



POLLUTION INCIDENT RESPONSE
MANAGEMENT PLAN

FOR

LITHGOW SEWAGE TREATMENT PLANT

CONTROLLED DOCUMENT

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Foreword

The Pollution Incident Response Management Plan (PIRMP) is a functional document. It is designed to assist personnel at the Lithgow Sewage Treatment Plant (LSTP) to quickly identify pollution incidents and detailed procedures for the response and reporting of pollution incident.

The structure and scope of this PIRMP reflects the requirements introduced by the *Protection of the Environment Legislation Amendment Act 2011* (POELA Act) to prepare and implement a pollution incident response management plan. The POELA Act introduced several changes to improve the way pollution incidents are reported, managed and communicated to the general community. The Act includes a new requirement under Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEO Act) to prepare, keep, test and implement a pollution incident response management plan.

Utilisation of this PIRMP aims to improve, monitor and demonstrate environmental performance. If you have any suggestions for amendments, additions or improvements, please discuss these with your supervisor.

.....
Maddison Bailey
Water and Wastewater Manager
Lithgow City Council

Date:.....

Purpose

Objective of the Pollution Incident Response Management Plan is to:

- ensure comprehensive and timely communication about a pollution incident to staff at the premises, the Environment Protection Authority (EPA), other relevant authorities specified in the Act (such as local councils, NSW Ministry of Health, WorkCover NSW, and Fire and Rescue NSW) 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 specific requirements for pollution incident response management plans are set out in Part 5.7A of the POEO Act and the Protection of the Environment Operations (General) Regulation 2009 (POEO(G) Regulation). In summary, this provision requires the following:

- All holders of environment protection licences must prepare a pollution incident response management plan (section 153A, POEO Act).
- The plan must include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO(G) Regulation (clause 98B).
- Licensees must keep the plan at the premises to which the environment protection licence relates or where the relevant activity takes place (section 153D, POEO Act).
- Licensees must test the plan in accordance with the POEO(G) Regulation (clause 98E).
- If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, licensees must immediately implement the plan (section 153F, POEO Act).

1 Site Overview

Lithgow Sewage Treatment Plant is located off Geordie Street Lithgow NSW, 2790.

Lithgow City Council is the holder of Environment Protection Licence No. 236 issued under the *Protection of the Environment Operations Act 1997*. The licence authorises the carrying out of the scheduled activity of sewage treatment and includes the whole of the premises at Geordie Street Lithgow and the reticulation system.

The type of waste accepted and disposed of at the premises is as follows:

- Raw Sewage
- Liquid Trade Waste
- STP Sludge

1.1 Site Characteristics

Lithgow City Council owns and operates the Lithgow Sewage Treatment Plant (STP). The Lithgow STP services Lithgow, South Bowenfels, Marrangaroo Fields Estate and the Lithgow Correctional Centre. The plant has a capacity of 23,000 EP. Lithgow STP treats around 80% of total sewage flows in the Lithgow LGA. Lithgow City Council has a license to discharge up to 30,000 kL/day of tertiary treated effluent into Farmers Creek. The effluent is discharged below Farmers Creek Dam and then flows into Lake Lyell and ultimately into Warragamba Dam (Sydney's water supply).

The "original" plant is a traditional trickling filtration treatment system which was designed and constructed throughout NSW by Public Works from about the early 1930's until the mid 1980's when it was constructed here. The plant you see today is a modern activated sludge treatment system, known as Intermittent Decanted Extended Aeration (IDEA) that has been added to the trickling filter plant as an augmentation. This was developed by NSW Public Works in the 1960's and 1970's and has been provided at about 170 locations in NSW. It is a well proven and economical treatment technology. The new augmentation does what the old plant can't do, that is, remove nitrogen - as well as phosphorus - the two nutrients which, in combination, are responsible to a very high degree for algal blooms in receiving waterways.



The new augmented plant commenced operations in March 2012. The plant has been designed to meet the needs of Lithgow for the next 30 years. It will serve the community well and protect the receiving environment.

1.2 Treatment

The treatment process consists of the following stages:

1. Raw sewage primary treatment including screening of gross solids and degritting of inorganic material.
2. Treated effluent from the trickling filters is mixed at the flow divider with supernatant from the sludge lagoons to provide influent to the IDEA process. This is a hybrid secondary treatment process with new intermittently decanted extended aeration tanks operating in series with the existing trickling filters. These tanks include surface aeration and treated supernatant decanting systems and achieve significant nitrogen (ammonia and oxidized) removal. An alum storage and dosing system for phosphorus removal has been provided as well as a caustic soda tank to dose for pH correction and each chemical enters the IDEA tanks.
3. Decanted supernatant travels through catchponds which provide additional clarification. There is a secondary dose point for alum into the catchponds.
4. From the catchponds, flow is directed to the chlorine contact tank where sodium hypochlorite is injected and mixed to provide primary disinfection. Ample contact time is allowed to kill bacteria.
5. At the end of the chlorine contact tank the effluent is dechlorinated to remove residual chlorine which may cause environmental harm.
6. The next stage of treatment passes through the ultra-violet disinfection chamber. It is located at the end of the plant for further bacteria reduction and the removal of *Cryptosporidium* and *Giardia*. This provides an additional barrier to assure disinfection before discharge to the environment. There are dedicated storage tanks for onsite recycled water use as well as provision for future reuse offsite.
7. There are three sludge lagoons which receive wasted sludge from the IDEA tanks and the sludge thickens due to a long detention time.
8. Settled sludge is transferred from the lagoons to sludge tanks prior to dewatering. Water is removed from the sludge in a belt filter press and the resulting biosolids are removed by truck for stabilisation or off site processing.
9. The low nutrient, pathogen free final effluent is discharged to Farmers Creek.

1.3 Sewerage Services

The reticulated sewerage network that supplies Lithgow STP is operated by LCC and services Lithgow, South Bowenfels, Marrangaroo Fields Estate and the Lithgow Correctional Centre.

1.4 Site Supervision and Control

The Lithgow STP is open between 7 AM and 4 PM 4 days a week and 7 AM and 3:30 PM on Fridays. There are no set hours on weekends and public holidays. Access to the site outside of these hours (e.g. for special circumstances and emergency waste disposal) is subject to the approval of the Water and Wastewater Manager.

Lithgow STP is supervised when open for the receipt of liquid waste. The facility is staffed by qualified and experienced personnel who are notified on arrival by a trade waste contractor so they can assess the suitability of the load for compliance with the site EPA waste acceptance conditions.

Lockable security gates and a security fence are in place at access points to the facility with the main entrance on the Geordie Street frontage.

A daily checklist for monitoring, recording activities and incidents that occur during operation of the facility is maintained by the operators.

2 Distribution Policy

The PIRMP is a living document required to be reviewed and updated at least once every 12 months to ensure accuracy and effectiveness. A review must also be undertaken within one month of any pollution incident occurring.

For these reasons, document control is an important part of the environmental management system. It is critical that PIRMP storage locations are made known to all relevant staff members and that only the latest version is in use. Details of the version and date of issue are recorded on each page of the PIRMP in the bottom left hand corner.

Revised and updated versions of the PIRMP will always be issued with a covering memo summarising the changes. When a new PIRMP is received the old version is replaced in its entirety. A register for updating and testing the PIRMP can be found in **Appendix A** and must be kept on site and updated regularly.

Controlled hardcopies of any new PIRMP will need to be produced. They are to be distributed to the following:

- Water and Wastewater Manager, Lithgow City Council ;
- Supervisor Plants and Pump Stations, Lithgow City Council;
- Dataworks, Lithgow City Council; and
- Lithgow Sewage Treatment Plant

All paper copies of this PIRMP will be considered as uncontrolled unless they have been allocated a copy number in a colour other than black.

The current copy of the PIRMP and monitoring records will be made available on our website (<http://www.council.lithgow.com/monitoring.html>).

3 Terms and Definitions

Terms	Explanation
PIRMP	Pollution Incident Response Management Plan
EPA	Environmental Protection Authority
OEH	Office of Environment and Heritage
POEO Act	Protection of the Environment Operations Act 1997
EPL	Environment Protection Licence
STP	Sewage Treatment Plant
IDEA	Intermittent Decant Extended Aeration
SPS	Sewage Pump Station

4 Definition of a Pollution Incident

The legislation 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 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.”

5 Duty to Report a Pollution Incident

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 1997*:

“(a) harm to the environment is material if:

- i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or*
- ii) it 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.”

Initial response as soon as a pollution incident occurs that causes or threatens material harm to the environment is to notify EPA *immediately*. In short, ‘*immediately*’ means ‘*promptly without delay*’, but it does not mean undertaking notification ahead of doing what is necessary to make safe.

6 Regulatory Authorities and Personnel to Be Notified

If the incident presents an immediate threat to human health or property, Fire and Rescue NSW, the NSW Police Force and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents.

FIRSTLY, CALL 000 with the following information:

- a) LOCATION
- b) TYPE OF EMERGENCY
- c) CASUALTIES
- d) ASSISTANCE REQUIRED
- e) HAZARDS
- f) CONTACT MOBILE NUMBER
- g) YOUR NAME.

If the incident does not require an initial combat agency, or once the 000 call has been made, notify the **relevant** authorities in the following order:

- Environment Protection Authority
 - phone Environment Line on **131 555**
- Lithgow City Council;
 - Council Emergency contact number (after hours) **02 6354 9999**
- NSW Health via the Nepean Blue Mountains Local Health District
 - The contact number during work hours is **(02) 4734 2022**
 - After hours is **(02) 4734 2000**, and ask for the switchboard operator to page the on-call EHO
- Sydney Catchment Authority
 - phone **1800 061 069**;
- NSW WorkCover Authority
 - phone **13 10 50**
- Fire and Rescue NSW Lithgow
 - phone **(02) 6351 3366** (If 000 call not required).

7 Notification

Under section 150 of the *POEO Act 1997*, the information about a pollution incident that must be notified is:

- 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; and
- Other information prescribed by the regulations.

Notification is required by the Supervisor immediately after a pollution incident becomes known.

Any information required that is not known at the time the incident is notified must be provided when it becomes known. A Pollution Incident Reporting Form is produced in **Appendix F** to assist the Supervisor in correctly recording and notifying the relevant authorities detailed in Section 6 above.

8 Notification Responsibilities

8.1 Responsibilities

Under the POEO act, the following people have a duty to notify a pollution incident occurring in the course of an activity that causes or threatens material harm to the environment:

- the person carrying on the activity
- an employee or agent carrying on the activity
- an employer carrying on the activity
- the occupier of the premises where the incident occurs

For the Lithgow STP and sewerage system the Supervisor must be notified immediately after the person becomes aware of the incident. The Water and Wastewater Manager will then be the point of contact for notifying all relevant authorities.

8.2 Community and Stakeholder Notification

For each event immediately notified, the potentially affected community must be notified. This can occur in a number of ways, including direct correspondence by letterbox drop or door-knocking.

Furthermore, Council will discuss the need for provision of information to the wider public with Public Health Unit and the Environment Protection Authority, (eg. media release, radio announcement, signage etc.).

Licence monitoring results will be published on the Lithgow City Council website (<http://www.council.lithgow.com/monitoring.html>).

8.3 Minimising Harm to Persons on the Premises

In the event of a pollution incident occurring, all members of the public, site contractors and other Council staff will be mustered by site staff to the Emergency Assembly Point after which they will be safely evacuated from site where appropriate. It is a condition of entry that in the event of an emergency, both the public and staff must adhere to directions given by the Supervisor.

8.4 EPA Powers of Direction and Notification of Neighbours

Where the pollution incident causes or threatens material harm to the environment or human health, the EPA is notified.

Once the EPA is notified, it is then for the EPA to determine whether commercial, industrial and residential neighbours of the site need to be contacted by Council and informed of the circumstances of the incident and what action is being taken in response to it. If deemed necessary, the EPA then has powers to formally direct Council to notify the neighbours of the site.

Irrespective of whether the EPA directs Council to notify neighbours and depending on the circumstances of the particular pollution incident, Council may at their own discretion voluntarily choose to notify neighbours.

Council would notify neighbours by 'door knocking' every neighbouring property.

9 Hazards and Pre-Emptive Actions

The following section outlines current operational procedures and design intended to minimise and manage risk.

Members of staff working on site are responsible for being aware and notifying the Supervisor of any potential pollution incidents on the premises or at pump stations in the network.

During or following a pollution event, all media enquiries are to be referred to the Local Emergency Management Officer (LEMO).

9.1 Pre-Emptive Actions

The Lithgow City Council will provide identification and notification of hazards that may affect environmental and human health. When a hazard has been identified, a risk management plan will follow that will include hazard assessment, control and management. All environmental disturbances and human injuries will be detailed in an incident report. All environmental incidents will be communicated immediately to the Supervisor and the Manager, Water and Wastewater.

An incident major hazard risk assessment is contained in appendix B, including pre-emptive action and controls associated with each of the major incidents and hazards assessed.

Other pre-emptive actions taken to minimise the risk of harm to persons on the premises include:

- pre-commencement health screening and assistance
- site inductions
- regular inspections and recording and close out of corrective actions
- regular management meetings
- hazard and near miss reporting
- staff training
- regular audit inspections of the site by OHS Committee members
- environmental and occupational monitoring

9.2 Inventory of Pollutants

9.2.1 Table of chemicals stored on site.

Alum
Sodium bisulfate
Sodium hydroxide
Sodium hypochlorite
Cationic polymer
Sulphuric acid
Cleaning detergent
Mercury Sulphate
disilver sulphate
Potassium dichromate
Disodium hydroxynaphthalene disulphonate
Sulphuric acid
Lithium hydroxide
Sodium dichloroisocyanurate dihydrate
Sulfanidic acid
disodium peroxodisulphate
Potassium persulphate
Sodium salicylate
Sodium dinitroprusside dihydrate

9.2.2 Inventory of Maintenance Pollutants

The following pollutants are stored on site in small quantities required for routine maintenance necessary for operations at the facility:

- Diesel; and
- Detergent (e.g. Kleenbreak).

The MSDS document box on site provides details of where these chemicals are stored on the premises.

10 Environmental Mapping

A detailed map of the site is included in **appendix C**.

11 Safety Equipment

Lithgow City Council's workplace health and safety policies and procedures apply to this site.

All equipment, controls, incident response plans and management plans will be maintained to prevent any possible harm to human health and the environment. Inspection, testing and review of equipment, controls, documents and systems currently in place will depend on issues raised for concern and results from previous checks.

Emergency spill kits are present on site to manage spills. Any used spill cleanup material is then deposited in the Lithgow Solid Waste Facility subject to provisions of the MSDS and waste acceptance conditions for the landfill. In the event of chemical spill, PPE and other equipment is provided for on-site staff.

11.1 Safety Equipment

- First Aid kits
- Fire extinguishers
- Breathing Apparatus
- Safety harnesses
- MSDS register and folder
- PPE
- Signage
- Spill Kits

12 Prepare, Test and Maintain

After preparation of this PIRMP, it is to be tested via mock pollution incident to ensure personnel are aware of the processes and responsibilities on site. All testing of this plan and any supplementary amendments that are made are to be documented and stored and may be requested by the EPA at any time.

A PIRMP Test Tracking spreadsheet can be seen in **appendix A**. The PIRMP will be reviewed and maintained to ensure information in the plan is accurate and up-to-date. The review process will occur every 12 months and within one month of any pollution incident occurring. This will ensure any issues within the plan are identified and revised.

13 Staff Training

All staff must complete Council's General Induction and Site Specific Induction. All staff must maintain competency in relevant licences, policies and procedures. Operators and the Supervisor Plant & Pump Stations must attain competency in water treatment plant operation. All staff training programs are to be updated annually.

New members of staff at the facility should be inducted. This induction must cover the purpose, requirements and responsibilities detailed in this PIRMP.

All staff should receive sufficient training to enable them to carry out their assigned duties in a competent and safe manner. In particular:

- Staff must be capable of using the fire-fighting equipment;
- Staff must be capable of identifying excluded wastes;
- Staff must be capable of identifying potential pollution incidents; and
- Staff must be familiar with the requirements and procedures contained within this PIRMP.

Staff competency will be monitored through audits, public complaints and pollution incident reports.

At least once every year staff should undertake a simulated pollution incident response exercise, including with emergency services, to familiarise site personnel with the requirements of this management plan. A register of staff training can be found in **Appendix A** and must be kept on site and updated regularly.

Regular site briefings and toolbox meetings should be held when considered appropriate to draw attention to potential pollution incidents and identify improvements to on-site safety procedures.

Date	Staff Member	Brief Description of Training Task
14 July 2015	Water & Wastewater Manager ran training with: Rob Williams Mark McCann Darrin Hamment Justin Healey Jason Neaves Mitch Noon Perrin Walsh Dane Russell Anthony Boza Robert Dunn Mitch Hibbard Peter Sinfield Hayden Cornwell Jason McGuinness	Review of updated PIRMP Responsibilities of during pollution incidents, including reporting.

Appendix B: Major Hazard Risk Assessment

Hazard identification and risk assessment was undertaken using the following criteria:

- Define the approach and methodology to be used for hazard identification and risk assessment;
- Identify and document hazards, sources and hazardous events for each component of the sewage treatment process;
- Estimate the level of risk for each identified hazard or hazardous event;
- Evaluate the major sources of uncertainty associated with each hazard and hazardous event and consider actions to reduce uncertainty; and
- Determine significant risks and document priorities for risk management.

Risk Assessment

Events and hazards were identified for each process step. Risks posed by each of the events were assessed.

Identified Pollution Incident Risks

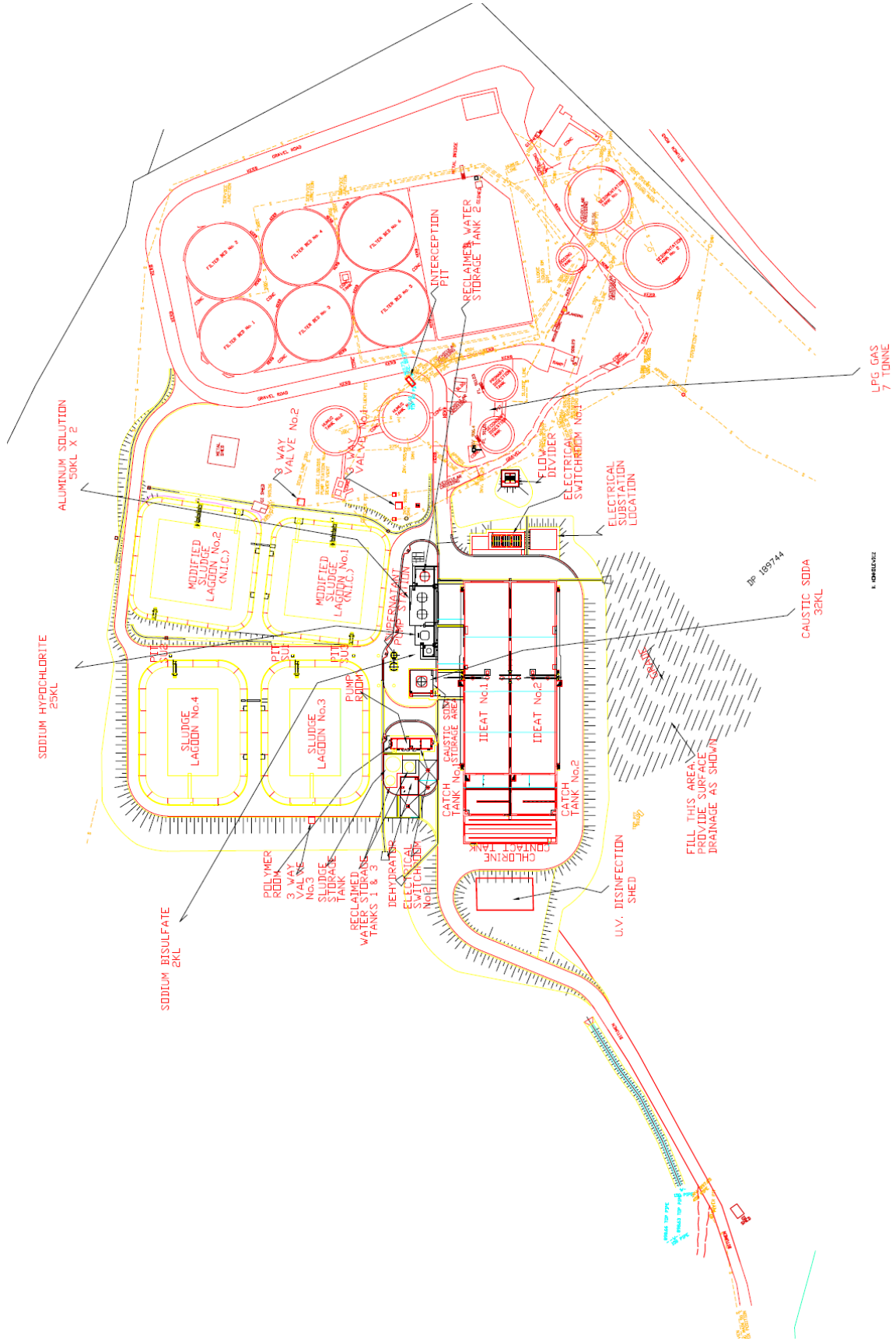
The primary potential hazards to human health or the environment associated with the activity undertaken at this site – i.e. ‘Pollution Incidents’ – are included in Table 1 below.

Table 1: Pollution Incident Classification, Risk Assessment and Contributing Factors

Description of Pollution Incident	Risk	Contributing Factors	Controls (Pre-emptive Measures)
Raw sewage bypass	Low	Blockage of inlet channel with gross solids	Screening and grit removal. SCADA alarm. Bypass capture and re-treatment from the lagoons back to head of plant
Inorganic solids carried through to Primary Settling Tank	Low	Non-removal of inorganic solids	Treated by IDEA plant.
Suspended solids carried through to trickling filters	Low	Non-removal of suspended solids	Treated by IDEA plant.
High concentrations of soluble organic material in final effluent	Low	Biomass fails to provide adequate removal of soluble organic material	Alum dosing. BOD reduced by IDEA plant.
High concentrations of suspended material in final effluent	Moderate	Inadequate Settling phase	Alum dosing. Suspended solids reduced by IDEA plant and further settling in catchponds and chlorine contact tank.
High concentrations of organic material in final effluent	Moderate	Over aeration	SCADA control and alarm. Daily monitoring.
High concentrations of organic material in final effluent and odour	Low	Under aeration	SCADA control and alarm. Daily monitoring.
High concentrations of organic material in final effluent	Low	Poor MLSS control	SCADA control and daily monitoring.
High concentrations of phosphorus in final effluent, turbidity	Low	Alum is under dosed	SCADA control and daily monitoring.
High concentrations of Alum in final effluent	Low	Alum is over dosed	SCADA control and daily monitoring.
Final effluent pH may be too acidic	Low	Caustic soda is under dosed	SCADA control and daily monitoring.
Final effluent pH may be too alkaline	Low	Caustic soda is over dosed	SCADA control and daily monitoring.
Disinfection failure in final effluent	Low	Sodium Hypochlorite is under dosed	SCADA control and daily monitoring of chlorine residual.
High concentrations of free chlorine in final effluent	Low	Sodium Hypochlorite is over dosed	SCADA control and daily monitoring of chlorine residual.
High concentrations of free chlorine in final effluent	Low	Sodium Bisulphite is under dosed	SCADA control and daily monitoring of chlorine residual.
High concentrations of sodium bisulphite in final effluent causing low dissolved oxygen and odour	Low	Sodium Bisulphite is over dosed	SCADA control.
Disinfection failure in final effluent	Low	Final effluent receives insufficient UV dosage	SCADA control and daily monitoring of UV output and effluent turbidity.
Release of sludge	Low	Sludge lagoon hydraulic failure	Sludge lagoon routine inspection. On-site drainage system that is collected in a holding lagoon.
Fire	Moderate	Climate, maintenance	Fire extinguishers. Bushfire preparation precautions.

Description of Pollution Incident	Risk	Contributing Factors	Controls (Pre-emptive Measures)
Explosion	Low	Flammable materials.	Use of Australian Standard storage vessels. Minimize quantities kept on site.
Natural events	Low	Climate	Infrastructure built to withstand most natural events.
Incorrect or reduced quality of chemicals or wrong specification of chemicals resulting in overdosing , underdosing or contamination	Low		Checks and balances in place to ensure appropriate chemicals are used. Contractual arrangements with chemical suppliers.
Power failure resulting in system failure	Moderate	Electricity supply reliability	Emergency power supply capability available at SPS
Disgruntled employees or contractors leading to malicious damage resulting in treatment failure	Low	Employees and contractors understand the system so would know where to act to cause most damage e.g. altering SCADA	Site is secured and control room is locked.
Failure of critical monitoring devices resulting in inability to pick up quality control issues	Low	SCADA failure	SCADA has multiple backups. Full alarm system and all hours paging.
Chemicals are delivered to incorrect storage resulting in process contamination or incorrect dosage	Low		Checks and balances in place to ensure appropriate chemicals are used. Contractual arrangements with chemical suppliers. Storage tanks clearly labelled.
Operator training is not kept up to date resulting in potential for treatment failure through incorrect operation of the sewage treatment plant.	Low	Staff training program	Staff regularly participate in training programs and maintenance of skills and knowledge.
Sewerage overflow	Moderate	Climate or maintenance	Design and storage capacity of SPS. Regular maintenance conducted. Cleanup procedures and equipment

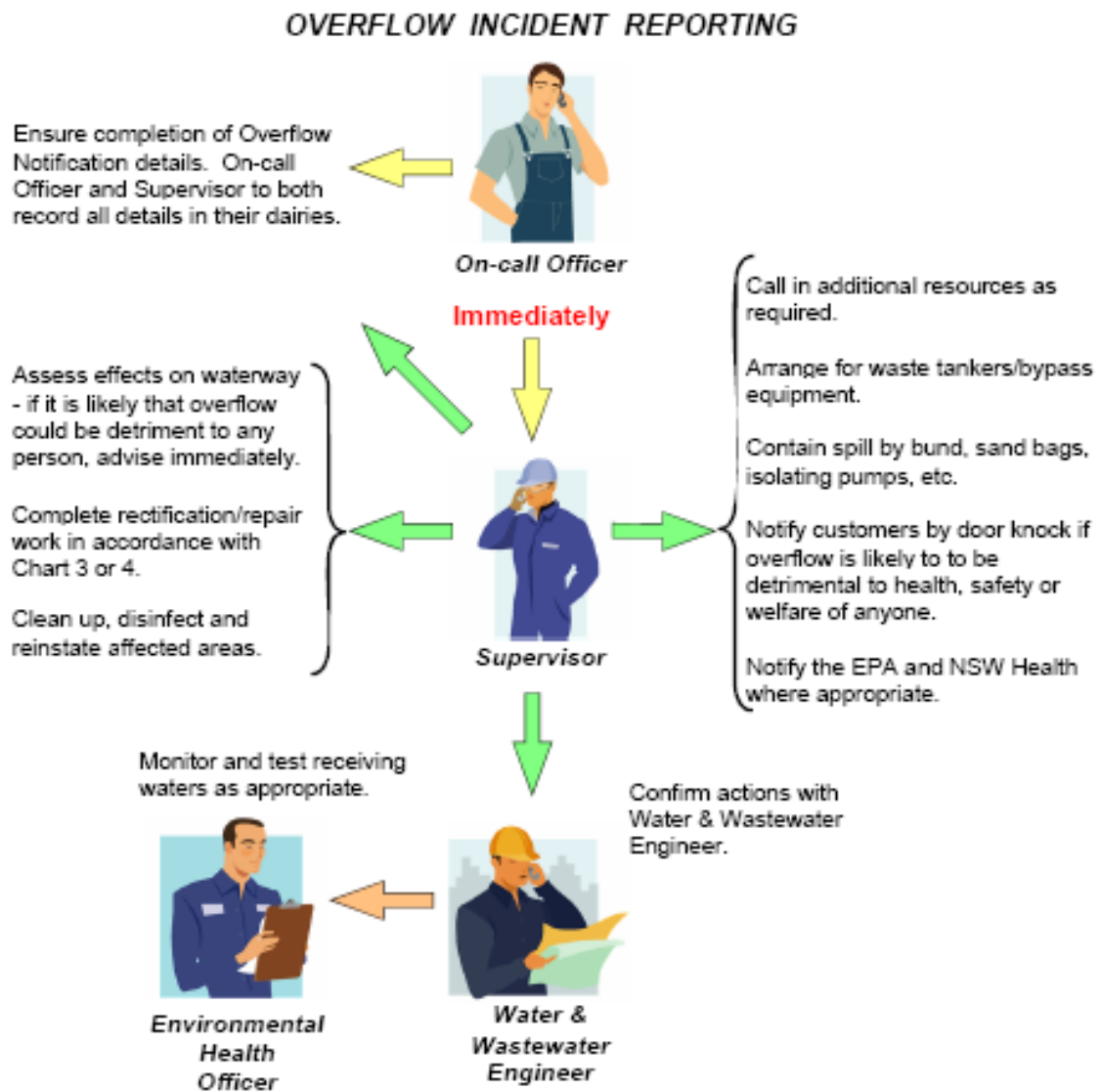
Appendix C: Site Map



Appendix D: Emergency Responses for Major Incidents

The following chart summarises the general procedures to be followed when overflow incidents occur.

Chart of General Procedures for Overflow Incidents



Appendix E: Generic Responsibilities and Accountabilities for Hierarchy within Lithgow City Council

Group Manager Operations

Pollution and Workplace Health and Safety Controls:

1. Implement Environmental Policy.
2. Be responsible for compliance and notification of non-compliance for Pollution Incident Response Management Plans (PIRMP) and Workplace Health and Safety (WH&S) Systems.
3. Ensure finance is available for implementation of Environmental and WH&S policies, procedures, manuals, plans and programs.
4. Liaise with Water and Wastewater Manager for regular reporting on implementation of policies, procedures manuals, plans and programs.

AUTHORISED BY:

Name: Maddison Bailey
Water and Wastewater Manager

Signature: Date:

Water and Wastewater Manager

Pollution and Workplace Health and Safety Controls:

1. Establish corporate environmental and WH&S goals and objectives as part of the Environmental and WH&S Policies.
2. Ensure employee compliance with Environmental and WH&S policies, procedures manuals, plans and programs prior to implementation.
3. Ensure sufficient funding for implementation of Environmental and WH&S policies, procedures, manuals, plans and programs.
4. Liaise with Supervisors on regular basis.
5. Be responsible for implementing Environmental and WH&S policies, procedures manuals, plans and programs to ensure legislative compliance and that roles and responsibilities are clearly communicated and demonstrated.
6. Review, monitor and maintain the plans, programs and procedures manual by conducting audits and ensure that corrective action and changes are made on the Procedures Manual in a diligent and timely manner.
7. Ensure implementation of education and training on Environmental and WH&S issues.
8. Be responsible for notification of contractors to undertake duties according to the Environmental and WH&S policies, procedures manuals, plans and programs.
9. Establish and implement Environmental and WH&S objectives and goals as part of the environment and WH&S policy and implement the following systems (where required) to ensure compliance:
 - Pollution Incident Response and Clean-Up Procedures;
 - Emergency Evacuation Procedures;
 - Noise and/or Dust Management Plans;
 - Odour Control System; and/or
 - Stormwater Management Plan.
10. Ensure the appropriate vaccinations are available to all employees.
11. Prepare submissions for the appropriate level of funding required for implementation of managerial duties. These specific duties to include (but not limited to):
 - review the design of equipment/machinery for environmental compliance prior to purchase (eg. noise guards, catalytic converter);
 - purchase vehicles with visible and audible warning signs;
 - ensure electrical tools are insulated prior to purchasing and safety switches installed;

- ensure required storage areas are bunded in accordance with AS 1940 - 1993 Storage and Handling of Flammable and Combustible Liquids;
 - ensure electrical installations comply with Australian Standards prior to purchase;
 - implement lockout procedures for all equipment; and
 - Provision of Material Safety Data Sheets (MSDS), instruction manuals and operational guidelines to all sites.
12. Liaise with the Group Manager Operations to provide feedback on the effectiveness of the procedures manual.

AUTHORISED BY:

Name: Maddison Bailey Signature: Date:
Water and Wastewater Manager

Appendix F: Environmental Incident Reporting

PART A

Report to Environmental Incident Hotline LOCATION OF INCIDENT

PLACE YOUR



Recent changes to Part 5.7 of the *Protection of the Environment Operations Act 1997* (POEO Act) stipulate the requirement for notification of pollution incidents. For more information see www.environment.nsw.gov.au/pollution/notificationprotocol.html

<input type="checkbox"/> Project	<input type="checkbox"/> Facility	<input type="checkbox"/> Activity	<input type="checkbox"/> Location/Name: <input style="width: 150px;" type="text"/>
STREET NUMBER	STREET NAME		
<input style="width: 80px;" type="text"/>	<input style="width: 900px;" type="text"/>		
SUBURB		NEAREST CROSS STREET	
<input style="width: 350px;" type="text"/>		<input style="width: 350px;" type="text"/>	
WHERE DID THE INCIDENT OCCUR			
<input style="width: 900px;" type="text"/>			
SECTION/UNIT RESPONSIBLE FOR THE SITE			
<input style="width: 900px;" type="text"/>			

<input type="checkbox"/> Sewage <input type="checkbox"/> break in mains <input type="checkbox"/> pumping station (sewage or chemical) <input type="checkbox"/> sewage treatment plant <input type="checkbox"/> other (ponds etc) <input style="width: 100px;" type="text"/>	Cause <input type="checkbox"/> blockage <input type="checkbox"/> mechanical failure <input type="checkbox"/> electrical failure or power outage <input type="checkbox"/> rainfall inundation <input type="checkbox"/> trade waste incident <input type="checkbox"/> break in main <input type="checkbox"/> other <input style="width: 100px;" type="text"/>
<input type="checkbox"/> Waste <input type="checkbox"/> waste from Council project/facility/activity <input type="checkbox"/> dumped waste <input type="checkbox"/> asbestos only	
<input type="checkbox"/> General <input type="checkbox"/> spill/overflow (chemical, fuel, substance etc) <i>- additional detail required below</i> <input type="checkbox"/> vegetation - disturbance / damage <input type="checkbox"/> general - (heritage, water, wildlife etc) <input type="checkbox"/> other <input style="width: 100px;" type="text"/>	
DESCRIPTION OF INCIDENT	
<input style="width: 900px;" type="text"/>	
ACTION TAKEN TO CONTAIN / MANAGE THE INCIDENT	
<input style="width: 900px;" type="text"/>	
Were photos taken: YES <input type="checkbox"/> NO <input type="checkbox"/>	Were samples taken: YES <input type="checkbox"/> NO <input type="checkbox"/>

DETAILS OF PERSON REPORTING THE INCIDENT

NAME	<input style="width: 500px;" type="text"/>	DATE	<input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/>
PHONE	<input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/>	MOBILE	<input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/>
DEPARTMENT SECTION			
<input style="width: 900px;" type="text"/>			

PART B

Report to Environmental Incident Hotline INVESTIGATION



The appropriate Section Supervisor/Manager is responsible for completion of Part B of the incident report.

IMMEDIATE ACTION BY SUPERVISOR/MANAGER

Will the incident:

- | | | | |
|---|------------------------------|-----------------------------|-----------------------------------|
| 1. Require assistance from other agencies to contain, isolate or cleanup?
If "Yes" call 000 immediately. | YES <input type="checkbox"/> | NO <input type="checkbox"/> | NOT SURE <input type="checkbox"/> |
| 2. Pose any actual or potential harm to human health that is not trivial?
• Is it located within 100m of a school, childcare centre, aged care home?
• Could it impact on users of public areas such as ovals, reserves, waterways?
• Could the impact spread and potentially harm occupants of nearby properties? | YES <input type="checkbox"/> | NO <input type="checkbox"/> | NOT SURE <input type="checkbox"/> |
| 3. Pose any actual or potential harm to ecosystems that is not trivial?
• Could the incident flow / impact on a water body or drainage system?
• Could the incident flow / impact on environmentally sensitive land? | YES <input type="checkbox"/> | NO <input type="checkbox"/> | NOT SURE <input type="checkbox"/> |
| 4. Result in actual or potential loss or property damage of an amount over \$10,000? | YES <input type="checkbox"/> | NO <input type="checkbox"/> | NOT SURE <input type="checkbox"/> |

If you answered 'YES' to any of the above then the incident should be considered as a notifiable "pollution event". There is a **duty to notify** the EPA, Ministry of Health, WorkCover and Fire and Rescue NSW immediately after becoming aware of a pollution incidents where material harm is caused or threatened. Failure to do so is an offence (*Protection of the Environment Operations Act 1997*)

AGENCY NOTIFICATIONS

If the incident does not require an initial combat agency, or once the 000 call has been made, notify the relevant authorities in the following order:

NSW EPA (EPA Environment Line: 131 555)

Contacted: YES NO Reason not contacted:

NAME OF EPA REPRESENTATIVE	TIME AND DATE	EPA REFERENCE NUMBER
<input type="text"/>	<input type="text"/>	<input type="text"/>

ACTIONS REQUIRED BY EPA

NSW Health – Local Public Health Unit (See www.health.nsw.gov.au/publichealth/infectious/phus.asp)

Contacted: YES NO Reason not contacted:

NAME OF PHU REPRESENTATIVE	TIME AND DATE	PHU REFERENCE NUMBER
<input type="text"/>	<input type="text"/>	<input type="text"/>

ACTIONS REQUIRED BY LOCAL PHU

WorkCover Authority (WorkCover: 13 10 50)

Contacted: YES NO Reason not contacted:

NAME OF WORKCOVER REPRESENTATIVE	TIME AND DATE	WORKCOVER REFERENCE NUMBER
<input type="text"/>	<input type="text"/>	<input type="text"/>

ACTIONS REQUIRED BY WORKCOVER

Fire & Rescue NSW (Emergency Hotline: 000)

Contacted: YES NO Reason not contacted:

NAME OF FIRE & RESCUE REPRESENTATIVE	TIME AND DATE	FIRE & RESCUE REFERENCE NUMBER
<input type="text"/>	<input type="text"/>	<input type="text"/>

ACTIONS REQUIRED BY FIRE & RESCUE

CONTINUES ON REVERSE 

OTHER NOTIFICATIONS TO CONSIDER INCLUDE:

- Internal contacts eg Environmental Health Officer
- Media
- NSW Food Authority
- Shellfish programs
- River users eg boat hiring companies
- Marine education centres
- Other

PRELIMINARY INVESTIGATION

Notes from discussions with relevant operational staff

Any further observations or comments by Supervisor / Manager

CATEGORISATION BY AUTHORISED OFFICER

- Minor**
No notification required
 - Incident affects small area only (eg single property) AND
 - Incident is easy to clean up without additional assistance, AND
 - There is no risk of material harm to humans or the environment.

- Moderate**
Notify EPA and Local PHU only
 - Incident affects more than one property OR
 - There is a risk of pollution or material harm to the environment BUT
 - Cleanup can be completed without assistance AND
 - There is no danger to humans.

- Major**
Notification required - Notify EPA, Local PHU, Workcover and Fire & Rescue
 - Potential or actual harm to humans and the environment AND/OR
 - Assistance is required with cleanup from other agencies.

- Council Responsible** Incident occurred as a direct result of Council activity or function.

- Response by Council** Incident occurred on Council land, or land under Council care and control BUT Council did not cause the incident.

- Technical Licence Breach** Relating to technical compliance such as exceedence of permissible discharge volume or environmental monitoring limits.

DETAILS OF APPROPRIATE SECTION SUPERVISOR/MANAGER REPORTING THE INCIDENT

NAME	DATE
<input style="width: 95%;" type="text"/>	<input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>
PHONE	MOBILE
<input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>	<input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>
DEPARTMENT SECTION	
<input style="width: 95%;" type="text"/>	

Appendix G: Action Taken by Nepean Blue Mountains PHU

1. Site Visit Yes No

Date/Time: _____

2. Additional clean up requested Yes No

3. Water Samples Taken Yes No

4. Other (specify)
