

**2127078-REP-
0_PIRMP_002_DUBBO_STP**
DUBBO SEWAGE TREATMENT SYSTEM

PREPARED FOR:
DUBBO REGIONAL COUNCIL

JUNE 2023

Report Title:	<i>Pollution Incident Response Management Plan</i>
Project:	<i>Dubbo Sewage Treatment System</i>
Client:	<i>Dubbo Regional Council</i>
Report Ref.:	<i>2127078_PIRMP_002_Dubbo_STP</i>
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Change History

Date	Details of Changes	Version
22/06/2023	Updated contact details	1.5
06/02/2018	Document updated to address EPA audit findings	1.4
07/12/2017	Maps Added to Document	1.3
29/08/2017	Document Reviewed – Dubbo Regional Council	1.2
19/05/2016	Document Reviewed – Western Plains Regional Council	1.1
20/08/2012	Original Document	1.0

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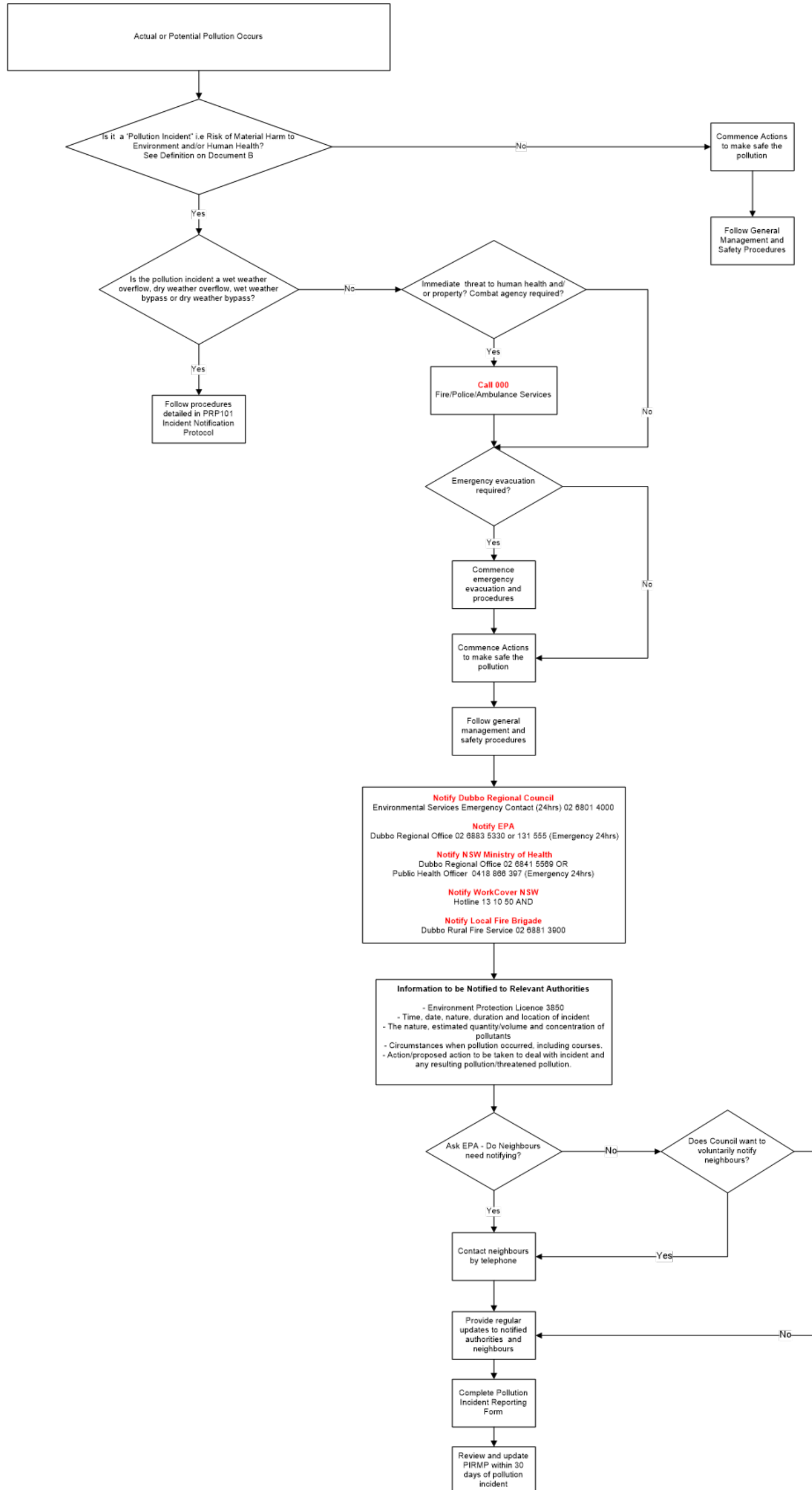
1.0 POLLUTION INCIDENT CLASSIFICATION, RISK ASSESSMENT AND CONTRIBUTING FACTORS

Table 1.1 Pollution Incident Classification, Risk Assessment and Contributing Factors

Description of Pollution Incident	Likelihood	Impact	Contributing Factors
Wet Weather Overflow from the reticulation system discharges untreated sewage to the environment.	High	Medium	Proximity to sensitive environments, lack of preventative maintenance of the reticulation system, choke or blockage (caused by tree roots, debris, fat etc), failure of mechanical or electrical assets, significant rainfall event, extent of infiltration throughout system.
Dry Weather Overflow from the reticulation system discharges untreated sewage to the environment.	Low	Medium	Proximity to sensitive environments, lack of preventative maintenance of the reticulation system, choke or blockage (caused by tree roots, debris, fat etc), failure of mechanical or electrical assets.
Wet Weather Bypass at the sewage treatment plant (STP) discharges untreated sewage to the Macquarie River during wet weather.	Low	High	Prolonged periods of heavy rain, lack of pond and site maintenance and/or a mechanical failure of plant and equipment.
Dry Weather Bypass at the STP discharges untreated sewage to the Macquarie River during dry weather.	Low	High	Lack of pond and site maintenance and/or a mechanical failure of plant and equipment.
Pond failure at the STP discharges treated effluent to the environment.	Low	Low	Prolonged periods of heavy rain, lack of pond and site maintenance and/or a mechanical failure of plant and equipment.
Mechanical failure at the STP discharges untreated sewage to the environment.	Low	High	Fire damage or poor maintenance of plant and equipment. Prolonged periods of heavy rain.
Mechanical failure at the STP emits offensive odour from the premises.	Low	Low	Fire damage or poor maintenance of plant and equipment.
Rupture of bulk chemical storage tanks spills of corrosive water treatment chemicals to the environment.	Low	Medium	Failure of equipment during re-filling of bulk tankers. Movement of mobile plant around site impacting bund and/or chemical storage tanks. Inadequate inspection and maintenance of chemical storage facility.
Rupture of bulk chemical storage tanks exposes Sewer personnel to corrosive chemicals.	Low	Medium	Failure of equipment during re-filling of bulk tankers. Movement of mobile plant around site impacting bund and/or chemical storage tanks. Inadequate inspection and maintenance of chemical storage facility. Untrained personnel responding to chemical spill. Inadequate maintenance of spill response and PPE.
Damage to property at the STP through acts of vandalism or terrorist activity.	Low	Medium	Increased risk during hours of closure and increased fire risk during sustained periods of hot and dry weather.
Discharge pipeline breakage releases treated effluent to the environment.	Low	Low	Poor maintenance of plant and equipment. Flows exceeding pipe and pump capacity
EPL discharge limits to the Macquarie River are exceeded.	Low	Low	Prolonged periods of heavy rain and mechanical failure of plant and equipment

Description of Pollution Incident	Likelihood	Impact	Contributing Factors
Poor management of irrigation in utilisation areas causes significant adverse impact to the environment.	Low	Low	Human error allowing the effluent to be discharged onto utilisation areas during inappropriate times when the land and farm animals are more susceptible to harm. Lack of control and/or monitoring. Prolonged periods of heavy rain.

2.0 DOCUMENT A - POLLUTION INCIDENT DECISION FLOW CHART



3.0 DOCUMENT B – POLLUTION INCIDENT EMERGENCY CONTACT DETAILS

3.1 DEFINITION OF 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, 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.”*

3.2 NOTIFICATION OF POLLUTION INCIDENT

3.2.1 Notification Speed of Response

The requirement for notification of a pollution incident has changed from 'as soon as practicable' to 'immediately'. In short, 'immediately' means 'promptly without delay', but it does not mean undertaking notification ahead of doing what is necessary to make safe.

3.2.2 Notification of Relevant Authorities

If the pollution incident is a wet weather overflow, dry weather overflow, wet weather bypass or dry weather bypass procedures need to be followed in Council's *PRP 101 Incident Notification Protocol, August 2012*.

In all other pollution incident cases and where the pollution incident causes or threatens material harm to the environment or human health, all the following authorities must be notified by the Site Supervisor:

Notification of Relevant Authorities

1. Emergency Call Services

- **Emergency Hotline Number (24 hours)** 000*

*The Site Supervisor 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) and then notify all other parties below including NSW Fire and Rescue via a local telephone number.

2. Dubbo Regional Council

- Dubbo Regional Council Environmental Services (24 hour Emergency Hotline Number) 02 6801 4000

3. The Environment Protection Authority (EPA)

- Dubbo Regional Office 02 6883 5333
- Emergency Hotline Number (24 hours) 131 555

4. NSW Ministry of Health (via Public Health Units)

- Dubbo Regional Office 02 6809 8963
02 6809 8979
- Public Health Officer on Call (24 hours) 0418 866 397

5. WorkCover NSW

- Hotline Number 13 10 50

6. Fire and Rescue NSW

- Dubbo Rural Fire Service 02 6881 3900**

**If there is no immediate threat to human health and/or property i.e. a combat agency is not required, then the Site Supervisor is still required to follow that outlined above except for dialling 000.

3.2.3 Information to be Notified

Under section 150 of the *POEO Act 1997*, the information about a pollution incident that must be notified to relevant authorities 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 Site 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.

3.2.4 EPA Powers of Direction & Notification of Neighbours

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 **Table 2.1** below. A summary of the neighbour notification procedure is provided in **Document A – Pollution Incident Decision Flow Chart**.

Table 2.3.1 – List of Neighbours to be Notified

Contact Name	Property Address	Contact	Comments
T. Somerville	32 Boothenba Road	Tel: 0429 964 593	
T. Bye	33 Boothenba Road	N/A	Door Knock
Western Memorial Park	11 Boothenba Road	Tel: 02 6885 3340	
R. Holmes Transport	6 Boothenba Road	Tel: 02 6884 4866	
DRC Sale Yards	Boothenba Road	Tel: 041727 2844	
Neil's Parts	14 Boothenba Road	Tel: 02 6882 9699	
DRC Animal Shelter	189 Boothenba Road	Tel: 02 6882 1934	
Fletchers International	29 Boothenba Road	Tel: 02 6884 5833	
M. O'Brien's	5 Old Gilgandra Road	Tel: 02 6845 3089	
Bungaribee Homestead	Boothenba Road	N/A	Door Knock

3.2.5 Sewage Treatment System Council Contact Details

The following Council officers are directly responsible for the overall management of the DSTS and, if considered necessary, can be contacted by relevant authorities in the event of a pollution incident:

- Stephen Carter, Manager Water Supply & Sewerage 0429 443 657
- Mark Gilbert, Waste Water Treatment Coordinator – West 0436 194 902
- Paul Meredith, Reticulation Coordinator – West 0419 217 887

4.0 POLLUTION INCIDENT REPORTING FORM

INCIDENT No:	TIME:
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DATE:	DURATION OF INCIDENT:
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NATURE OF INCIDENT:

WEATHER CONDITIONS:

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 CORRECTIVE ACTION TAKEN OR PROPOSED TO BE TAKEN TO DEAL WITH THE INCIDENT AND ANY RESULTING POLLUTION OR THREATENED POLLUTION (IF KNOWN):

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

HAS EPA DIRECTED COUNCIL TO NOTIFY NEIGHBOURS?	YES	NO
IF NOT, HAS COUNCIL VOLUNTARILY NOTIFIED NEIGHBOURS?	YES	NO

Signature:	Date:
Site Supervisor, Dubbo Regional Council	
Signature:	Date:
Water Operations Engineer, Dubbo Regional Council	

5.0 PIRMP TESTING REGISTER

Date	Testing Method (Drill / Desktop)	Participants

6.0 STAFF TRAINING REGISTER

Date	Staff Member	Brief Description of Training Task

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On 22 June 2023.



Purpose:	To Familiarise staff with the PIRMP procedure and to test the process.
Overview:	<p>Discussed the PIRMP and the procedures to follow in the event of a pollution incident with all staff present.</p> <p>The notification speed of the incident were discussed, as per PIRMP and Management Staff on site will make sure of SAFTY FIRST and that include to stop the overflow. Once that is done, notify the EPA of incident and the clean-up procedure /plan.</p> <p>Follow procedure of notifications as outlined in PIRMP. Make sure to complete relevant documents and submit to the Technical Officer and manager for EPA report.</p>
Desk Top Testing - Scenario:	After Hour On-Call Technician received a pump failure pager and found Cootha SPS overflow tank is full and it is overflowing after a heavy rain fall and pump failure.

Staff's Response on Scenario:

- 1) Log on to SCADA, acknowledge alarm and check for problems – can't reset pumps on SCADA it has to be manually in person.
- 2) Attend site
 - It is recommended that the technician keep notes of times, actions and communications during the incident
- 3) Check pump control systems and attempt to diagnose problems
- 4) Attempt to reset/restart pumps
- 5) Contact On Call MECH/ELEC staff member, provide information and request an electrician attend site.
- 6) Contain as much of the overflow as possible (Consider organising earth moving equipment depending on the size of the overflow)
- 7) Contact supervisor and advise them of situation
- 8) On advice from supervisor, contact the EPA via their emergency phone number and advise them of overflow at site due to storm inflows and pump failure.
- 9) Provide relevant information to the EPA and act as they request in accordance with the PIRMP.
- 10) Monitor overflow and its effects (has it reached the river?) and prepare to notify relevant authorities and neighbours if necessary
 - If it is a long term overflow event Sam's Waste can be contacted to pump out SPS and maintain levels.
 - If Cootha SPS was to significantly overflow and enter the river, Babu (WTP supervisor needs to be notified as soon as possible.
- 11) Once pumps are operating, monitor flows and well levels to ensure continuous proper operation

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- 12) Assess effects of overflow on local environment
 - Technician to assess site for further cleaning if necessary and if so, arrange disinfectant and gravel.
 - Technician to assess odour control if the overflow is in a public space.
 - 13) Update supervisor of situation. Supervisor to notify DRC chain of command.
 - 14) Arrange and carry out necessary clean-up work
 - 15) Complete Pollution Incident Reporting Form and submit it to supervisor who will need to sign and forward to the Technical Officer and Engineer/specialist to escalate to EPA.
- It was suggested that a debriefing meeting be held following incidents to review causes, action taken and preventative measures.

NOTES:

- It was recommended by the operators that Council should investigate constructing a containment dam specifically at Cootha SPS as it is the only SPS that can directly affect the town's potable water supply should it have a significant overflow event and enter the river.

Comments and observations



Participants were familiar with the PIRMP in order to respond to the pollution incident scenario presented. The discussion exercise was successful in testing the PIRMP. Participants discussed and confirmed their roles in relation to the scenario and pollution incident response.

Attendee list attached separately.

ATTENDANCE LIST



Training/Testing:	Pollution Incident Response Management Plan - 2023
Date:	22 June 2023
Venue:	Dubbo Sewer Treatment Plant
Time:	10:00 AM
Provider:	DRC

Name	Position	Signature
Mark Gilbert	Acting - Waste Water Treatment Coordinator – Operations	
Tazim Bhuiyan	Waste Water Treatment Technician	
David Wheeler	Waste Water Treatment Technician	