

PIRMP- Gulgong
Wastewater Treatment
Plant and Sewerage
System



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POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN (PIRMP) LICENCE NUMBER: 5808

Approved by: Manager Water and Sewer Date: 15/05/2022

PURPOSE:

Mid-Western Regional Council holds an Environment Protection Licence with the NSW Environment Protection Authority (EPA) for Gulgong Wastewater Treatment Plant. As per the Protection of the Environment Operations Act 1997 (the POEO Act), Mid-Western regional Council must prepare, keep, test and implement a pollution incident response management plan (PIRMP) that complies with Part 5.7A of the POEO Act.

If a pollution incident occurs in the course of our activities so that material harm to the environment (within the meaning of section 147 of the POEO Act) is caused or threatened, Mid-Western Regional Council will **immediately** implement this plan as required by Part 5.7A of the POEO Act.

A copy of this plan is kept at the licensed premises and can be made available on request by an authorised EPA officer and to any person who is responsible for implementing this plan.

Parts of the plan is also available on Mid-Western Regional Council website as set out in clause 98D of the Protection of the Environment Operations (General) Regulation 2009.

NOTE: 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.

NOTIFICATION OF A POLLUTION INCIDENT

Notification is required if a pollution incident causes or threatens to cause 'material harm to the environment'. Harm to the environment is material as per section 147 of the POEO Act 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 the 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.

Notification is required even where 'harm to the environment is caused only in the premises where the pollution incident occurs', as specified in section 147(2)



ame of licensee:	Mid-Western regional Council
PL number:	5808
Premises name and address:	Gulgong Wastewater Treatment Plant, 107 Spring Creek Road, Gulgong 2852 NSW
Contact details	Position or title: Manager Water and Sewer
	Business hours contact number/s: 1300 765 002
	After hours contact number/s: 1300 765 002
Website address:	http://www.midwestern.nsw.gov.au/
Scheduled activity/activities on EPL:	Sewage treatment
Fee-based activity/activities on EPL:	Sewage Treatment processing by small plant
Pollution incident – person/s responsible	
PIRMP activation	Position or title: Water and Sewer Process Coordinator
	Business hours contact number/s: 1300 765 002
	After hours contact number/s: 1300 765 002
	Position or title: Manager Water and Sewer
	Business hours contact number/s: 1300 765 002
	After hours contact number/s: 1300 765 002



Notification of relevant authorities

See below for persons and/or any relevant authorities requiring to be notified as per Part 5.7A of the POEO Act in the case of a pollution incident that causes or threatens to cause material harm to the environment.

The following information must be noted and forwarded to the authorities when they are notified of the incident:

- · Time and date.
- · Nature and location of the incident.
- Duration of the incident (including estimated quantity /volume discharged if applicable)
- Location of areas that may be affected by incident.
- Circumstances in which the incident occurred.
- The proposed action to be taken in dealing with the incident

Fire & Rescue NSW	Contact number/s:	000 Emergency (112 mobile phones) 1300 729 579 (generic) 6374 1049 Gulgong Fire and rescue
EPA (written report to be provided within 7 days)	Contact number/s:	131 555
NSW Health	Relevant Area Health Service: Contact number/s: After hours	Dubbo Office 6809 8979 0418 66 397
SafeWork NSW	Contact number/s:	131 050



Notification of relevant authorities, continued

See below for persons and/or authorities that also may need to be notified in the case of a pollution incident that causes or threatens to cause material harm to the environment.

Department of Planning Industry and Environment (DPIE)	Contact number/s: Generic number (business hours)	1800 353104
WaterNSW	Contact number/s: Emergency reporting – 24h (spills etc)	1300 662 077 1800 061 069
Mid-Western, Regional Council (24h)	Contact number/s:	1300 765 002 (02) 6378 2850
Rural Fire Services - Gulgong	Contact number/s:	6372 4434 (Mudgee) 45 Rouse Street Gulgong
NSW Fisheries – Central Tablelands	Contact number/s:	0488 220 443

Notification of neighbours and the local community

Mid-Western Regional Council will attempt to provide early warning to directly affected premises. Depending on the severity of the incident and the likelihood of impact on the community, a range of communications methods can be deployed during and after an incident. These include:

- Site visits/door knocking
- Phone calls
- SMS messages
- Emails (internal and external)
- Social media, website updates
- Media updates
- Letter drop
- Warning signs
- Depending on the incident; WaterNSW has an early warning system to alert Water Licence Holders. WaterNSW can be contacted and request made for them to send an alert



Description and likelihood of hazards; Pre-emptive actions to be taken

Sewage overflow

	Impact	Risk Rating*	Pre-emptive actions
Heavy rainfall	Land/waterway contamination	C 3 = M11	 Sewerage system maintenance and rehabilitation to reduce infiltration and inflows Spare capacity in pump wells Monitoring and maintenance SCADA alarm
Power failure	Land/waterway contamination	B 2 = L5	 Lightning protection Emergency diesel pump Vegetation management to prevent damage to infrastructure in case of storm SCADA alarms
Blockage or damage to sewers	Land/waterway contamination	C 2 = M8	 Sewerage system maintenance Sewer Jetting (high pressure cleaning of mains for repeat chokes) Spare capacity in pump wells Monitoring and maintenance
SCADA/Communication failure	Land/waterway contamination	A 2 = L4	SCADA testing and alarmingMonitoring of SCADA signal issues
External person hitting sewers when excavating	Land/waterway contamination	C 2 = M8	 Provide approximate location of underground service to external persons Telemetry designed to pick up a change in inflows (for example excessive pumping hours) Vacuum trucks (for clean-up) Portable pumps (for clean-up) Review of design plans by Council
Infrastructure failure (general)	Land/waterway contamination	C 3 = M11	Maintenance and renewal programs



PIRMP - Gulgong Wastewater Treatment Plant and Sewerage System

			 Smoke testing and asset condition assessment aimed at reducing stormwater infiltration programmed in future years Sewer relining program
Infrastructure failure such as: 1. Failure of Rising Main 2. Failure at Gulgong STP site 3. Sewer Pump Station failure	Land/waterway contamination	C 3 = M11	 Condition assessment of receiving manholes (Scheduled for 21-22) Document "Contingencies - Gulgong STP and SPS" has details of critical stock items and their location (document in K:\Operations\Services\2. SEWER\Operational)
Mechanical breakdown/dual pump failure	Land/waterway contamination	B 2 = L5	 Telemetry monitoring Maintenance and inspection programs Spare capacity in pump wells vacuum truck Monitoring and maintenance
Excessive flow at STP	Land/waterway contamination	B 2 = L5	 Sewerage system maintenance and rehabilitation to reduce infiltration and inflows Spare capacity in pump wells Monitoring and maintenance SCADA alarm



Chemical Spills

	Impact	Risk Rating*	Pre-emptive actions
Chemical spill due to storage failure	Land contamination	B 2 = L5	Chemicals kept in secured workshop/shed

Fire (bushfire)

	Impact	Risk Rating*	Pre-emptive actions	
Fire destroying pump station	Land/waterway contamination	C 3 = M11	Vegetation managementFire extinguishersSCADA monitoring	
Fire destroying part of or all of STP infrastructure	Land/waterway contamination	B 4 = M12	 Vegetation management Fire extinguishers Fire alarms SCADA Monitoring 	

^{*} MWRC Risk Matrix WHS302 used to evaluate risk rating (see Appendix B)

Note: in all cases, waterway contamination is less likely than land contamination.

Inventory of pollutants

Provide an inventory of potential pollutants on the premises or used in carrying out the activity to which the licence relates:

Identify the maximum quantity of any pollutant/s likely to be stored or held at particular locations (including underground tanks) at or on the premises to which the licence relates.

Location/Tank	Max. quantity	Contents	Comments
Workshop	20 L	Unleaded Petrol	
Workshop	20 L	Diesel	
Workshop	10 L	Oil (Castrol)	
Workshop	20 L	Glyphosate (Roundup)	
Shed	100 Kg	Sodium Sulphate	Currently not used



At Mudgee depot shed and stores as appropriate

Safety equipment Safety Equipment/Process Location Alarms via SCADA when issues with processes Can be remotely monitored Internal sampling and testing **Gulgong STP laboratory** External Sampling and testing Contracted to ALS Mudgee Safety Data Sheet (SDS) in Chemwatch plus hard copy on site Gas meter (confined space) In W&S Process Coordinator office (Depot road Mudgee) PPE including gloves and safety glasses at STP and in trucks Personal Floatation device, hand railing at various locations as appropriate Fire extinguishers at STP, SPS and W&S vehicles Fire hoses at STP Safety Shower and eye wash station at STP **Emergency Evacuation Plan** at STP Emergency alert/evacuation warning system at STP

Communicating with neighbours and the local community

Spill containment kits (including sandbags, silt trap)

Witches hats, star pickets and tape to isolate spill area

Mid-Western Regional Council will attempt to provide early warning to directly affected premises. Depending on the severity of the incident and the likelihood of impact on the community, a range of communications methods can be deployed during and after an incident. These include:

- Site visits/door knocking
- Phone calls
- SMS messages
- Emails (external and internal)
- Social media, website updates
- Media alerts
- Letter drop



- Warning signs
- Depending on the incident; WaterNSW has an early warning system to alert Water Licence Holders. WaterNSW can be contacted and request made for them to send an alert

Depending on the nature of the incident, MWRC will liaise with NSW Health and DPIE to ensure best advice is given to the community. The advice will be given to the community either by phone call, email, SMS messages if individuals are directly affected; or by media alerts and social media post for advice to the general community. Community will be regularly updated by the same mediums as the situation evolves.

Depending on the incidents, specific warning signs may be erected near incident sites or near affected area.

Minimising harm to persons on the premises

The following are in place to minimise the risk of harm to any persons who are on the premises or who are present where the scheduled activity is being carried out:

- Operators are trained and qualified to undertake the work
- Operators in training are actively supervised by qualified operators
- · Contractors have completed MWRC induction and site induction/ risk assessment
- · Visitors are to sign in and out and visitors are accompanied by MWRC staff
- PPE are supplied and kept in good condition
- Gas meter are available to operators



Maps

Maps are presented in Appendix C and includes:

- location of the premises to which the licence relates
- surrounding area likely to be affected by a pollution incident
- location of potential pollutants on the premises



Actions to be taken during or immediately after a pollution incident

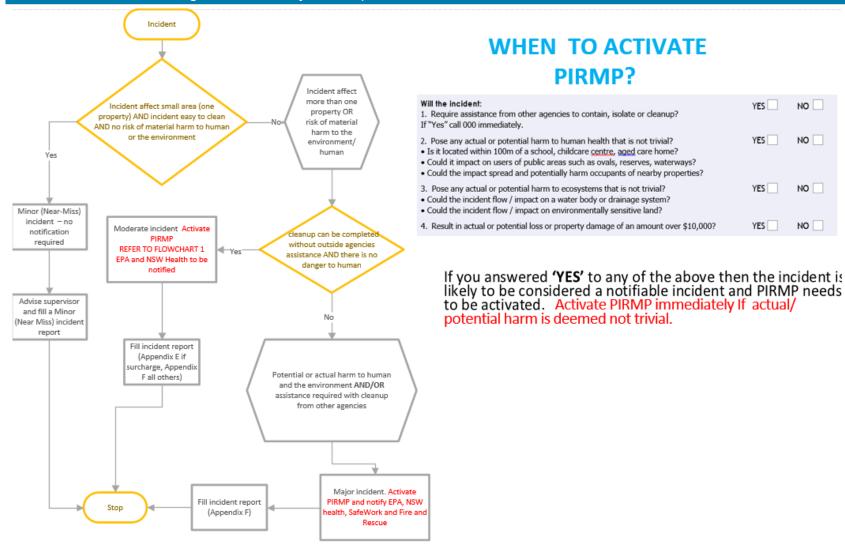


Figure 1: Incident classification flowchart



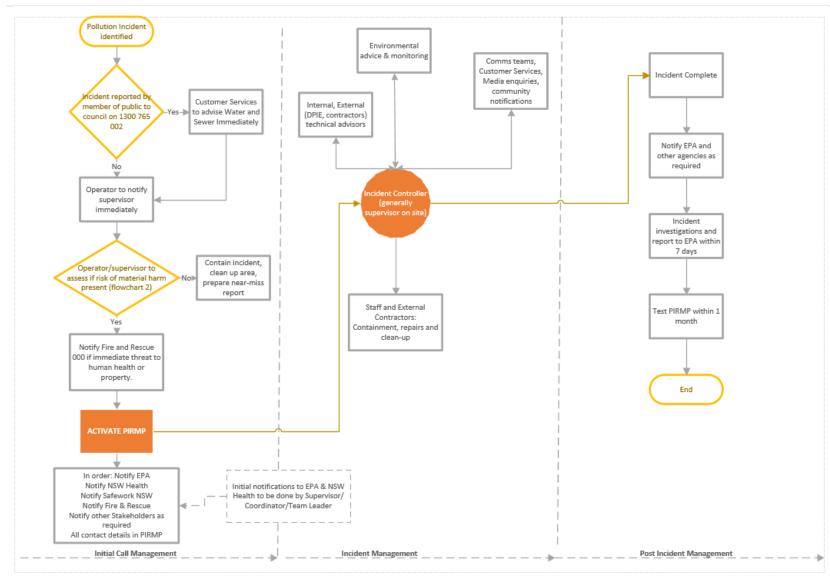


Figure 2: Pollution Incident Response Flowchart



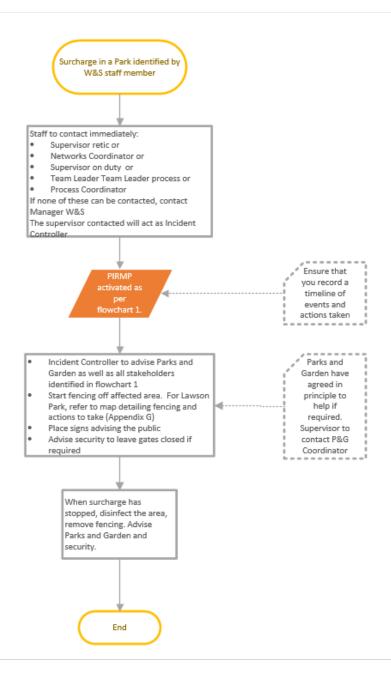


Figure 3: Surcharge in a Park Flowchart



Initial Call Management

Pollution incident is identified either by the public or by Water and Sewer Operator.

If there is immediate threat to human health or properties, call triple zero (000 or 112 if using a mobile phone) and follow emergency evacuation protocol as required.

Operator to advise supervisor immediately and **start isolating the site** to prevent un-authorised entry. If possible, contain the incident and prevent it from spreading without endangering staff and/or public. Remain upwind if incident involves smoke or fumes.

Operator and Supervisor will assess if the incident poses a risk of material harm to the environment as defined in section 147 of the POEO Act. Flowchart 2 can help with the assessment.

Material Harm is defined as:

- (i) involving actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- (ii) resulting 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 the 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.

If the incident is identified as **NOT** posing a risk of material harm, contain the incident, clean up the area and prepare a minor (Near Miss) incident report (Appendix D). In this instance, the PIRMP does not need to be activated.

If the incident is identified as **posing a risk** of material harm, Supervisor to advise Water and Sewer Process Coordinator and/or Manager Water and Sewer. The PIRMP must be **activated immediately**.

The following agencies MUST to be contacted as soon as possible:

- EPA on 131 555
- NSW Health Dubbo Office

In case of major incident (potential or actual harm to human and the environment AND/OR assistance is required with cleanup from other agencies), the following agencies MUST ALSO be contacted as soon as possible:

- SafeWork NSW 131 050
- Fire and Rescue Gulgong 6374 1049

Further authorities may need to be contacted as required see page 4 (notification of authorities, continued)



Incident Management

Incident Controller will take charge of the incident (generally Coordinator/Supervisor/Team Leader first on site). This staff member will be in charge of managing all aspects of the response to the incident.

Incident controller, with the help of internal and external technical advisors (DPIE, external contractors), is to devise the course of action to be taken to contain, repair and clean up the affected area. Incident Controller will also allocate resources (staff, equipment etc) required to be able to deal with the incident in a timely manner. Incident Controller to consider the need to activate Gulgong WTP incident response plan (contamination in Cudgegong River)

Incident controller to contact Communication team and Customer Services to advise of incident and request assistance with communication to the community as required. Incident Controller to organise contacting Stakeholders listed in Appendix A as required. The Incident Controller will regularly review the need for communications updates.

In the event of a chemical or sewage spill, Mid-Western Regional Council staff will go to prominent and/or high use areas, erect signage and advise users. The signs are to warn users of the contamination and advise them to avoid using the area until contamination has cleared.

Incident Controller to organise sampling* as required and to advise MWRC Environmental Officer.

Incident Controller to remind all staff involved in the incident to keep a timeline and record all actions taken during the incident.

Post Incident

Incident Controller is satisfied that the incident is under control, repairs have been done and cleanup completed.

EPA and other agencies to be notified of incident completed as required.

Incident Controller to ensure that investigations into the incident, including root cause analysis, are done and report to EPA produced within 7 days. Appendix E can be used to report a sewage spill or overflow. Appendix F can be used as the basis for reporting any incident

PIRMP to be tested within 1 month of incident and amended as required

* Note: To facilitate sampling in case of an environmental incident, PIRMP sampling boxes have been made. The PIRMP boxes include 3 lots of bottles (upstream, at site and downstream), sampling SOP, Chain of Custody and some spare bottles. PIRMP Boxes and sampling pole are at Gulgong STP and Mudgee Operations Depot



Staff training

Training in relation to the PIRMP will have three forms:

- for new members of staff at the premises, the specific induction for the premises will include details of the PIRMP,
- refresher training undertaken as part of the annual testing of PIRMP, and
- as deemed necessary, particularly after an incident that required implementation of the PIRMP

PIRMP will be tested yearly as a training exercise. This training exercise will involve all Water and Sewer staff that could potentially be involved in an actual incident.

A realistic scenario will be presented to staff who will need to highlight all steps that will be taken to:

Activate the PIRMP

Contain the incident

Report the incident

Advise the community (if scenario requires)

Clean up and close the incident

Testing and updat	ting of the PIRMP			
PIRMP testing detail	ls			
Date tested	Tested by (to include the names of all people involved in testing)	Details of test	Finding of test, including issues identified	Next scheduled testing date (must be within 12 months from current test)
16/09/2021	Manager W&S W & S Process Coordinator Water Quality Officer Water and Sewer Networks Coordinator Operators	Two scenarios were presented (one requiring PIRMP activation and one not requiring PIRMP activation) and tested	All aware of changes in the PIRMP	September 22



PIRMP update detail	s			
Date update occurred	Reason for update (e.g. address issues identified in testing, contact details/personnel have changed)	Details of updates (nature of changes to PIRMP)	Date the updated version uploaded to website (if applicable)	Date of completion
December 21	PIRMP review for MSTP	Contact details and flowchart amended	December 21	
August 2021	Yearly review	Flowcharts amended, chemical list amended, stakeholder list amended, maps amended. PIRMP document transferred into EPA template	25 October 2021	25 October 2021
July 2020	Yearly review		August 2020	
February 2019	Yearly Review		February 2019	



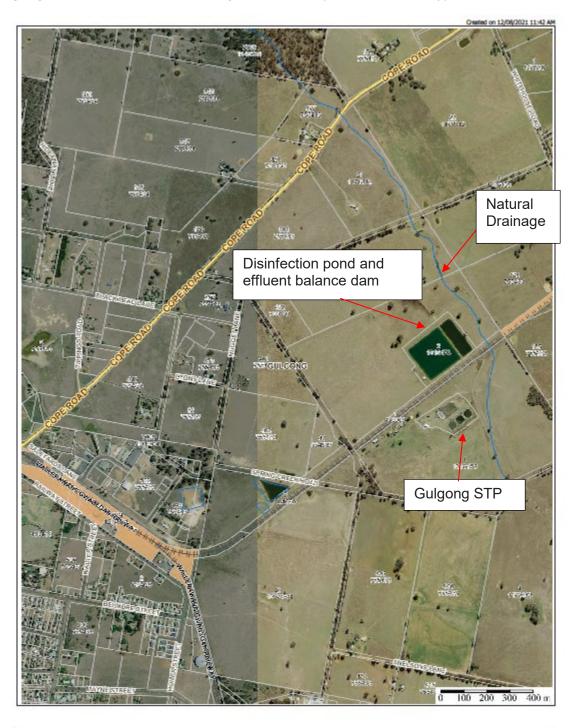
Appendix B: MWRC Risk Matrix

	western		MID-	WESTERN	REGIONAL C	OUNCIL				
Mi	d-Western Regional Council			RISH	MATRIX				REF: REV:	WHS302 1.0
								LIKELIHOOD)	
						A	В	С	D	Ε
						Rare	Unlikely	Possible	Likely	Almost Certain
		POTEN	TIAL CONSEQUEN	ICE		Requires unusual	Not expected to	May Occur	Will occur	Expected to
No.	Key Word	Health & Safety	Environmental	Financial	Public Image	chain of events	occur occur	way Occur	occasionally	occur
5	Catastrophic	Fatality or work related fatal disease	Detrimental impact to environment or community. High level prosecution.	Greater then \$500,000	International media coverage	Moderate 13	High 19	Critical 22	Critical 24	Critical 25
4	Severe	Serious Permanent injury or illness	Long term negative impact. Low level prosecution.	No more then \$500,000	National media coverage	Moderate 10	Moderate 12	High 18	Critical 21	Critical 23
3	Serious	Lost time injury or illness	Serious but reversible impact Media enquiry.	No more then \$100,000	State media coverage	Low 6	Moderate 9	Moderate 11	High 17	Critical 20
2	Significant	Medically treated injury or illness	On-site incident promptly contained requiring external clean up aid.	No more then \$25,000	Local media coverage.	Low 4	Low 5	Moderate 8	High 15	High 16
1	Minor	First Aid treated injury or illness	On-site incident immediately contained & cleaned up.	No more then \$5,000	Public complaint.	Low 1	Low 2	Low 3	Moderate 7	High 14
STA	TUS		ACTION REQI	JIRED			NOT	TFY		MONITOR
Critical Do not commence activity. Immediate senior management action required.				anager (Notifie			I.A.			
ligh lode			educe risk. Authorisat ow as reasonable pra			_	nager (Notified al Manager	by Operation	٠,	Veekly Monthly
.ow		utine procedures and		cucable before COM	nending task	Team Lead				nnually



Appendix C: Maps of STP

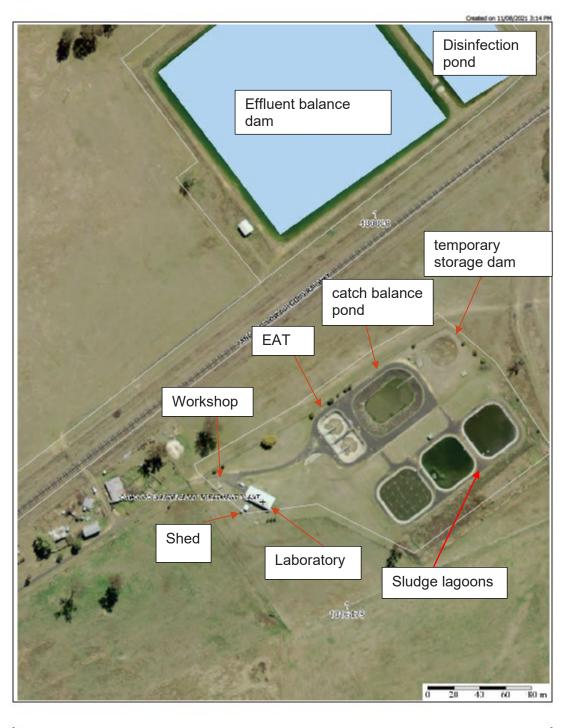
Gulgong STP is located at 105 Spring Creek Road (East Star property), 2852 NSW.







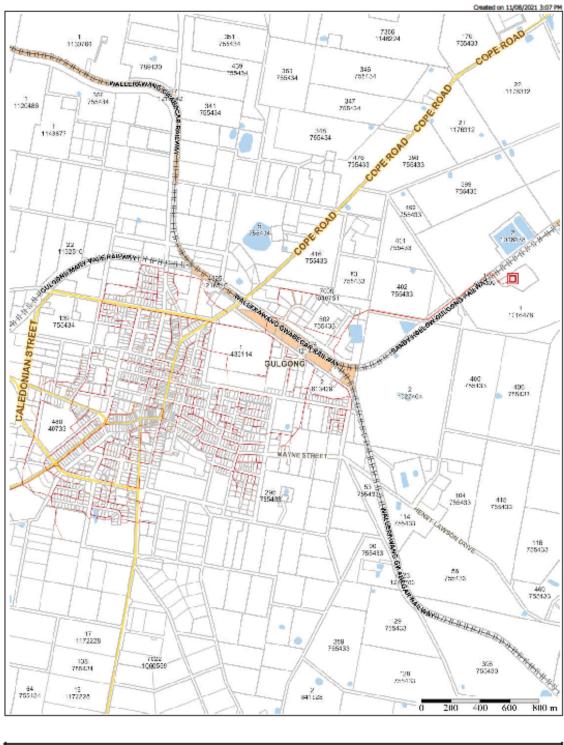








Gulgong Sewerage System







PIRMP - Gulgong Wastewater Treatment Plant and Sewerage System