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#### POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN (PIRMP)

**LICENCE NUMBER: 1737** 

Position/Title: Manager Water and Sewer Date: 10/01/2022

#### PURPOSE:

Mid-Western Regional Council holds an Environment Protection Licence with the NSW Environment Protection Authority (EPA) for Kandos 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)



Name of licensee:	Mid-Western regional Council	
EPL number:	1737	
Premises name and address:	Kandos Sewage treatment Works, Rylstone Road, Kandos NSW 2848	
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) 6379 4021 Kandos Fire & 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:	1300 662 077
	Emergency reporting – 24h (spills etc)	1800 061 069



Mid-Western, Regional Council (24h)	Contact number/s:	1300 765 002 (02) 6378 2850
Rural Fire Services - Rylstone	Contact number/s:	6372 4434 (Mudgee) Crn Coomber St and Bylong Valley Way
NSW Fisheries – Central Tablelands	Contact number/s:	0488 220 443



## Notification of neighbours and the local community

See Appendix A for the list of high risk stakeholders which includes neighbouring properties

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	<ul> <li>Sewerage system maintenance and rehabilitation to reduce infiltration and inflows</li> <li>Spare capacity in pump wells</li> <li>Monitoring and maintenance</li> <li>SCADA alarm</li> </ul>
Power failure	Land/waterway contamination	B 2 = L5	Lightning protection     Vegetation management to prevent damage to infrastructure in case of storm     SCADA alarms



	Impact	Risk Rating*	Pre-emptive actions
Blockage or damage to sewers	Land/waterway contamination	C 2 = M8	<ul> <li>Sewerage system maintenance</li> <li>Sewer Jetting program (high pressure cleaning or mains for repeat chokes)</li> <li>Spare capacity in pump wells</li> <li>Monitoring and maintenance</li> </ul>
SCADA/Communication failure	Land/waterway contamination	A 2 = L4	<ul><li>SCADA testing and alarming</li><li>Monitoring of SCADA signal issues</li></ul>
External person hitting sewers when excavating	Land/waterway contamination	C 2 = M8	<ul> <li>Provide approximate location of underground service to external persons</li> <li>Telemetry designed to pick up a change in inflow (for example excessive pumping hours)</li> <li>Vacuum trucks (for clean-up)</li> <li>Portable pumps (for clean-up)</li> <li>Review of design plans by Council</li> </ul>
Infrastructure failure (general)	Land/waterway contamination	C 3 = M11	<ul> <li>Maintenance and renewal programs</li> <li>Smoke testing and asset condition assessment aimed at reducing stormwater infiltration programmed in future years</li> <li>Sewer relining program</li> </ul>
Infrastructure failure such as: 1. Failure of Rising Main 2. Failure at Kandos STP site 3. Sewer Pump Station failure	Land/waterway contamination	C 3 = M11	<ul> <li>Condition assessment of the receiving manholes (scheduled for 21-22)</li> <li>Document "Contingencies –Rylstone/Kandos STP, Main and SPS" has list of critical stock item and their location (document in K:\Operations\Services\2. SEWER\Operational)</li> </ul>
Mechanical breakdown/dual pump failure	Land/waterway contamination	B 2 = L5	<ul> <li>Telemetry monitoring</li> <li>Maintenance and inspection programs</li> <li>Spare capacity in pump wells</li> <li>vacuum truck</li> <li>Monitoring and maintenance</li> </ul>



	Impact	Risk Rating*	Pre-emptive actions
Excessive flow at STP	Land/waterway contamination	B 2 = L5	<ul> <li>Sewerage system maintenance and rehabilitation to reduce infiltration and inflows</li> <li>Spare capacity in pump wells</li> <li>Monitoring and maintenance</li> <li>SCADA alarm</li> </ul>

# **Chemical Spills**

	Impact	Risk Rating*	Pre-emptive actions
Chemical spill due to storage failure	Land contamination, possibly enter a waterway	B 2 = L5	Bunding
Chemical spill during delivery	Land contamination, possibly enter a waterway	B 2 = L5	PPE Bund
Chemical spill due to damage to chemical system	Land/waterway contamination	C 1 = L2	<ul><li>Bund</li><li>Shut off valves</li></ul>
Chemical spill due to vandalism	Land/waterway contamination	B 2 = L5	Security fences
Chemical spill due to Bund failure	Land/waterway contamination	B 2 = L5	<ul><li>Bund inspections</li><li>Maintenance and renewal</li></ul>
Chemical truck incident outside of bunded area	Land/waterway contamination	C 2 = M8	Operator always on-site during deliveries.
Storage of chemicals	Toxic effect on human, flammability, Land/waterway contamination	C 2 = M8	Bund     SDS



# Fire (bushfire)

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

<sup>\*</sup> MWRC Risk Matrix WHS302 used to evaluate risk rating (see Appendix B)

## 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.

#### Example

Location/Tank	Max. quantity	Contents	Comments
Workshop	20 L	Unleaded Petrol	
	300kg	Limestone	
	800 Kg	Sodium Carbonate	
	100 kg	Citric acid	
	40 kg	Granular chlorine	
Near dosing system	1000L	10-30% Sodium Hypochlorite Solution	
Near dosing system	1000 L	Aluminium Sulphate	



Safety equipment	
Safety Equipment/Process	Location
Alarms via SCADA when issues with processes	Can be remotely monitored
Internal sampling and testing	Kandos 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
Hand railing	at various locations as appropriate
Fire extinguishers	at STP and SPS
Emergency alert/evacuation warning system	at STP
Bund to contain chemical spills	at STP Workshop and chemical tanks
Spill containment kits (including sandbags, silt trap)	At Depot shed and stores as appropriate
Witches hats, star pickets and tape to isolate spill area	

## Communicating with 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 (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

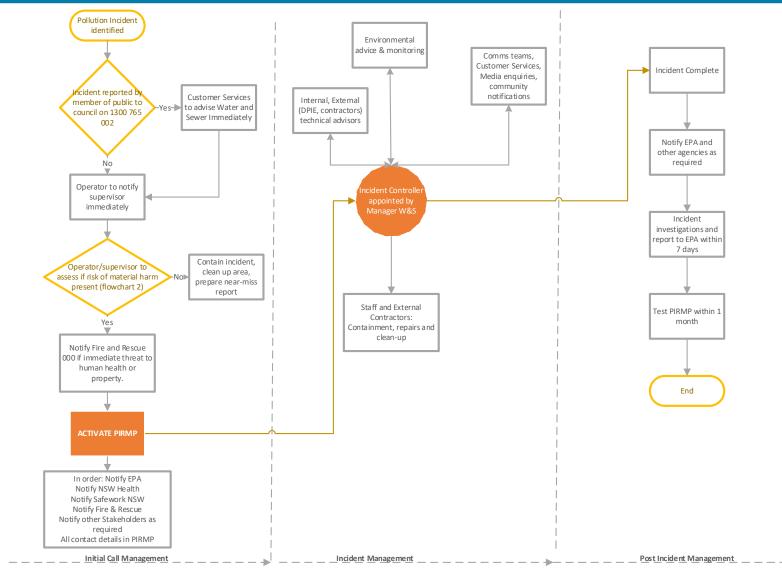


Figure 1: Pollution Incident Response Flowchart



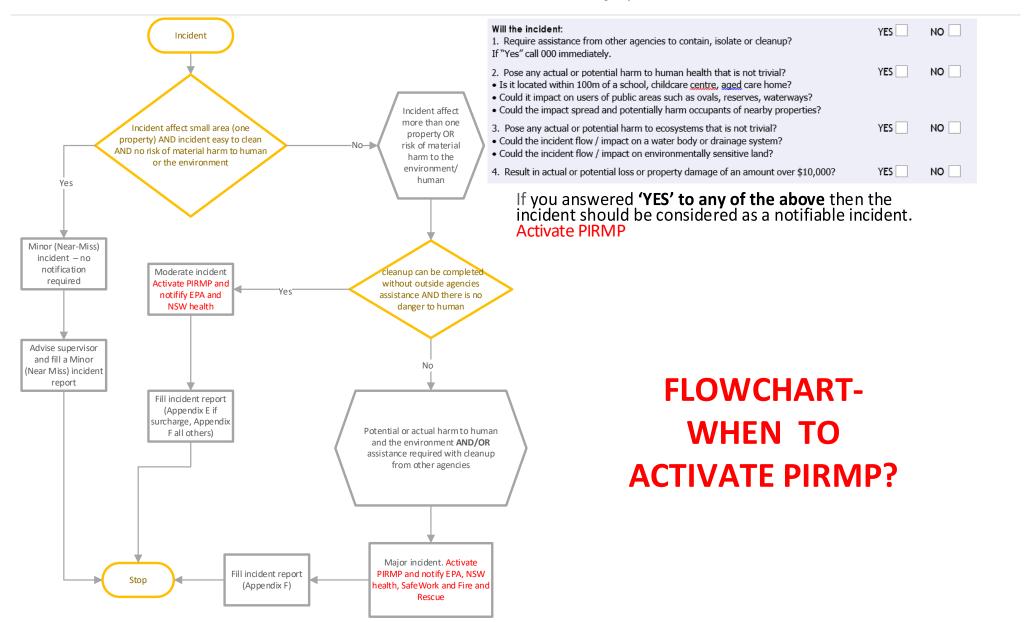


Figure 2: Incident classification flowchart



# **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 Kandos 6379 4021

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



# **Incident Management**

Manager Water and Sewer to immediately appoint an Incident Controller. 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 are at Kandos STP and Mudgee Operations Depot. Sampling poles are also available at these locations.



## 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

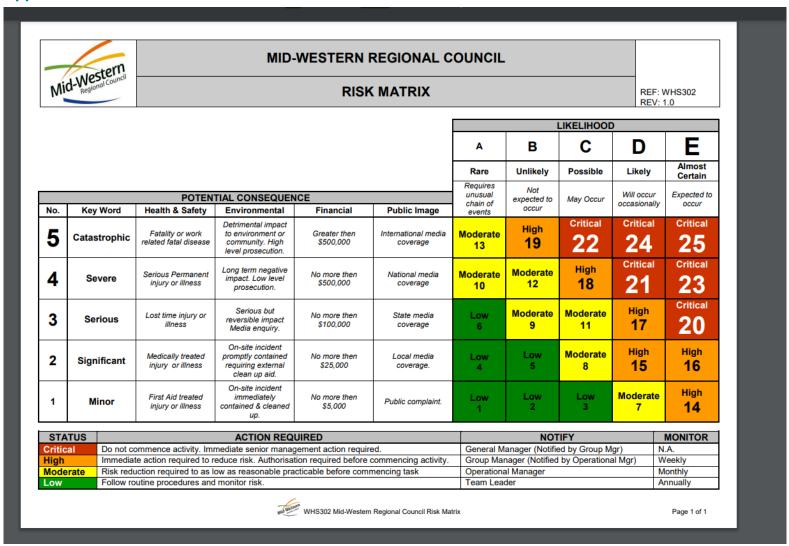
Testing and updating of the PIRMP							
PIRMP testing details							
Date tested	Tested by (to include the names of all people involved in testing)	Details of test	Finding of test, including issues identified	Next scheduled testing date (must be within 12 months from current test)			
26/10/2021	W & S Process Coordinator Water Quality Officer Operators	Two scenarios were presented (one requiring PIRMP activation and one not requiring PIRMP activation) and tested	All aware of changes in the PIRMP	October 2022			
1/10/2020	W & S Process Coordinator Reticulation Team Leader Water Quality Officer Water and Sewer Networks Coordinator Operators	Scenario		October 2021			



PIRMP update details						
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 21	Yearly review	Flowcharts amended, chemical list amended, stakeholder list amended, maps amended. PIRMP document transferred into EPA template	27/10/2021	28/10/2021		
July 2020	Yearly review		August 2020			
February 2019	Yearly Review		February 2019			



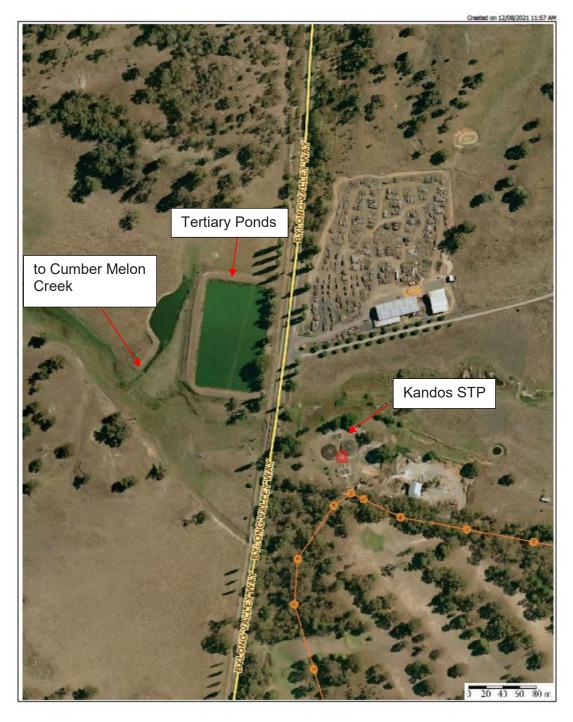
### **Appendix B: MWRC Risk Matrix**





## **Appendix C: Maps of STP**

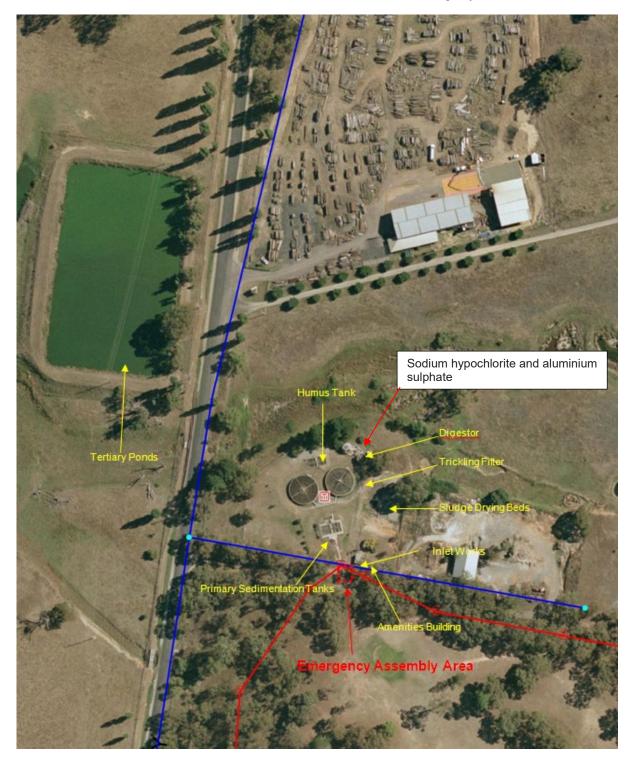
Kandos STP is located on the Bylong Valley Way, outside of Kandos township







PIRMP - Kandos Wastewater Treatment Plant and Sewerage System





# Kandos Sewerage System

