Public Health	Environment Operations Act 2011	NSW Office of Environment and Heritage
Environmental Health	Section 55 Protection of the Environment Operations Act 2011 Environment Protection Licence 1644	NSW Office of Environment and Heritage
WHS	<i>Work Health and Safety Act 2011 (WHS Act) and associated Regulations.</i>	Safe Work NSW
Plumbing	AS/NZS 3500.0 to 4:2003 Plumbing and Drainage Set Largely for management of the distribution system including standard for pumping and drainage issues.	Oberon Council

Council's Works and Engineering Director, is responsible for the review and evaluation of this plan and for meeting the regulatory and other requirements.

3 Assessment of the Risks

3.1 Risk Assessment – Oberon STP and Collection System

A risk assessment was undertaken with the Oberon water and sewer operator at Oberon on 14 June 2016. The objective of the assessment was to:

- Identify the hazards
- identify hazardous events
- assessment of the likelihood of the event and other factors that may increase the likelihood
- assess the impacts and
- assess the overall risk.

Shown in **Table 3.1**, **Table 3.2** and **Table 3.3** are the criteria used in the assessment.

As can be seen in **Table 3.4**, the residual STP risks are rated low. The SPS risks are also rated low

Table 3.1: Definitions of Likelihood

Level	Likelihood	Description
A	Almost certain	- The event is expected to occur often (several times per year)
B	Likely	- The event will probably occur often (once every 1-3 years)
C	Possible	- The event might occur at some time (once every 3 to 10 years)
D	Unlikely	- The event could occur at some time (once every 20 years)
E	Rare	- The event may occur only in exceptional circumstances (once every 100 years)

Table 3.1: Definitions of Impact

Level	Classification	Example Definition Human Health	Example Definition Environment
1	Insignificant	No detectable human health illness.	No detectable environmental impact.
2	Minor	Short term, low level illness affecting a small population	localised, short term environmental impact.
3	Moderate	Short term, low level illness affecting a large population.	localised, medium term environmental impact.
4	Major	Severe illness or death affecting a small population	Severe long term environmental impact.
5	Catastrophic	severe illness or death affecting a large population	severe permanent environmental impact.

Table 3.3: Risk Analysis Criteria

Likelihood	Impacts				
	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
Almost Certain – A	Low	Moderate	High	Very High	Very High
Likely – B	Low	Moderate	High	Very High	Very High
Possible – C	Low	Moderate	Moderate	High	Very High
Unlikely – D	Low	Low	Moderate	High	Very High
Rare – E	Low	Low	Low	Moderate	High

Table 3.4: Risk Register

Contaminant	Description of the Hazardous Event	Human Health (Public Health)	Environmental Risks	Likelihood Almost Likely Moderate Unlikely Rare	Events or Circumstances that would exacerbate or increase likelihood	Impact Insignificant Minor Moderate Major Catastrophic	Assessed Risk Low Moderate High Very High	Pre-emptive Actions (Existing Controls) In addition to operator training, SWMS
STP								
1	Effluent	Septage upset process	✓	Rare		Minor	Low	The operator must authorise. Not currently taken
2	Effluent	Stormwater inflow to STP causing overflows	✓	Unlikely		Minor	Low	Plant designed to handle PWWF All inflows pumped. Telemetry system. Operator attendance within 1 hour
3	Effluent	Poor quality - sabotage of plant	✓	Rare		Minor	Low	Security gate. Locked building. Telemetry system
4	Effluent	Poor quality - extended power failure	✓	Unlikely		Minor	Low	Reliable power system. Long outages would be planned. Units will provide some treatment Telemetry system
5	Effluent	Poor quality - equipment failure	✓	Unlikely		Minor	Low	Standby capacity. SPS storage if required. Telemetry system. Operator attendance in less than 1 hour.

	Contaminant	Description of the Hazardous Event	Human Health (Public Health)	Environ Risks	Likelihood Almost Likely Moderate Unlikely Rare	Events or Circumstances that would acerbate or increase likelihood	Impact Insignificant Minor Moderate Major Catastrophic	Assessed Risk Low Moderate High Very High	Pre-emptive Actions (Existing Controls) In addition to operator training, SWMS
6	Alum	Tank leak or failure		✓	Unlikely	Stop valve left open	Minor	Low	Bundling.
7	Alum	Spill during filling operation		✓	Unlikely	Stop valve left open	Minor	Low	Bundling of transfer area
8	Screening and grit	Washed off site - currently buried		✓	Unlikely		Minor	Low	Buried in trench

Contaminant	Description of the Hazardous Event	Human Health (Public Health)	Environ Risks	Likelihood Almost Likely Moderate Unlikely Rare	Events or Circumstances that would exacerbate or increase likelihood	Impact Insignificant Minor Moderate Major Catastrophic	Assessed Risk Low Moderate High Very High	Pre-emptive Actions (Existing Controls) In addition to operator training, SWMS
SPS 1,2,3,4								
9 Sewage	Overflow to creek - extended power failure	✓	✓	Unlikely	Wet weather event	Minor	Low	Reliable power system. Long outages would be planned. 8 hours ADWF emergency storage Operator response less than 1 hour
10 Sewage	Overflow to creek - extended power failure unplanned	✓	✓	Unlikely	Wet weather event	Minor	Low	Duty and standby Pumps - Pumps less than 4 years old 8 hours ADWF emergency storage Operator response less than 1 hour
11 Sewage	Overflow to creek - pump failure	✓	✓	Unlikely	Wet weather event	Minor	Low	Telemetry system. Operator response less than 1 hour
12 Sewage	Overflow to creek - electrical failure	✓	✓	Unlikely	Wet weather event	Minor	Low	Telemetry system. Operator response less than 1 hour. Diesel generator. 8 hours ADWF emergency storage

13	Sewage	Overflow to creek - flooding of SPS	✓	✓	Unlikely	Wet weather event	Minor	Low	Telemetry system. Operator response less than 1 hour. Diesel generator. 8 hours ADWF emergency storage
14	Sewage	Overflow due to blockage	✓	✓	Moderate	Wet weather event	Minor	Low	Operator to call in tanker Operator response less than 1 hour Small volumes

4 Preventative Measures to be Undertaken

The preventative measures to manage and minimise the risk to human health and the environment involve a multiple barrier approach. The multiple barriers, in order of preference, are as follows;

- Elimination
- Substitution
- Isolation
- Engineering means
- Administrative
- Personal Protection Equipment

These are broken down to the following

- Appropriate design of the facilities
- Appropriate operation and monitoring
- Appropriate education and training.

The identified current control measures are shown in this section. Photos of the existing measures are shown in Figures 4.1 – 4.6.

4.1 COLLECTION SYSTEM

Collection system overflows can principally occur from five main causes. They are:

- Power/mechanical failure at pumping stations
- Reticulation system blockage/leakage
- Rising main breakage (leaks or major failure)
- Breakdown of pump units
- Excessive inflows.

4.1.1 Gravity System

Overall the Oberon reticulation system is in good condition. It has sufficient capacity and the number of overflows or incidents per kilometre of pipeline per year would be considered low by industry standards.

Apart from minor seepages due to blockages in pipelines, no major overflow events have occurred in the reticulation system the recent past.

Unusual excessive inflows that are greater than the design peak wet weather flow (PWWF) may occur during extreme flood events if reticulation manholes become inundated and the inflow is greater than the pumping station capacity. Overflows due to illegal connection of storm water pipes, low lying gullies and boundary traps etc. have not been recorded.

4.2 PUMPING STATIONS

The likelihood of overflows from SPS will be minimised by the provision of the following;

- Adequate pumping capacity

- Reliable power supply
- Service response time to address abnormal operating conditions such as power failure, pump failure etc. is less than the detention time provided within SPSs before overflow occurs
- Availability of standby pumps (pump failure), and/or portable generators (power supply/electrical failure)
- Implementation of effective emergency plan/operational procedures for attending to failure and breakdown within the system.

4.2.1 Adequate Pumping Capacity

All the SPS have sufficient pumping capacity for present and future requirements.

4.2.2 Reliable Power Supply

Oberon has a reliable power supply. Power outages in the Oberon area have generally been for less than 4 hours in duration. While not common, power failures of extended duration are possible but are usually planned outages.

4.2.3 Provision of Emergency Storage

A sewerage system must have sufficient capacity to store sewerage, which continues to flow from the catchment during extended mechanical breakdowns, electrical failures or blockages of sewer mains. Each of the Oberon SPS has 8 hours of ADWF emergency storage. SPS 1 has an overflow detention pond designed to store any overflows. Overflows are pumped back to the SP1 once the situation is normal.

4.2.4 Telemetry System

SPS 1 and 2 are connected via a telemetry system and alarm sent back to Oberon STP. Power outages, mechanical failure, high level alarms are transmitted to the operators for immediate attention.

SPS 3, 4 are not connected with the telemetry. Pump fault signal is provided via a lamp on the switchboards.

Response Times to Abnormal Operating Conditions

Response time for attendance to any abnormal operating condition would generally be less than one hour.

4.2.5 Standby Pumps

All PS have duty and standby pumps installed. All SPS also have a generator connection point. Council has a mobile generator.

Table 4.1: Preventative Measures at Each Site.

Site	Potential Hazards	Existing Preventative Actions	Proposed New Measures	
STP	Stormwater inflow to STP causing overflows	the pump station can stop to pump the inflow to the inlet work Overflow at inlet work discharge to effluent pond. Telemetry system Operator attendance with 1 hour.	None Required	
		Sabotage of plant	Locked gate. Locked building. Telemetry system.	None Required
		Poor quality – extended power failure.	Reliable power system. No inflow in the inlet works due to no inflow will be pumped from pumping station No.1 Telemetry system.	None Required
		Poor quality –equipment failure.	Standby capacity (duty/standby pumps). SPS No.1 Storage if required. Telemetry system. Operator attendance in less than 1 hour.	None Required
	Overflow from aerator tank	An overflow pipe has been provided.	None required	
SPS No.1	Overflow to water course – extended power failure.	Reliable power system. 8 hours ADWF emergency storage. Telemetry system.	None required.	

		Operator response less than 1 hour.	
	Overflow to water course –pump failure	Duty and stand by pumps 8 hour ADWF emergency storage. Telemetry system. Operator response less than 1 hour.	None required.
	Overflow to water course – pump failure by lightning strike.	Duty and stand by pumps – maintenance well. 8 hour ADWF emergency storage. Telemetry system. Operator response less than 1 hour.	None required.
	Overflow to water course – flooding of SPS.	SPS above the flood level. Telemetry system. Operator responds less than 1 hour. 8 hours ADWF emergency storage.	None required.
SPS No.2	Overflow to water course – extended power failure.	Reliable power system. 8 hours ADWF emergency storage. Telemetry system. Operator response less than 1 hour.	None required.
	Overflow to water course –pump failure	Duty and stand by pumps – maintenance well. 8 hour ADWF emergency storage. Telemetry system. Operator response less than 1 hour.	None required.
	Overflow to water course – flooding of SPS.	SPS above the flood level. Telemetry system Operator responds less than 1 hour 8 hours ADWF emergency storage.	None required.
	Overflow to water course – extended power failure.	Reliable power system. 8 hours ADWF emergency storage. Operator response less than 1 hour	None required
SPS No.3	Overflow to water course – extended power failure.	Reliable power system. 8 hours ADWF emergency storage. Operator response less than 1 hour	None required

SPS No.4	Overflow to water course – pump failure	Duty and stand by pumps – maintenance well. 8 hour ADWF emergency storage. Operator response less than 1 hour	None required
	Overflow to water course – flooding of SPS.	SPS above the flood level. 8 hours ADWF emergency storage. Operator response less than 1 hour	None required
	Overflow to water course – extended power failure.	Reliable power system. 8 hours ADWF emergency storage. Indicator lamp.	None required
SPS No.4	Overflow to water course –pump failure	Duty and stand by pumps – maintenance well. 8 hour ADWF emergency storage.	None required
	Overflow to water course – flooding of SPS.	SPS above the flood level. 8 hours ADWF emergency storage.	None required

Figure 4.1 Photo STP Effluent Ponds



Figure 4.2 Photo STP Aerator Tank



Figure 4.3 Photo SPS No.1



Figure 4.4 Photo SPS No.2



Figure 4.5 Photo SPS No.3



Figure 4.6 Photo SPS No.4



4.3 SEWAGE TREATMENT PLANT OVERFLOWS

The Oberon STP was originally constructed in 1965 and upgraded in 1988 to cater for 7000EP. All flows are pumped to the Balance tank of inlet works via pumping station No.1 with maximum capacity of 130 L/s. The overflow in excess of 60 kl/s at balance tank is discharge to the effluent pond during the wet weather flow condition. The effluent ponds provide 20 day detention time and UV disinfection before discharging to the Fish River if required.

Equipment failure may occur at the plant, however the overflow storage at the pumping station No.1 has sufficient storage capacity to store sewage until the STP failure is resolved. The plant has a telemetry system and the operators live locally to the STP. Alarms will alert the operator via an automatic phone dialler system. Operators are usually able to attend to the alarm within an hour.

4.3.1 Dry Weather

Unless exceptional circumstances such as malfunction of system due to mechanical/ electrical failure or blockages occur, overflows at STP are very unlikely.

No dry weather overflow events have been recorded in the recent past.

4.3.2 Wet Weather

Overflow during wet weather is likely to happen at the STP. The overflow is discharged to the effluent ponds.

4.4 SEWAGE TREATMENT PLANT CHEMICAL SPILLS

The Oberon STP has an alum based chemical dosing system. The Alum tank is stored in a bund. The bound area can hold for the spill event of the alum tank, the spill is pumped out via a portable pump. A safety shower is provided.

Figure 4.2 STP - Alum Storage Tank Bund



5 Inventory of Pollutants and SDS

5.1 Inventory of Stored Chemicals

The stored chemicals onsite and hard copies of current Safety Data Sheets (SDS) are listed in a folder kept in the STP office

5.2 Chemical Usage

The following chemical is used in the treatment of sewage.

- Alum
- Soda Ash

5.3 Other Pollutants – Sewage and Effluent

The other potential pollutants are:

- Sewage – within the collection system
- Effluent – produced at the STP.

Table 5.1: Pollutant List – Chemicals

Chemical	Location	Chemical Name and Formula	Typical Analysis	Use	Amount Stored
Alum	Oberon STP			Flocculation	20,000 L

Table 5.2: Pollutant List – Sewage and Effluent

Parameter	Raw Sewage	EPA Effluent (90 percentile)
Biochemical oxygen demand (BOD ₅)	170 mg/L	<20 mg/L
Suspended solids (SS)	190 mg/L	<30 mg/L
Total nitrogen (TN)	12 mg/L	<20 mg/L
Ammonia	24 mg/L	
Total phosphorus (TP)	mg/L	<1 mg/L
Oil and grease (O&G)	mg/L	<10 mg/L
Faecal coliforms, FC	1,000,000 cfu/100 mL	<1500 cfu/100 mL
pH	6.5 - 8.5	6.5 - 8.5

6 Safety Equipment

Safety equipment or other devices that are onsite will minimise the risks to human health or to the environment and contain or control a pollution incident. These will include any PPE, SDS, monitoring devices and spill containment equipment.

6.1 List of PPE Equipment Onsite

Personal Protective Equipment	Location
Hearing protection	STP
Protective gloves	STP
Dust mask	STP
Safety glasses	STP
BA	STP
Safety apron Lifebelts	Sludge lagoons Clarifier

6.2 List of Monitoring Devices

The following monitoring devices are present onsite:

System	Monitoring Devices	Devices Alert
STP	Telemetry system monitors	Water and Sewer Supervisor On call Water and Sewer Operator
SPS No.1	High Level alarm	Water and Sewer Supervisor On call Water and Sewer Operator
	Power failure	Water and Sewer Supervisor On call Water and Sewer Operator
SPS No.2	High Level alarm	Water and Sewer Supervisor On call water and sewer operator
SPS No.3	Mechanical Failure	Water and Sewer Supervisor On call water and sewer operator
SPS No.4	High Level alarm	Water and Sewer Supervisor On call Water and Sewer operator

7 Roles, Responsibilities and Contact Details

7.1 Stakeholder Responsibilities and Engagement

Oberon Council has committed to operating its STP in a responsible manner. Effective stakeholder engagement is necessary to fulfil this commitment. **Table 7.1** presents the stakeholders involved in the operation of the STP, sets out their roles, and the communication expected to occur to achieve safe operation of the STP and the sewerage collection system. Further information on the operation of the system and communication protocols is addressed later in this plan.

Table 7.1: Stakeholder Responsibilities and Engagement

Stakeholder	Responsibility	Communicates with	Reason
Technical Services , Director	Overall scheme operation/ responsibility	Water and Sewer Supervisor	Management of operations staff
		NSW Health	Health advice, reporting incidents
		NSW EPA	Reporting on Licence compliance, reporting incidents
		Community of Oberon WHS/RM Coordinator	Advice where required during incidents Risk assessments Reporting of incidents and injuries.
Technical Services , Director	Management of scheme operation and maintenance, emergency response	Council operators and Works & Engineering Director WHS/RM Coordinator	Management of operations staff, reporting issues regarding operation, maintenance and compliance to Council, resolving site issues,
Operators and Water and Sewerage crews	Day to day operation of STP and collection system, response to emergencies	Water and Sewer Supervisor	Communicates issues regarding operation, maintenance and compliance
Police /Fire brigade/HAZMAT/ Ambulance/ SES	Response to emergencies	Technical Services, Director Water and Sewer Supervisor	Response to spills, injuries, accidents

7.2 List of Contact Details

Organisation	Number
Fire, Ambulance, Police	000
Oberon Police	6366 1000
SES	6336 1759
Hospital, Oberon	6336 1300
Medical Centre, Oberon	6336 1505
Fire Control Office, Oberon	6336 0493
Council Office, Oberon	6329 8100
Council, After Hours	0428 698 036
Council, WHS/Risk Management Coordinator	0418 544 176
Council, Technical Services Director	0407 214 534
Andrew Krol , STP Supervisor	0407 963 885
Electrical	132 830
Gas	131 909
Environment Protection (EAP)	6330 7600
NSW Health	0427 204 372
NOW Inspector	0419 624 576
Oberon Dam, State Water Corporation	0419 463 039
Poisons information line	13 11 26

8 Communicating with Neighbours and the Community

To determine the appropriate communication strategy for an incident the incident needs to be categorised. Once categorised the agreed communication strategy should be deployed.

8.1 Incident Classification

- **Minor Risk Incident:** managed by routine procedures/work practices.
 - Incident affects small area only AND
 - Incident is easy to clean up without additional assistance AND
 - There is no risk of material harm to humans or the environment.
- **Moderate Risk Incident:** Further investigation may be required and assessment of management options; in short term, operations and maintenance adjusted to reduce the consequences, likelihood and exposure.
 - Incident affects more than one property OR
 - There is a risk of pollution or material harm to the environment BUT
 - Clean up can be completed without assistance AND
 - There is no danger to humans.
- **Major Risk Incident:** further detailed investigation and assessment of management options is required; immediately review and adjust operations and maintenance to reduce the consequences, likelihood and exposure; clean-up and notification procedure become high priority.
 - Potential or actual harm to human and the environment AND/OR
 - Assistance is required with clean-up from other agencies.

The following examples are given as a guide only:

- **Low Risk Incidents** – incidents with a low risk to health and the environment such as;
 - Reticulation system blockages
 - Pump failure
 - Short term power failure or electrical failure
 - Minor spills to the ground
- **Moderate Risk Incident** - an incident with a medium risk to health and the environment such as;
 - Major spills to the ground or to a sensitive environment
 - Sewage spills to a waterway
 - Extended power failure
- **Major Risk Incident** –an incident with a high risk to health and the environment such as:
 - Major spills to a waterway
 - Extended Power failure during wet weather
 - Earthquake or structural collapse cause significant damage.

8.2 Notification process

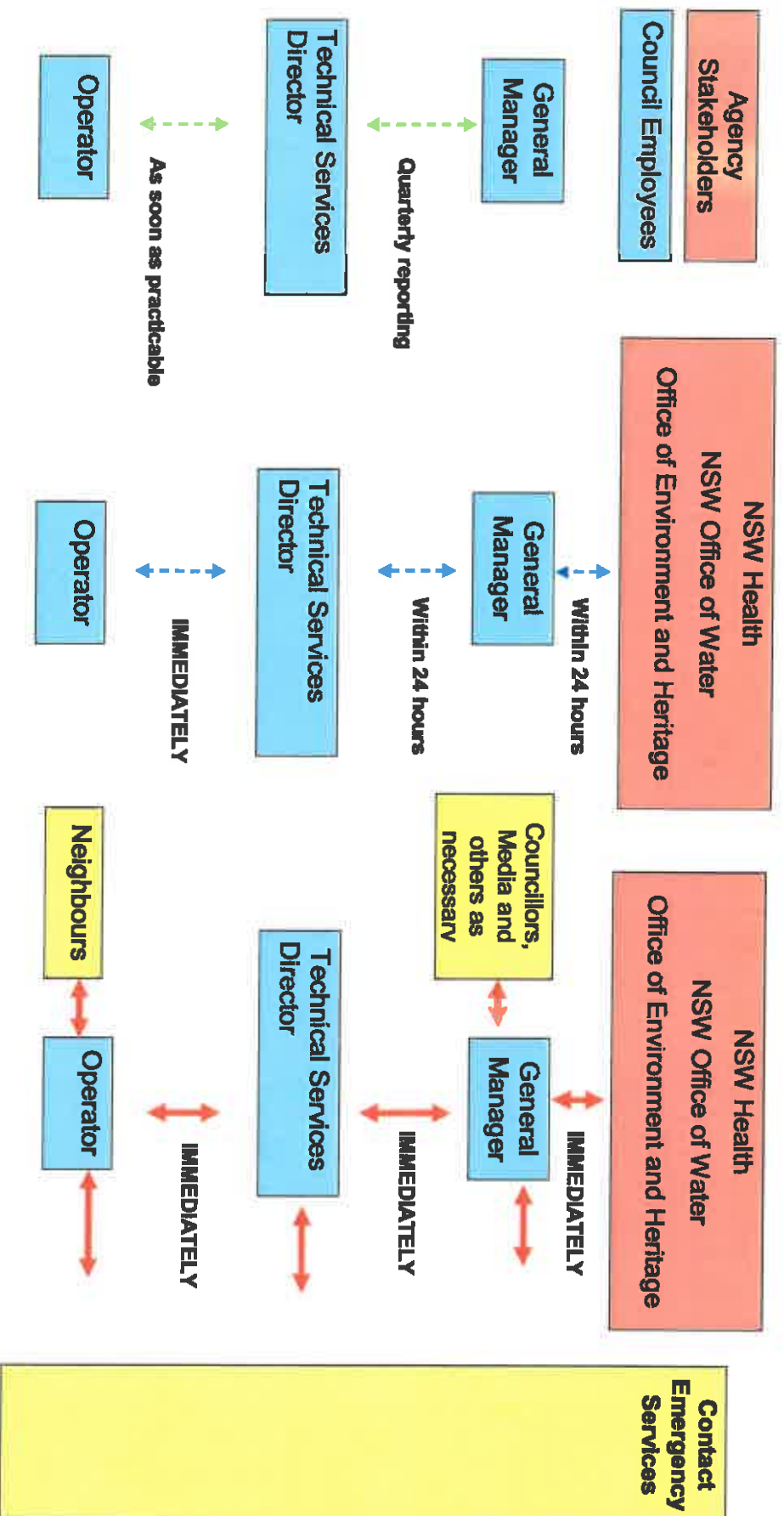
The following incident notification process will be undertaken for the identified incident levels;

- **Minor Risk Incident**
 - The STP operator will record ALL MINOR incidents
 - The operator reports all incidents to Works & Engineering Director – monthly.

- **Moderate Risk Incident – NOTIFIABLE**
 - The STP operator will report Medium Incident to the Works & Engineering Director – IMMEDIATELY.
 - The Works & Engineering Director will report incidents to Council's General Manager within 24 hours
 - Council's General Manager will report incidents to the EPA, NSW Health, and Safe Work NSW if required within 24 hours

- **Major Risk Incident- NOTIFIABLE**
 - The STP Operator will report Major Incident to the Works & Engineering Director, HAZMAT and Emergency Services as required –IMMEDIATELY
 - The STP operator will communicate with neighbours to the plant – IMMEDIATELY
 - The Works & Engineering Director will report incidents to Council's General Manager IMMEDIATELY
 - Council's General Manager will report incidents to the EPA, NSW Health, and Safe Work NSW if required IMMEDIATELY

Figure 8.2 Incident Communication Protocols



Minor Incident Reporting

Significant Incident Reporting

Major Incident Reporting

8.3 Workplace Incidents and Injuries

All incidents will be reported in accordance with procedures as required by StateCover Mutual, on appropriate forms and within required timeframes.

- i. Advise supervisor of incident
- ii. Complete the StateCover Incident/Injury register form within 24hrs from incident occurring
- iii. Take completed form to WHS/RM Coordinator for on-line registration with StateCover
- iv. Where worker's compensation applies a return-to-work plan will be organised by Council's Return-to-work Coordinator

The following incidents and injuries will be reported to SafeWork NSW:

- Notifiable incident involving a fatality or a serious injury or illness.
- Notifiable incident involving a fatality or a serious injury or illness to other people at your workplace.
- Notifiable incidents that present a serious risk to health and safety at the workplace (dangerous incidents).

8.4 Investigation of incident and emergency

Following any incident or emergency situation, Council's WHS/RM Coordinator will conduct an investigation. All relevant staff will be debriefed, to discuss performance and address any issues and concerns. The investigation will consider factors such as:

- What was the initiating cause of the problem?
- How was the problem first identified or recognised?
- What were the most critical actions required?
- What communication problems arose and how were they addressed?
- What were the immediate and longer term consequences?
- What procedures have been put in place to eliminate or minimise risk of similar incident occurring in the future?

8.5 Register

An attendance register is in place at the STP. Visitors are required to sign in and out of the site

8.6 Site Induction

Visitors are inducted to the site by the STP operator.

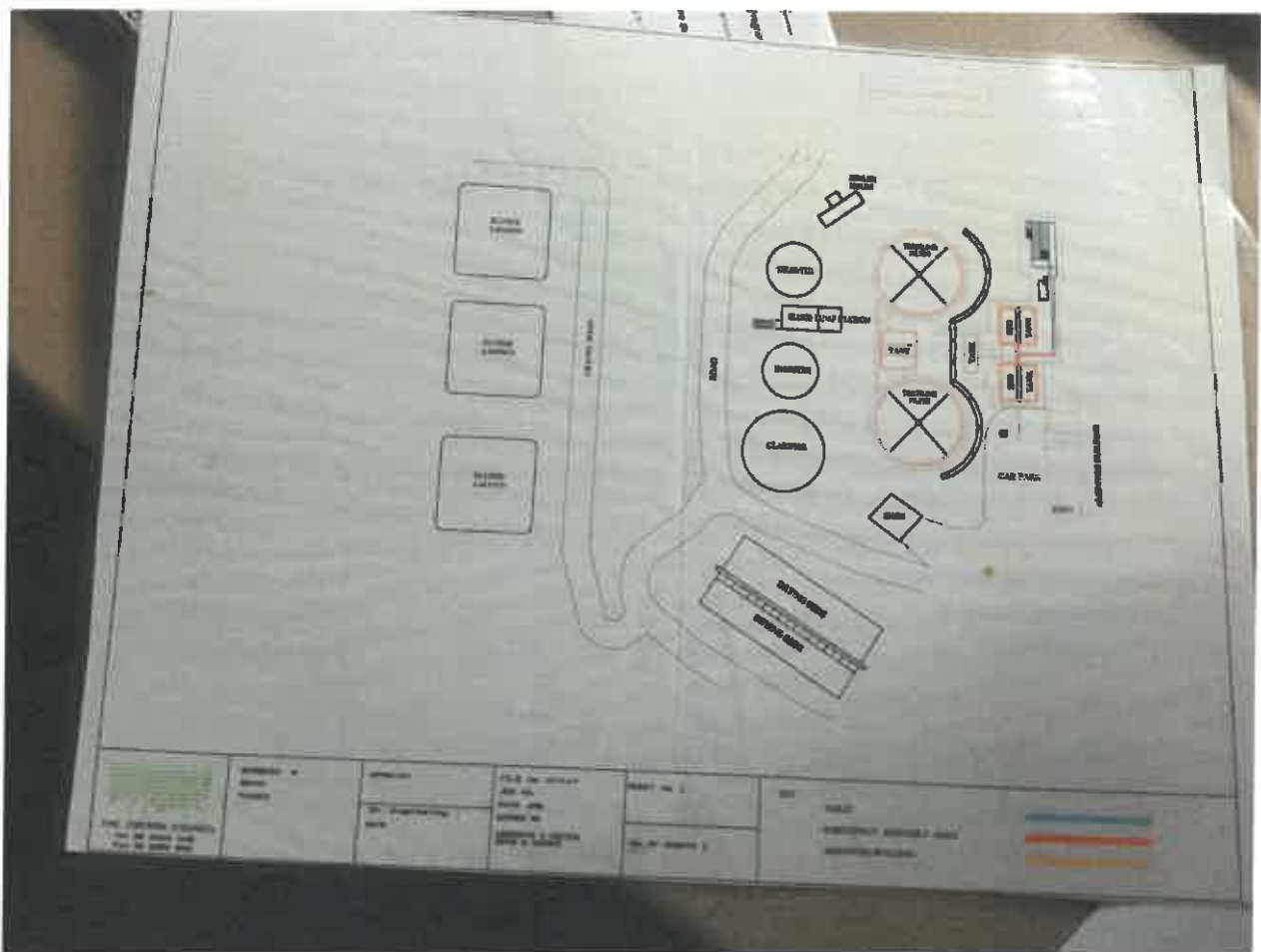
8.7 Evacuation Procedure

Go to the emergency assembly point.

8.8 Emergency Assembly Point

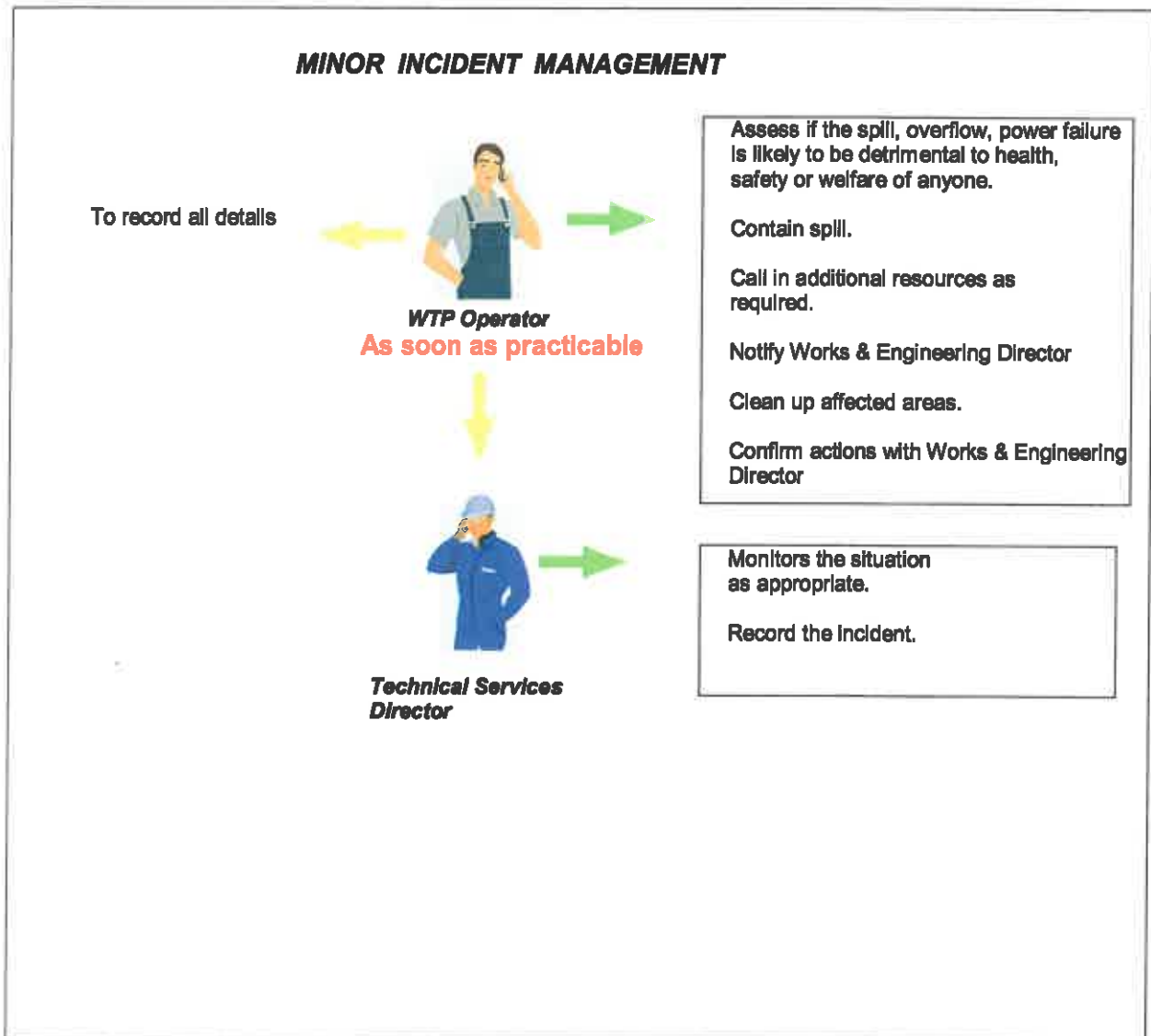
The emergency assembly point is at the front gate to the site as shown in **Figure 9.1**.

Figure 9.1 Plant layout and Emergency Assembly Point.

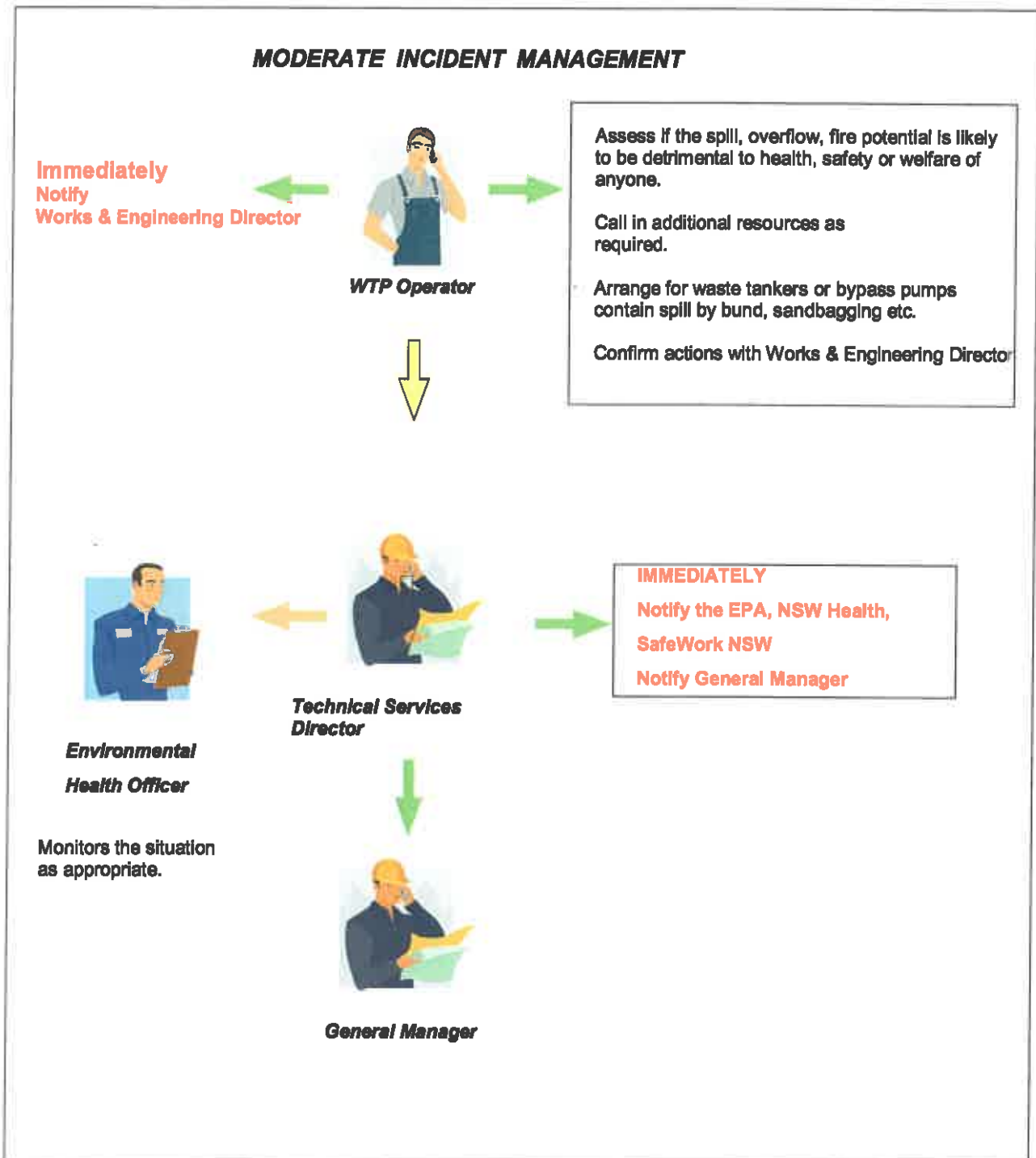


9 Actions to be undertaken during or immediately after a Pollution Incident

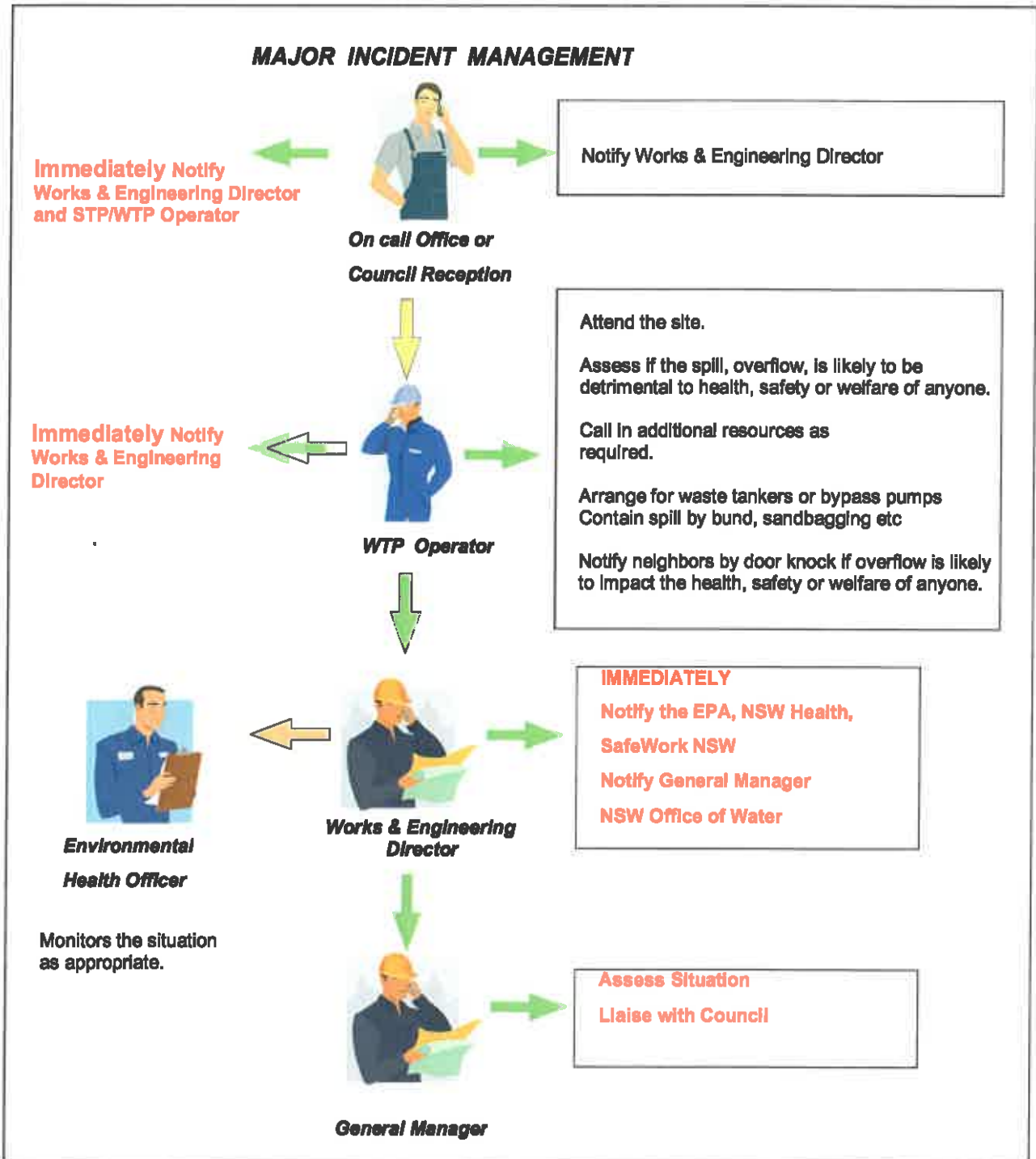
9.1 Minor Incident Action Plan



9.2 Moderate Incident Action Plan



9.3 Major Incident Action Plan



9.4 Evaluation and Review

An annual review of the Plan will be undertaken by the WHS/RM Coordinator and the Works & Engineering Director or within one month of an incident occurring at the plant. The evaluation will:

- Assess the relevance of the risk assessment against the current state of the plant
- Identify any emerging problems and trends
- Assess the communication between Council, Council operational staff and regulators
- Assist in determining priorities for improving procedures
- Assessment of incidents and responses determined
- Determine when and what is to be audited in the next six months.

Evaluation of results described above will be documented and the Plan updated.

Evaluation will be reported to the Council stakeholders.

9.5 Auditing

Auditing of the pollutant inventory is to be done quarterly.

An audit may also be triggered by a significant incident or if the process chemical is changed.

10 References

1. Protection of the Environment. Legislation Amendment (POELA) Act 2011
2. Protection of the Environment. Operation (POEO) Act 1997
3. EPL – Section 55 Protection of the Environment Operations Act 1997

11 Appendices

Appendix A – Incidents

The following form is to be completed in June each year.

Monthly testing	Results	Action taken	Comments
June			
July			
August			
September			
October			
November			
December			
January			
February			
March	Storm Water Over flow on dated 23/03/2021	Inform to EPA, taken water sample as a precautionary measure	Visual inspection, no odour observed ,checked two sedimentation tanks and they are sludge free and constantly flowing.
April			
May			

Call out Date	Description (minor, significant, major)	Action taken	Comments
23/03/2021	Minor	Inform to EPA and taken sample by Plant Operators	Monitoring the overflow and they are sludge free and constantly flowing , large decrease in the amount of rags and wet wipes that are normally encounter in the normal operation

Appendix B – Plans

Management Plans for various activities are registered in Council's record system

Appendix C - Training/ Education Register

Staff Training Records are available from HR.

Scanned copies of Certificates, licences etc. are registered in Infoxpert.

Appendix D – Incident Reporting Form

An Incident Reporting Form has been developed by NSW Water Directorate and it is available for their members at the NSW Water Directorate website.

Appendix E – Audit Log Form

Auditor/ reviewer comment (System deficiency and non-compliances)	Scheme response	Corrective actions to prevent reoccurrence	Timetable for corrective/preventive action	Person(s) responsible	Completion Date

The report must be signed by the General Manager.

Sam Golam

From: Andrew Krol
Sent: Tuesday, 18 May 2021 12:07 PM
To: Sam Golam
Subject: FW: Oberon sewerage treatment plant /Oberon Council, NSW

From: Chris Schumacher
Sent: Wednesday, 24 March 2021 12:43 PM
To: 'admin@environment.nsw.gov.au'
Cc: 'Andrew Helms'; Andrew Krol; Sam Golam
Subject: FW: Oberon sewerage treatment plant /Oberon Council, NSW

Dear EPA Staff,

Please be advised of the below information which has unfortunately occurred at the Oberon STP during the recent heavy rainfall event. This email is a self reporting email to outline what has occurred as a result of heavier than usual experiences of storm water infiltration.

Oberon Council contacted the Bathurst EPA Office afternoon 23/03/2021 and reported same to EPA's Compliance Officer Andrew Helms. This email is lodgement of that conversation and for EPA's advice. Grab samples of the clear water were taken by plant operators as a precautionary measure, and visually indicate the make up of predominately a vast majority of storm water as opposed to effluent.

Should you require any further information or clarification and can be contact as below.

Regards
Chris

Chris Schumacher
Technical Services Director
02 6329 8127 Direct
0407 214 534 Mobile
Chris.schumacher@oberon.nsw.gov.au
www.oberon.nsw.gov.au
RPEng (Civil) 8146-0311



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P Please consider the environment before printing this email

From: Andrew Krol
Sent: Wednesday, 24 March 2021 10:27 AM

To: Chris Schumacher
Subject: Oberon sewerage treatment plant /Oberon Council, NSW

Dear Sir

This email is to report that the Oberon STP system has been inundated with storm water flow. This is a direct result of the inclement weather which has produced an extraordinary amount of inflow which the small pump stations on the towns periphery and the main pump station are and continue to be overwhelmed.

The inflow began on Saturday morning and has continued right up to the present time. The appearance of the inflow is of discoloured water which has no odour, is fast flowing and has the occasional sighting of human waste and is highly diluted with what we normally deal with. I first received numerous high water alarms at the pump station, which drew my attention that this was an unusual occurrence.

Upon investigation at the main pump station I noted that the inflow was starting to rise past normal levels of operation, but could do nothing to stop the overflow into our emergency over flow pond beside the pump station. In fact the same pump has been operating continually for 3 days as the flow has kept and is still increasing.

It is impossible to give a amount of inflow due to the sheer volume. I can only assume that roughly 40% is going into the over flow and the remainder is being pumped up to the STP where 60% of that flow is going through the overflow down to our ponds, leaving the rest of the flow to run through our trickling filters and clarifier treatment process.

I have checked (this morning) our 2 sedimentation tanks and they are Sludge Free and constantly flowing. There is a notable large decrease in the amount of rags and wet wipes that we normally encounter in the normal operation of the STP.

if you need more information please contact me

Regards Andrew Krol
Waste and water supervisor
Mobile 0407 963 885

Exceedances 01/04/2020 to 31/03/2021

30th April Exceed TSS , Possibly due to heavy/short rain event 30mm in EMP1

30th August pH exceeded, citric acid dosing break down EMP1

30th January.. faecal and nitrates exceedance ...short detention time due to change of outlets from EMP1 to EMP6, done to avoid heavy algal bloom discharging into Fish River Creek from ponds 3 & 4.

30th February. Faecal and nitrates exceedance...short detention time due to maintaining changed outlet EMP1 to EMP6, again avoiding heavy algal bloom discharge into Fish River Creek from ponds 3 & 4