Warrumbungle Shire Council

Pollution Incident Response Management Plan for the Coonabarabran Sewerage Treatment System

EPA LICENCE NO. 1744

April 2014 Doc ID: 114082

(Revised May 2020)



For policy and technical information regarding this plan please contact: Warrumbungle Shire Council 20-22 John Street PO Box 191 COONABARABRAN NSW 2357

Phone 02 6849 2000 info@warrumbungle.nsw.gov.au

VERSION	ISSUE DATE	DESCRIPTION
1.0	April 2014	Final version
2.0	February 2015	Amendments
3.0 (114082)	March 2020	Major review, updates and amendments
		(Jacinta Green)
3.1	May 2020	Minor updates

Approval record

Version Number	Approved By (Signature)	Name and Title	Date
3.0			

PIRMP update details

Please note that the following updates have been made to this document.						
Date updated	Version Number	Page/s	Reason for update	Description	Date updates loaded to website	Updated by
February 2015	2.0	24		Attachment 6: Operational Procedure checklist		
February 2015	2.0	25		Attachment 7: Emergency Procedure		
March 2020	3.0		Major plan review	Updated format to follow latest guidelines. Inserted the following new sections as indicated by the latest guidelines. Updated contact details. Updated chemical and safety equipment inventories.		Jacinta Green Jacintagreen .com.au

May 2020	3.1		Jpdating neighbour contacts.	Jacinta Green
		U	Jpdated flow chart.	

Testing record

It is a legal requirement to test the plan every 12 months and within 1 month of any pollution incident.

Date Tested	Test type (Yearly/Post Incident)	Tested by	Details of Test	Findings of test
24 March 2020	Yearly	Jacinta Green	Desktop and Site Audit	Staff Training to be undertaken for all staff by end May
				Latest PIRMP to be loaded to Website Updated PIRMP to be placed in site office Fire Extinguisher in Meal room needs compliance check – Treatment Supervisor has been
				informed. Need for onsite induction process and register for visitors has been discussed with WHS Officer.

Next test due

March 2021

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1 Purpose of this plan.

Warrumbungle Shire Council holds an Environment Protection Licence with the NSW Environment Protection Authority (EPA) for Coonabarabran Sewerage Treatment Works. As per the Protection of the Environment Operations Act 1997 (the POEO Act), the holder of an Environment Protection Licence must prepare, keep, test and implement a pollution incident response management plan (PIRMP) that complies with Part 5.7A of the POEO Act in relation to the activity to which the licence relates.

If a pollution incident occurs in the course of an activity causing or threatening material harm to the environment (within the meaning of section 147 of the POEO Act), the person carrying on the activity must immediately implement this plan in relation to the activity required by Part 5.7A of the POEO Act.

A written copy of this plan must be kept at Coonabarabran Sewage Treatment System Plant and be made available on request by an authorised NSW EPA Officer and to any person who is responsible for implementing this plan.

The plan is also available for download from <u>www.warrumbungle.nsw.gov.au</u>

This plan has been developed in accordance with the Protection of the Environment Operations Act 1997 and the Protection of the Environment Operations (General) Regulation 2009.

This plan is intended to inform field staff and provides a concise summary of the requirements for responding to and reporting potential and actual pollution incidents in the Coonabarabran Sewerage Treatment System including the Sewage Treatment Plant, Pump Station and Reticulation Pipework.

Council will provide regular training to ensure staff are familiar with how to respond to pollution incidents. Management staff are to refer to the Pollution Incident Response Management Plan Supporting Statement for further detail in relation to Pollution Incidents

2 Environment Protection Licence (EPL) Details

Name of licensee ABN EPL number Premises name and address	Warrumbungle Shire Council 63 348 671 239 1744 Coonabarabran Sewage Treatment Works Industrial Estate Coonabarabran NSW 2357
Contact	Cornelia Wiebels Manager, Warrumbungle Water Business Hours 02 6378 5000 After Hours 02 6378 2000 Cornelia.Wiebels@warrumbungle.nsw.gov.au www.warrumbungle.nsw.gov.au
Scheduled activity/activities on EPL:	Sewage Treatment
Fee based activity/activities on EPL:	Sewage treatment processing by small plants > 219-1000 ML discharged

3 Pollution incident – Person/s responsible

Identify the person/s through whom all communications are to be made:

PIRMP activation	Site Supervisor Coonabarabran Sewerage Treatment Works Business Hours 02 6378 5000 After Hours 02 6378 2000
Notifying relevant authorities	Technical Officer - Warrumbungle Water Business Hours 02 6378 5000 After Hours 02 6378 2000 <u>Scott.Stanley@warrumbungle.nsw.gov.au</u>
Managing response to pollution incident	Site Supervisor, Supervisor Reticulation, Supervisor Treatment Plants Business Hours 02 6378 5000 After Hours 02 6378 2000

4 Notification of relevant authorities

Operational Staff should call 000 if the incident presents an immediate threat to human health and/or property and a combat agency is required (i.e. NSW Fire and Rescue, NSW Ambulance Service, NSW Police Force). Operational staff are to follow the escalation/on-call process, whereby the respondee (Appropriate Site-Supervisor, Manager Warrumbungle Water, or Director of Environment and Development Services), will then notify all other parties below including NSW Fire and Rescue via a local telephone number.

EPA **131 555** should be contacted as soon as possible, as depending on the severity of the pollution event may want to be on-site, or will issue directions about notification to neighbours.

Health NSW (Public Health Officer on Call (24 hours) **0418 866 397**) should also be contacted immediately if there is a risk to human health.

Emergency Hotline Number - Fire, Police, Ambulance (24 hours)	000
Fire and Rescue NSWFire and Rescue NSW Coonabarabran Fire Brigade	02 6842 1982
Environment Protection Authority (EPA)	
Emergency Hotline Number (24 hour)	131 555
Dubbo Regional Office	02 6883 533
	0418 866 397 02 6809 8979
SafeWork NSW Hotline Number	13 10 50
 Warrumbungle Shire Council Warrumbungle Shire Council Environmental Services (24 hour Emergency Hotline Number) 	02 6849 2000

• The Manager Warrumbungle Water will notify the Director of Environment and Development Services who will determine the need for further reporting to the General Manager and Council. Depending on the severity of the pollution event Council Management will determine if press releases and/or radio announcements are required.

5 Notification of neighbours and the local community

Develop any specific information that could be provided to the community, so it can minimise the risk of harm where the pollution incident causes or threatens material harm to the environment or human health, the EPA is notified in accordance with Section 3.2.2.

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 making a telephone call to every neighbouring property of the STP as detailed in Attachment 2. If neighbours are unable to be contacted by telephone a door knock will be carried out.

If appropriate a media release will be issued for publication via radio and social media channels.

In the particular case of discharge into the Castlereagh River, especially in times of low flow in the river, it may be decided to contact landowners and other parties that may be impacted. See Attached Maps in Appendix B.

6 Description and likelihood of hazards

DESCRIPTION OF INCIDENT	LIKELIHOOD	IMPACT	CONTRIBUTING FACTORS
Overflow in the reticulation system	Medium	High	Prolonged heavy rain, lack of maintenance, mechanical failure
Wet weather bypass at the STP	Low	High	Prolonged heavy rain, lack of maintenance, mechanical failure
Dry weather bypass at the STP	Low	High	Lack of maintenance, mechanical failure
Pond failure at Sewer Treatment Plant	Low	Medium	Lack of maintenance
Mechanical failure at the STP results in discharge of untreated effluent	Low	High	Lack of maintenance or fire damage
Unauthorised chemicals entering plant causing shutdown of process	Low	High	Criminal acts, leaking chemicals in urban area
Mechanical failure at the STP results in offensive odours	Low	Low	Lack of maintenance or fire damage
Inadequate chemical storage	Low	Medium	Human error, high winds could spread chemical fire
Pipeline breakage within Sewer Treatment Plant	Low	Low	Human error during excavation, poor maintenance
Exceed Environment Protection Licence discharge limits	Low	Medium	Prolonged periods of heavy rain or mechanical failure
Acts of vandalism or target of terrorist activity	Low	Medium	Increased risk when plant not attended. Increased risk of fire in hot dry weather

7 Pre-emptive actions to be taken and minimising harm to persons on the premises

It is a requirement of the legislation that all steps be taken to minimise the risk of pollution incidents. All staff must ensure that work is carried out in a safe manner in accordance with the WHS legislation and Council's safe work procedures.

All on site chemicals will be safely stored, and where necessary, in a bunded area.

All safety equipment including personnel protective equipment, fire extinguishers, hazmat kits etc are to be kept up to date and ready for any emergency.

All staff are, to ensure that any observed maintenance issues are reported to their supervisor for action.

It is management's responsibility to ensure all staff are fully trained in safety procedures and emergency responses including this Pollution Incident Response Management Plan. Training in relation to this Plan will be registered in the Training Register-Attachment 2.

Any persons entering the site must be wearing the appropriate PPE and inducted by a trained staff member.

Signage should be installed where appropriate.

8 Actions to be taken during or immediately after a pollution incident

Develop a detailed description of the actions to be taken immediately after a pollution incident to reduce or control any pollution. These should include as a minimum early warnings, updates and actions to be taken during and after an incident

Identify any actions to be taken in combating the pollution caused by the incident and how any clean-up and associated funding resulting from an incident will be undertaken:

9 Staff training

An online training course has been developed to test relevant staff knowledge of the Pollution Incident Response Management Plan (PIRMP).

Relevant staff are required to complete the training course at least once a year. Completion of the training course by relevant staff is checked annually as part of the PIRMP testing procedures.

Access to the training course is through the council's on-line training program managed by the Human Resources Department of Warrumbungle Shire Council.

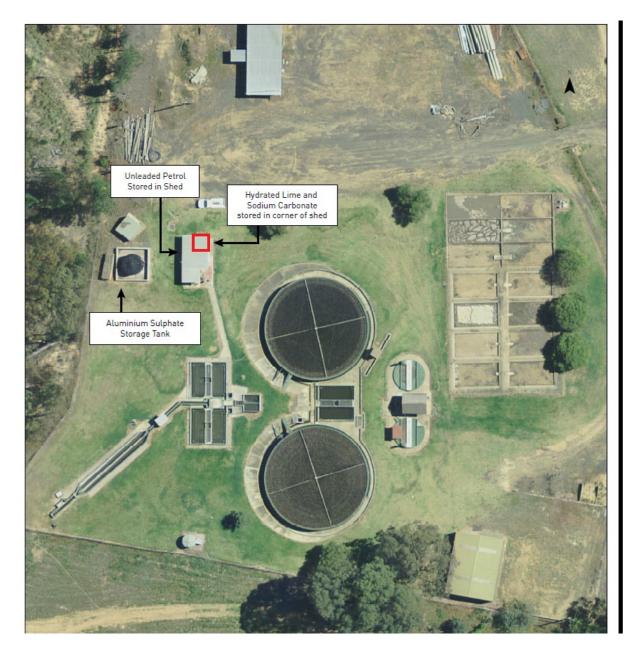
The objectives of the training program are to:

- Ensure staff are aware of whether a pollution event is considered minor or major.
- Ensure that staff know who to call when a pollution event occurs.
- Ensure Warrumbungle Shire Council meets its regulatory obligations.
- Ensure chances of pollution events impacting human health or the environment are minimised.

ATTACHMENTS

Attachment 1 - Maps of the Coonabarabran Sewerage System

Confidential







Attachment 2 - List of Neighbours to be Notified

Confidential

Attachment 3 – Information to be notified

Under section 150 of the POEO Act 1997, the site supervisor is to immediately provide the information initially by phone and later by filling out the "Pollution Incident Reporting Form" in Attachment 1 of this plan.

Any information required that is not known at the time the incident is notified must be provided when it becomes known.

Pollution Incident Reporting form	
Incident No:	Time:
Date:	Duration of Incident:
Nature of Incident:	
Weather Conditions:	
The Location of the Place Where Pollution is Oc	curring or is Likely to Occur:
The nature, the estimated quantity or volume an involved (if known):	d the concentration of any pollutants

The Circumstances in which the Incident Occurred, Including the Cause of the Incident (if known):

The Corrective Action Taken or Proposed to be Taken to Deal with the Incident and Any Resulting Pollution or Threatened Pollution (if known):

Las EDA Directed Council to Notify Noighbourg?	Yes	No
Has EPA Directed Council to Notify Neighbours? If not, has Council Voluntarily Notified Neighbours?	Yes	No
Signature:		
Signature: Date: Manager, Warrumbungle Water Warrumbungle Shire Council		
Has Council Been Notified?	Yes	No
Has Environment Protection Authority (EPA) Been Notified?	Yes	No
Has NSW Ministry of Health (via Public Health Units) Been Notified?	Yes	No
Has WorkCover NSW Been Notified?	Yes	No
Has Local Fire and Rescue NSW Been Notified?	Yes	No

Attachment 4: Staff Training Register

Staff Training	Register	
Date	Staff Member	Brief Description of Training Task
22/1/2014	Cornelia Weibels	Explained contents of PIRMP and requested feedback
22/1/2014	Brad Saunders	Explained contents of PIRMP and requested feedback
22/1/2014	Martin Gordon	Explained contents of PIRMP and requested feedback
22/1/2014	Jason Isedale	Explained contents of PIRMP and requested feedback
22/1/2014	Frances Perry	Explained contents of PIRMP and requested feedback
22/1/2014	Ben Smith	Explained contents of PIRMP and requested feedback

Attachment 5: - Sewer overflow risk analysis

Tables 8,9,10 Of 2007 sewer overflow investigation report and map of at risk sewer infrastructure

EVALUATIONS AND RANKING OF RISKS

The risk associated with sewer overflows can be qualitatively assessed by using a matrix of likelihood and consequence. For the Coonabarabran sewer reticulation system the model provided in the guidelines is used to express the magnitude of the risk associated with any overflow. The matrix from the guidelines is reproduced in Table 8 and results from the analysis are provided in Table 9.

Table 8 - Risk Assessment Matrix

Likelihood	Impacts					
	Insignificant	Minor	Moderate	Major	Catastrophic	
	(1)	(2)	(3)	(4)	(5)	
Almost	Significant	Significant	High	High	High	
certain (A)						
Likely (B)	Moderate	Significant	Significant	High	High	
Moderate	Low	Moderate	Significant	High	High	
(c)						
Unlikely (D)	Low	Low	Moderate	Significant	High	
Rare (E)	Low	Low	Moderate	Significant	Significant	

Sewerage System Component	Magnitude of overflow risk in dry weather	Magnitude of overflow risk in wet weather	
Individual sewer lines within reticulation system	(see appendix 5.0)	(see appendix 5.0)	
Pump station No. 1	Low	Low	
Pump station No. 2	Low	Low	
Pump station No. 3	Moderate	Significant	
Pump station No. 4	Moderate	Significant	
Pump station No. 5	Moderate	Moderate	
Pump station No. 6	Low	Low	
Sewage treatment plant	n/a	Moderate	

Table 10 - Risk Analysis of Overflows – Risk Magnitude Moderate or greater for individual branch lines in reticulation system. (Information extracted from Appendix 5.0)

Sewer	Likelihoo	Likelihoo	Consequen	Magnitud	Magnitude
Line	d of	d of	се	e of	of overflow
	overflow	overflow		overflow	risk in wet
	s in dry	s in wet		risk in dry	weather
	weather	weather		weather	
JA	D	D	4	Significant	Significant
HN	E	E	4	Significant	Significant
FA	D	С	4	Significant	High
BM	D	D	4	Significant	Significant
BH	E	E	4	Significant	Significant
В	E	E	4	Significant	Significant
AJ	E	E	4	Significant	Significant
AC	E	E	4	Significant	Significant
А	С	В	4	High	High
Р	D	D	3	Moderate	Moderate
Ν	E	E	3	Moderate	Moderate
L	E	E	3	Moderate	Moderate
НК	E	E	3	Moderate	Moderate
HJ	D	С	3	Moderate	Moderate
AY	E	E	3	Moderate	Moderate
F	E	E	3	Moderate	Moderate
CY	E	E	3	Moderate	Moderate
CD	E	E	3	Moderate	Moderate
С	E	E	3	Moderate	Moderate
BY	D	D	3	Moderate	Moderate
BV	E	E	3	Moderate	Moderate
BD	E	E	3	Moderate	Moderate
AZ	E	E	3	Moderate	Moderate
AV	E	E	3	Moderate	Moderate
GA	D	С	2	Low	Moderate

Attachment 6 - Operational Procedures

COONABARABRAN SEWERAGE TREATMENT PLANT OPERATIONAL PROCEDURES

A DAILY PROCEDURE

Prior to any work have a current risk assessment completed and check controls for hazards, PPE, procedures etc.

		Details
i)	During the week	 Inspect and take meter readings at sps's and ponds, clean screens and v- notch weir at ponds
 Send humus sludge and clear water from syg Draw sludge from Sed Tanks and mix with an digester prior to adding and mixing in primary Digester a minimum of 4 hours) Remove and dispose of screenings Squeegee sedimentation and humus tanks Brush all channels flumes etc daily Complete daily running sheet Perform drop test on alum dosing pump Run standby pumps for one day once a weel Clean SPS's once a week Use lime to correct pH in Digester 1 as require When out of room in Digester 2 pour the water mixed recently (supernatant first) into a dryin weekend and/or public holidays a second cat digesters full always) 		 Draw sludge from Sed Tanks and mix with appropriate seed from secondary digester prior to adding and mixing in primary digester, twice daily (mix #1 Digester a minimum of 4 hours) Remove and dispose of screenings Squeegee sedimentation and humus tanks Brush all channels flumes etc daily Complete daily running sheet Perform drop test on alum dosing pump Run standby pumps for one day once a week Clean SPS's once a week Use lime to correct pH in Digester 1 as required When out of room in Digester 2 pour the wateriest sludge that hasn't been mixed recently (supernatant first) into a drying bed. If one isn't enough for weekend and/or public holidays a second can be poured (basically keep
ii)	Weekend and Public Holidays	 Send humus sludge and clear water from syphon through the head of works. Draw sludge from Sed Tanks and mix with appropriate seed from secondary digester prior to adding and mixing in primary digesters (mix #1 Digester) Remove and dispose of screenings Squeegee sedimentation and humus tanks Complete daily running sheet for plant Also refer to Office of Water Sewage Manual, available for staff

COONABARABRAN SEWERAGE TREATMENT PLANT				
EMERGENCY PROCEDURES				
A EMERGENCY	PROCEDURE FOR CHEMICAL SPILLS			
-	steps in the case of an emergency chemical spill at the plant.			
	Ilphate (AH) is slippery when spilt			
Avoid accident	s, clean up immediately			
	Details			
EMERGENCY PROCEDURE FOR SPILLAGE OF ALUMINIUM SULFATE	 Restrict access to the area. Clear area of all unprotected personnel. Remove other chemicals that may react with the spilled material. If contamination of sewers or waterways has occurred advise local emergency services Wear protective equipment to prevent skin and eye contact. Avoid skin and eye contact and breathing in vapour, mists and aerosols. Contain – prevent runoff into drains and waterways. Use an absorbent (soil, sand or other inert material). Neutralise with lime or soda ash. Flush area with water Collect and seal in properly labelled containers or drums for disposal 			
	FIRST AID PROCEDURE			
ALUMINIUM SULFATE SOLUTION CONTAMINATION	 Obtain medical attention immediately Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water DO NOT induce vomiting. If victim can swallow, have them drink 250-300ml water to dilute material in stomach. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Repeat administration of water 			
EYE CONTACT	 Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 30 minutes, by the clock, holding the eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If irritation persists, repeat flushing. If available, a neutral saline solution may be used to flush the contaminated eye(s) an additional 30 minutes Obtain medical attention immediately 			
SKIN CONTACT	 First aiders avoid direct contact with this chemical. As quickly as possible, flush contaminated area with lukewarm, gently running water for at least 30 minutes, by the clock. Under running water, remove contaminated clothing, shoes and leather goods (eg, watchbands, belts). If irritation persists, repeat flushing Obtain medical attention if effects persist. 			

	 Completely decontaminate clothing, shoes and leather goods before re- use or discard.
INHALATION	 Remove source of contamination or move victim to fresh air. Obtain medical advice if effects persist.
GENERAL/OTHER INFORMATION	 Provide general supportive measures (comfort, warmth, rest). Consult a physician and/or Poison Control Centre for all exposures except minor instances or inhalation or contact.
PHYSICIANS	3. Treat symptomatically

Attachment 7 – Definition of pollution incidents

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:

Harm to the environment is material if:

It involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or

It results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, and

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.

POLLUTION INCIDENT CLASSIFICATIONS, REQUIRED RESPONSES AND NOTIFICATIONS PROTOCOL

Pollution incidents that may occur within the Coonabarabran Sewerage System can be categorised into two major areas in determining the type of response and notification requirements. If there is any doubt as to the level of notification required it is always best to err on the side of caution and immediately notify all authorities as well as any affected residents.

It is the responsibility of the person on site to first call 000 in dangerous situations requiring immediate emergency services assistance, advise other staff and members of the public in immediate danger (by carrying out a door knock and/or telephoning) and if safe to do so take immediate steps to reduce the impact of the incident. When able, the person on site is to notify the Manager Warrumbungle Water as soon as possible who will immediately notify the relevant authorities and relevant Council managers.

When attending to pollution incidents it is important to assess the tasks required and ensure that work is carried out in a safe manner in accordance with the WHS legislation and Council's safe work procedures. The Pollution Incident Decision Flow Chart in Section 4 of this document summarises the response to an actual or potential pollution incident.

3.1 Minor -

No Notification Required

The type of incident requiring no notification to external authorities is one that is of no danger to human health and no impact on the environment.

Typical examples include:-

- Sewer choke causing surcharge affecting a single domestic premise that can be easily cleaned up by Council (fill out Sewer Choke report after incident is cleaned up).
- Small, local spill of sewage or chemical within the Sewage Treatment Plant that is easily cleaned up by Council Staff.
- Offensive odours discharged from the STP or a pump station.

3.2 Major -

Notify EPA, Dubbo Public Health Unit, Workcover and Coonabarabran Fire Brigade, Council Management.

The type of incident classified as Major typically has the potential to, or causes actual harm to, humans and/or the environment.

Typical examples include:-

- Sewer Choke affecting more than one residence.
- Minor overflow in the reticulation system that is easily contained and can be readily isolated from the public.
- Overflow from the reticulation system into the Castlereagh River during a wet weather event.
- Sewage overflow in or near a school, public park, aged care facility or hospital where humans may be impacted.
- Sewage overflow during dry weather that enters the storm water system and could discharge into the Castlereagh River
- Pump Station overflow.
- Sewage Treatment Plant bypass or mechanical failure event that results in discharge of untreated or partially treated sewage from the STP site.
- Fire or Chemical spill requiring Emergency Services Assistance.
- Dangerous trade waste discharges (e.g. petrol from a Service Station) Vandalism that has or could have caused a pollution incident.

Attachment 9 - Inventory of pollutants

To be updated as part of site audit

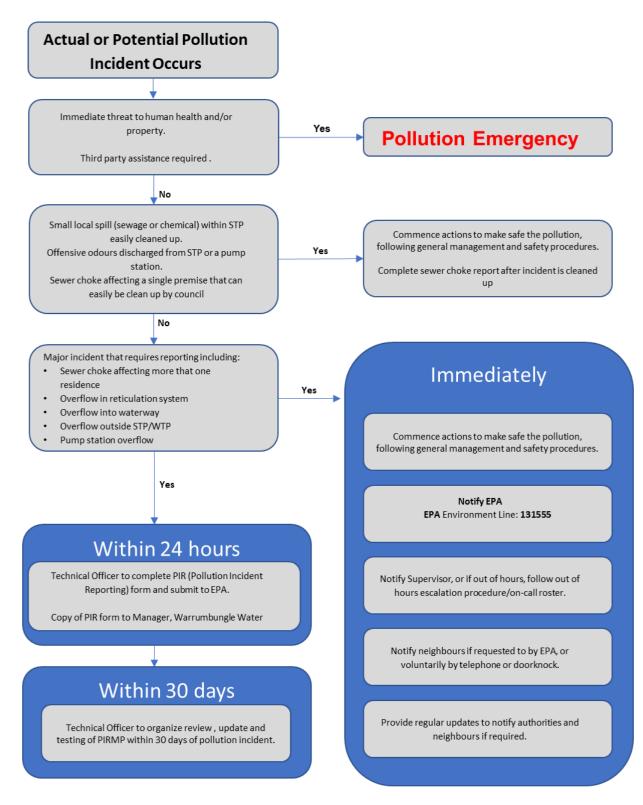
Chemicals	Present (?)	Quantity	Storage	Signage	Other /Comments
Chlorine	Yes		Workshop		Raised
Calcium hydroxide - Ca(OH) ₂	Yes	40 bags @ 25 kg	Workshop		On a raised pallet
(Hydrated Lime)					
LPG – cannister	Yes	1 canister	Meal room		
					Entire site bunded by earthwall – downhill of plant.

Attachment 10 - Safety equipment

To be updated as part of site audit

Equipment	Location		
Fire extinguisher	Workshop/well room/ meal room		
Breathing Apparatus	Workshop		
Gumboots	Workshop/truck		
Masks	Truck/office		
Safety showers	No but standard shower available		
Eye wash	No		
PIRMP on site	Needs updating with this version		
Chemical spill kit	Workshop		
First aid kit	Meal room		

Attachment 11 - Pollution incident decision flow chart



The Manager Warrumbungle Water will notify the Director of Environment and Development Services who will determine the need for further reporting to the General Manager and Council. Depending on the severity of the pollution event Council Management will determine if press releases and/or radio announcements are required.

