

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN – LEETON WATER TREATMENT PLANT

JANUARY 2020

DOCUMENT CONTROL

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REVIEWED BY:							
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022	Sept 2020		Vault reporting requirement. SDS. Change titles.	Ram Murugabubati	Andrew Valenta		

REVIEW OF THIS POLICY

This Policy will be reviewed every year or as required in the event of legislative changes. The Policy may also be changed as a result of other amendments that are to the advantage of Council and in the spirit of this Policy. Any amendment to the Policy must be by way of a Council Resolution or the approval of the General Manager.

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1. Purpose and Scope

This Pollution Incident Response Management Plan (PIRMP) has been developed to satisfy pollution reporting obligations under the Protection of the Environment Operations Act 1997 (POEO Act 1997). The objective of this plan is to ensure an environmental pollution incident is communicated to all relevant groups and individuals, to prevent, minimise and control the risk of an environmental pollution incident. Also, to appropriately establish and maintain the plan. The plan covers description of potential hazards, actions to be taken to prevent additional environmental harm and details of communication required in the event of an incident.

This plan is developed for Leeton Water Treatment System that produces town water to Leeton, Yanco and Wamoon townships. These townships are serviced by approximately 154km of water mains and 4 reservoirs that deliver the town water to the customers. Leeton Water Treatment Plant (WTP) has a maximum capacity to process 25ML of clear water per day. The treatment processes in Leeton WTP covers coagulation in the sedimentation tanks, filtration in the sand filters, chlorination and fluoridation.

2. Definition of Pollution Incident

The definition of a pollution incident is:

pollution incident means an incident or set of circumstances during or as a consequence of which there is or likely is 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 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.

3. Description of Hazards

Potential hazards identified on the site include:

- Chemical Spill, potentially caused by:
 - Tank/storage failure;
 - Delivery incident;
 - Damage to chemical reticulation;
 - Vandalism;
 - Inappropriate chemical use;
 - Bund failure.

4. Pre-emptive Actions to be Taken

Risk/Hazard	Controls/Actions	
WATER TREATMENT PLANT		
Chemical spill due to tank/storage failure	BundingAlarmsInspection and maintenance of tanks	
Chemical spill during delivery	Appropriate Safe Work Method Statement (SWMS)Appropriate PPE	
Chemical spill due to damage to chemical reticulation	 Locate services prior to excavations Appropriate supervision of contractors Shut off valves for chemical dosing plant 	
Chemical spill due to vandalism	Site security fences	
Chemical spill due to bund failure	Bund inspectionsMaintenance and renewal	
Chemical truck incident outside of bunded area	Operator onsite during deliveries	

5. Inventory of Pollutants

Below are the identified pollutants located on site:

- Activated Carbon → maximum quantities to be stored on site is 2 tonnes
- Chlorine Gas → maximum quantities to be stored on site is 2 x 920kg
- Liquid Aluminium Sulphate → maximum quantities to be stored on site is 2 x 24,000L
- Soda Ash → maximum quantities to be stored on site is 3 tonnes
- Sodium Silico Fluoride → maximum quantities to be stored on site is 2 tonnes
- Polymer → maximum quantities to be stored on site is 3 x 25kg

6. Safety Equipment

Leeton Shire 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 on the site will depend on the issues raised for concern and results from previous checks.

Safety equipment located within the site are as follows:

- 3 x Breathing apparatus units located near the Chlorine room
- 3 x Fire Extinguishers in the main building
- Exhaust Fans in the Chlorine and Fluoride room
- Gas alarm in the Chlorine room
- Electric Hoist in the Chlorine room
- 3 x Eye Wash Stations in the plant
- Signage on the gates, chemical rooms, sedimentation tanks, filter beds, feeders, pump rooms, inside the plant and raw water sites
- Bunded wall around Aluminium Sulphate tanks
- Handrails and walkways around sedimentation tanks and filter beds
- Ladders situated in appropriate sites
- Covers around moving parts of machinery
- SDSs for Aluminium Sulphate, Soda Ash, Chlorine, Fluoride, Activated Carbon and Polymer
- 1 x First Aid Kit in the plant and 1 x First Aid Kit in the work vehicle
- Induction for every employee and contractor
- PPE

7. Duty to Report Pollution Incident

Under the POEO Act a duty to immediately report an incident applies where a pollution incident occurs in the course of operations/maintenance so that material harm to the environment is caused or threatened. It does not matter that harm to the environment is caused only in the premise where the pollution incident occurs.

Leaks, spills, water discharges and other pollution incidents can harm the environment. The relevant regulatory authorities need to be informed of pollution incidents immediately, so that action can be coordinated to prevent or limit harm to the environment. Regulatory authorities and notification responsibilities as per section 8.

8. Regulatory Authorities and Project Personnel to be Notified

Below is a list of the relevant regulatory authorities and project personnel to be notified of any pollution incident for the Leeton Water Treatment Plant.

Contact	Phone Number
EPA Pollution Hotline	131 555
NSW Ministry of Health via Local Public Health Unit	1300 066 055

	02 6080 8900 (After Hours)
Environmental Health Officer (Kevin Prior)	0429 076 135
WorkCover	13 10 50 (Option 1)
Emergency Services (if dealing with an emergency)	000
Fire and Rescue	000
NSW Police	000
SES	132 500
Leeton Rescue Squad	02 6953 3943
Operator in charge	02 6953 6604 / 0428 445 010
Council Main Line	02 6953 0911
Water & Sewerage After Hours	0428 268 679
Coordinator Water & Wastewater	0400 078 048
Water & Wastewater Engineer	0439 880 491
Assistant Engineer Water & Waste	0478 775 619
Manager Water & Wastewater	0427 673 901
Director Operations	0438 567 037

Pollution incidents posing material harm to the environment must be notified to the Environmental Protection Authority. In addition to EPA, event must be reported to Vault through WHS, QA and Risk team. The relevant information about a pollution incident required to be reported consists of the following:

- 1) The time, date, nature, duration and location of the incident
- 2) The location of the place where pollution is occurring or is likely to occur
- 3) The nature, the estimated quantity or volume and the concentration of any pollutants involved
- 4) The circumstances in which the incident occurred (including the cause of the incident, if known)
- 5) The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution

If the information required by items (3) to (5) becomes known after the initial notification is made, that information must be provided to the authorities immediately after it becomes known.

A person/project must notify even though the notification might incriminate the person/project. However, the notification is not admissible in evidence against the person/project for an offence.

9. Communicating with Neighbours and the Local Community

Impacts on the community due to town water distribution and treatment incidents are variable and depend on location, volumes of spills or other factors. Communication methods will be used on a case by case basis and in all situations Leeton Shire 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, Leeton Shire 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
- Media releases (radio/newspaper/internet/social media as required)
- Site visits/door knocking
- Letter drops
- Warning signs
- Other methods as the situation requires

10. Minimising Harm to Persons on the Premises

One of the goals of the pollution incidents response management plan is to develop and implement an emergency response protocol.

Leeton Shire Council receives, records and initiates response to customer inquiries/complaints through 02 6953 0911 and get directed to the appropriate personnel. After hours calls will be directed through the appropriate personnel via a voicemail in the main phone number (02 6953 0911).

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
- Environmental and occupational monitoring

Leeton Shire Council emergency response action includes but is not limited to the following:

- Adequate staff training
- Provision of appropriate equipment (pumps, hoses, generators and industry approved PPE)
- Back up/stand-by pumps
- Public warning signs and emergency tapes to mark the effected area
- Sampling equipment
- Reporting and record keeping
- Formal procedures for maintenance activities
- Training of operations and maintenance staff

11. Actions to be taken During or Immediately after a Pollution Incident

Actions to be undertaken in the event of a pollution incident are as follows:

- If a pollution incident has occurred involving Leeton Shire Council water & sewerage asset and / or activity and the situation is potentially life threatening, call 000 in the first instance
- Any persons wishing to report an incident involving Leeton Shire Council water & sewerage asset and / or activity must call 02 6953 0911, to be directed to the Superintendent Water & Wastewater
- The Superintendent Water & Wastewater will:
 - a. Assess the situation and potential consequences
 - b. Prioritise the response based on intelligence gathered
 - c. Contact / dispatch designated operational staff to attend the incident or advise of a course of action based on the prioritisation assessment
 - d. Advise of any specific hazards which may be present at the location of the incident
- Leeton Shire Council will escalate the incident accordingly and notify relevant authorities (detailed in Section 8) based on information received from its field resources
- Leeton Shire Council follows the NSW State Emergency Management Arrangements meaning that key emergency service organisations such as NSW Police, Fire and Rescue NSW and SES may be the controlling authority depending on the nature of the incident

12. 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. All operators must attain competency in water treatment plant operation. All staff training programs 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 plan.

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

All staff required to implement this plan and associated documents must have training in its use and be inducted into it. This is to ensure they are aware of the content, processes and requirements of this plan and can competently implement it if necessary. Additionally, relevant staff will be involved in an annual exercise/drill to test the implementation of the plan. In the event of a significant incident, an investigation and debrief will be conducted, documentation updated (if required) and staff will be re-inducted.

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.

All, desktop exercises, drills and incidents are to be registered into Council's TRIM, and training records will be sent to WHS, QA and Risk team.

13. Follow Up Actions

Actions to be taken after the incident are as follows:

- Submit the necessary reports to the relevant authorities (e.g. EPA, Ministry of Health, etc)
- Plan must be tested within one month of any pollution incident to assess whether the information included in the plan is accurate and up to date, and the plan is still capable of being implemented in a workable and effective manner

14. References

- EPA NSW Environmental Guidelines: Preparation of pollution incident response plans
- Leeton Shire Council Business Continuity Plan 2020
- Local Government Act 1993
- Protection of the Environment Legislation Amendment Act 2011
- Protection of the Environment Operations Act 1997
- Protection of the Environment Operations (General) Regulation 2009
- Public Health Act 2010

15. Site Plans



