



Pollution Incident Response Management Plan

For

Warialda (EPA 584) and Bingara (EPA L586)

Sewerage Treatment Plants and Reticulation System

Revision 2 September 2018

Revision History:

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Contents

1. Introduction:	4
2. Background:	4
3. Legislative Requirements:	5
4. Definition of a pollution incident:	5
5. Risk Management:	6
5.1 Description of likely hazards:	6
6. Inventory of pollutants:	7
6.1 Bingara STP	7
6.2 Warialda STP	7
7. Safety Equipment:	7
8. Contact Details:	8
9. Communications with relevant agencies:	8
10. Communications with neighbours and local community:	9
11. Minimising harm to people on the premises:	9
12. Maps:	9
13. Immediate Action In the event of an incident	10
14. Staff Training:	10
15. Transporters of waste:	10
15.1 Licensed transporters available:	10
16. Availability of plans:	11
17. Testing of the Plan:	11
Appendix 1: Incident Report form	12
Appendix 2: Warialda STP	13
Appendix 3: Bingara STP	14
References:	15

1. Introduction:

This Pollution Response Incident Management Plan (PRIMP) has been developed to describe Gwydir Shire Council response to a potential pollution incident and to meet new requirements introduced by the *Protection of the Environment Legislation Amendment Act 2011* (POELA Act).

The PRIMP covers the two environment protection licences for Gwydir Shire Council.

- Warialda sewerage treatment works (L584)
- Bingara sewerage treatment works (L586)

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. The plan is based on a risk assessment for each of the sites.

This document set out specific requirements regarding the preparing, keeping, testing and implementation of these plans.

2. Background:

The POELA Act introduces 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.

The objectives of these plans are 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)¹ 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.

3. Legislative Requirements:

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).² 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, in the case of trackable waste transporters and mobile plant, 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).

4. Definition of a 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 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 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.

Industry is now required to report pollution incidents *immediately* to the EPA, NSW Health, Fire and Rescue NSW, WorkCover 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 in a faster time.

There are new associated offences, for individuals and corporations, for not preparing a plan, not keeping the plan at the premises to which it relates, not testing the plan in accordance with the Regulations and not implementing the plan in the case of an incident.

5. Risk Management:

5.1 Description of likely hazards:

The potential hazards to the environment include:

-

Potential Hazards	Pre-emptive Actions
<p>Sewage overflow (raw or partially treated) – potentially caused by:</p> <ul style="list-style-type: none"> - Storms (lightning/heavy rainfall/wind) causing power failure or infrastructure damage - Reticulation blockages - Infrastructure failure due to age - SCADA/Communications failure - Excessive flows - Mechanical break down - Power outage - Treatment plant blockage 	<ul style="list-style-type: none"> • Reticulation inspection, monitoring & preventative maintenance to reduce infiltration & inflows, identify system failures (actual or likely), choke point trends etc • System redundancies and bypass processes incorporated in infrastructure design and operational plans • Spare capacity in bypass pond/s / processes at STP (including being an under-loaded plant) • SCADA testing and alarming • Electrical systems protection / backups / generator connectivity • Quick response 24 hour on call approach to sewer chokes / blockages or failures • Inflow, weather conditions & environmental monitoring in place • Principally a gravity feed reticulation system therefore less susceptible to power outages / pump station failures
<p>Chemical spill – potentially caused by:</p> <ul style="list-style-type: none"> - Tank/storage failure - Delivery incident - Damage to chemical reticulation - Vandalism - Inappropriate chemical use - Bund failure 	<ul style="list-style-type: none"> ▪ Inspection, monitoring and preventative maintenance ▪ Standard operating procedures ▪ Spill kits

6. Inventory of pollutants:

6.1 Bingara STP

Chemical – (Potential pollutant)	Quantity Stored	Location of storage	MSDS
Sodium bicarbonate	Max 10 x 20kg bags	Garden shed onsite	Onsite
Lime	Max 10 x 20kg bags	Garden shed onsite	Onsite
Soda ash	Max 10 x 20kg bags	Garden shed onsite	Onsite
Chlorine – granulated	20kg	Garden shed onsite	Onsite
Unleaded petrol	20L	Storage shed onsite	Onsite
Sewerage		Sewerage system	N/A

6.2 Warialda STP

Chemical – (Potential pollutant)	Quantity Stored	Location of storage	
Sodium bicarbonate	Max 10 x 20kg bags	Storeroom near digester tank	Onsite
Lime	Max 10 x 20kg bags	Storeroom near digester tank	Onsite
Soda ash	Max 10 x 20kg bags	Storeroom near digester tank	Onsite
Chlorine – granulated	20kg	Building Storeroom	Onsite
Sodium hypochlorite	1000L	Ponds chemical shed	Onsite
Unleaded petrol	20L	Ponds equipment shed	Onsite
Sewerage		Sewerage system	N/A

7. Safety Equipment:

Description	Location	Used for	
PPE (rubber gloves, dust mask, face shield)	Bingara STP Building Store room	Protection of body parts exposure	
Confined space entry equipment (tripod, winch, harness etc)	Bingara STP Building Store room	Safe entry to confined space	
Gas detectors	Bingara STP Building Store room	Testing the atmosphere of confined space	
Breathing apparatus	Bingara STP Building Store room	Safe entry or rescue from an area of unsafe atmosphere	
PPE (rubber gloves, dust mask, face shield)	Warialda STP Building storeroom	Protection of body parts exposure	
Confined space entry	Warialda STP Building	Safe entry to confined	

equipment (tripod, winch, harness etc)	storeroom	space	
Gas detectors	Warialda STP Building storeroom	Testing the atmosphere of confined space	
Breathing apparatus	Warialda STP Building storeroom	Safe entry or rescue from an area of unsafe atmosphere	

8. Contact Details:

Organisation	Position/ title	Name	Contact details
Gwydir Shire Council	General Manager	Max Eastcott	Phone: 0267242018 Mobile: 0427240112 Email: meastcott@gwydir.nsw.gov.au
Gwydir Shire Council	Director of Technical Services	Richard Jane	Phone: 0267293008 Mobile: 0408619826 Email: rjane@gwydir.nsw.gov.au
Gwydir Shire Council	Town Services Manager	Andrew Cooper	Phone: 0267242025 Mobile: 0428241990 Email: acooper@gwydir.nsw.gov.au
NSW Environmental Protection Agency	Pollution Hotline		131555
NSW Office of Water – Inspector	Trent Betts		0417458247
NSW Public Health	Glen Pearce		0429100391
Workcover NSW			131050
Fire and Rescue NSW			000

9. Communications with relevant agencies:

The Water and Sewer Manager has the responsibility to notify the relevant agencies of any pollution incident.

The initial notification will be by telephone followed up with a written report emailed to the EPA.

The notification will be undertaken as soon as practical in the event of an incident.

Written report will be on the incident report form - agency notification – appendix 1

10. Communications with neighbours and local community:

Neighbours and the local community will be communicated by doorknocking and letter drop of the particular circumstances.

In the event pollution incident is extreme notification will be made by advertising on the local radio stations and councils web site.

- 2NZ Radio Inverell – 0267221188 radio2nz@bigpond.com
- Now FM Radio Moree – 0267511983 nowstudio@bigpond.com

11. Minimising harm to people on the premises:

Follow emergency procedures as below:

Gwydir Shire Council

EMERGENCY PROCEDURES

(To be kept in all Maintenance Vehicles)

These procedures relate to emergencies which may occur on a maintenance site. Emergencies can include leakage of fuel, chemical spills, work or traffic accidents etc. The impact of emergencies includes:

- danger or threat to people's health or safety;
- environmental damage;
- damage or threat to property.

1. Clear the area of personnel and control traffic as required. Employees are to proceed to a safe area so they can be accounted for.
2. Remain upwind of the incident scene if chemicals, fumes or smoke are involved.
3. Identify the type of incident and its severity - Is it an accident, spillage, fire or explosion?
4. Inform the Works Supervisor Stan Fletcher (0428 241 909) or Town Service Manager (0428 241990) of all incidents.
5. Notify appropriate Emergency Services: Telephone 000, and 000 or 112 for Mobiles. (Note: Mobile numbers can be used even when no signal is showing)
6. Notify potentially affected residents.
7. Identify any chemicals involved (names and UN numbers).
8. Where possible, confine the incident and prevent the spread of its effects without endangering personnel.
9. Obey instructions from the Emergency Services.
10. Assist injured people if safe to do so.
11. Use fire extinguishers if safe to do so. DO NOT ATTEMPT TO EXTINGUISH FIRES INVOLVING HAZARDOUS SUBSTANCES.
12. Undertake all activities with appropriate protective clothing and/or at a safe distance.

12. Maps:

Plans must include a detailed map (or set of maps) showing the location of the premises, the surrounding area that is likely to be affected by a pollution incident, the location of potential

pollutants on the premises, the location of any stormwater drains on the premises, and the discharge locations of the stormwater drains to the nearest watercourse or water body.

Appendix 2 – Warialda STP Plan

Appendix 3 – Bingara STP Plan

13. Immediate Action In the event of an incident

Step		Action
1	emergency response	AS PER Emergency procedures above (11)

14. Staff Training:

Nature of training	Staff required	Frequency of training	Responsibility	Records
Induction – pollution response management Toolbox meeting form	Bingara and Warialda water and sewerage operators	12months and all new employees in this area.	Town Services manager	Record of the training shall be kept in councils electronic record system - TRIM

15. Transporters of waste:

Transporters of waste need to have their own management plans.

15.1 Licensed transporters available:

The following waster transporters have registered and approved by Gwydir Shire Council.

Company	Contact Name	Contact details
Connelly's Liquid Waste	Ian Connelly	0409926013
Christies Liquid Waste	Peter O'Neil	0429393900

16. Availability of plans:

A copy of this plan must be kept at the following locations:

- licensed premises of Bingara STP and Warialda STP
- Gwydir Shire Council offices
- Gwydir Shire Council web site: www.gwydirshire.com

17. Testing of the Plan:

This plan must be reviewed every 12 months ensure that the information included in the plan is accurate and up to date, and that each plan is capable of being implemented in a workable and effective manner. This is also applicable to plans prepared by waste transporters.

Appendix 1: Incident Report form



EMERGENCY OVERFLOW or BYPASS INCIDENT REPORT

Name of Station:	
Location of Station	
Date of Occurrence:	
Time overflow reported/discovered:	
How overflow reported/discovered:	
Overflow report received by:	
Time arrived on-site:	
Area(s) affected by overflow (describe):	
Did the overflow enter the stormwater system (Y/N):	
Estimated quantity of overflow:	
Estimated duration of overflow	
Clean-up measures taken (describe): (pumping, disinfecting, other)	
Disposal details (describe):	
Notification to people who may be potentially affected (householders in the vicinity, tenements) Notified (Y/N): Notified by: Time Notified:	
Notification to next line of authority: Notified (Y/N): Notified by: Time Notified:	
Notification to external authorities, organisations (Police, EPA, clean-out pumping organisation, etc): Notified (Y/N): Who Notified: Time Notified/Time Arrival On-site:	
Possible causes <input type="checkbox"/> Pump blockage <input type="checkbox"/> Pump failure <input type="checkbox"/> Float/probe failure <input type="checkbox"/> Electrical fault <input type="checkbox"/> Power failure <input type="checkbox"/> Other (describe)	
Action record: <input type="checkbox"/> Task/clean-up completed <input type="checkbox"/> Referred to Supervisor (for inclusion of report to relevant authority EPA) <input type="checkbox"/> Referred to Supervisor (for possible inclusion in Routine maintenance program) <input type="checkbox"/> Referred to Mechanical & Electrical Section for further investigation <input type="checkbox"/> Referred to Senior Management for further investigation	
Time left site:	
Attending Officer Signature:	
Print Name:	

WASTE WATER TREATMENT PLANT

TOTAL AREA OF FACILITY = 3.42ha

SEWERAGE TREATMENT PLANT

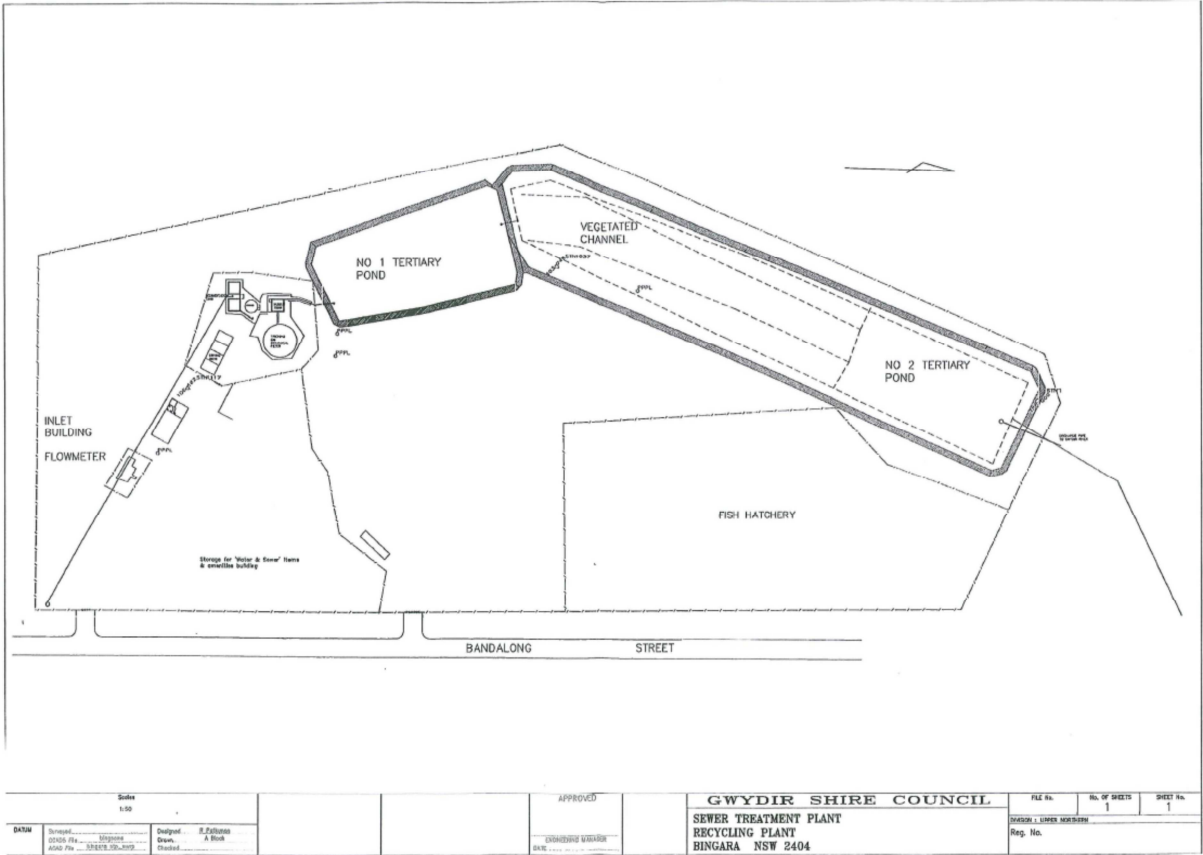
TOTAL AREA OF FACILITY = 0.42ha

NOTES:

- Sewerage at inlets 1 & 5 are pumped into sewerage ponds.
- Sewerage at inlets 2, 3 & 4 are gravity fed into sewerage ponds.
- Sedimentation Tanks & surrounding area incorporate the following:
 - Channel with grit-removers & flume & sensor.
 - Chamber with by pass & rag removers.
 - Secondary chamber with rag removers & overflow arrangement.
 - Sludge dewater.

Scale 1:1000				APPROVED		GWYDIR SHIRE COUNCIL WARIALDA TOWNSHIP WASTE WATER TREATMENT PLANT & SEWERAGE TREATMENT PLANT PLAN	No. OF SHEETS 1	SHEET No. 1
DRAWN ASSIGNED	Surveyed M. McIntosh CADD File SPRINGER CADD File Drawn J. Robinson	DESIGNED A. Bick	CHECKED A. Robinson	ENGINEERING MANAGER Paul E. Robinson 29/06/18			FILE NAME ENG	
				DATE				

Appendix 3: Bingara STP



References:

- NSW EPA Guidelines: Preparation of pollution incident response management plans, 2012
- Gwydir Shire Council, Environmental incident notification protocol, 2006