

Pollution Incident Response Management Plan For Cooma Wastewater Scheme



(This Plan should be read in conjunction with the CMSC Water & Wastewater Emergency Response and Crises Management Plan, and the CMSC Water & Wastewater Business Continuity Management Strategy Plan)

Background

On the 29th February 2012 an amendment to the Protection of the Environment Operations Act 1997 introduced a requirement for all licensees to prepare and implement a Pollution Incident Response Management Plan (PIRMP) for each of its licensed activities in accordance with the requirements set out in Part 5.7A of the PEOA Act 1997. The amendment included the provision that licensees may link individual PIRMP to their existing Emergency Response Plans SC502.

Definition of a 'pollution incident';

for the purpose of this response plan a pollution incident is a serious leak or spill of wastewater from the Cooma Wastewater System to the environment and where it results in actual or potential loss, or property damage of an amount, or amounts in aggregate exceeding \$10,000.
(See definition in the POEO Act Section 147)

License holder

Cooma Monaro Shire Council under the regulation of The Environment Protection Authority (EPA), NSW is the holder of License Number 6368 for Cooma and 1392 for Nimmitabel wastewater systems.

CMSC intends that this PIRMP's must be read in conjunction with the:

Cooma-Monaro Shire Council, Water & Wastewater Emergency Response and Crisis Management Plan, Jan 2012

Cooma- Monaro Shire Council, Water & Wastewater, Business Continuity Management Strategy Plan, Jan 2012

Cooma-Monaro Shire Council, Risk Assessment for Water Supply & Wastewater Workshop Report, Feb 2011; and

Cooma-Monaro Shire Council, PRP 100 Wastewater Overflow Investigations Report for the Cooma Wastewater System. *(EP License no 6368)*

The Cooma Wastewater System is made up of the following major assets:

- a) Wastewater Treatment Facilities – section 1.
- b) Pumping Stations – sections 2 to 6.
- c) Drainage systems – section 7.

Individual PIRMP's have been developed to address the specific hazards, risks and response required for each major asset of the scheme.

Objective of the plan:

The objective of this plan is to:

- Ensure that serious environmental consequences are negated by ensuring that appropriate pollution prevention measures are in place or immediately available to Cooma-Monaro Shire Council staff and Emergency Services through a comprehensive pollution incident response management plan (PIRMP).
- Ensure that CMSC staff are appropriately trained to manage and undertake pollution incident response and remediation measures in the event of spill or sewage discharge.
- Ensure that all affected parties are notified.

Section 1 – The Glen Wastewater Facility



<p>Cooma Monaro Shire Council 81 Commissioner Street Cooma NSW 2630</p> <p>Licensed Site Location (License No 6368)</p> <p>The Glen Wastewater Treatment Facility Glen Road Cooma NSW 2630</p>	<p>NGR: 690,000m 5,991,237m</p> <p>Map References: 149°12'15" Longitude 36°06'40" Latitude South</p> <p>Maps attached, page no 20 & 21</p>
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Overview of the Activities on site:

- The Glen Wastewater Treatment Facility collects and treats wastewater from the township of Cooma to standards required by the EPA NSW & NSW Office of Water (NOW) for the discharge of treated effluent, under licence, to Cooma Creek.

A failure of Glen Wastewater Treatment Facility has the potential to cause major environmental harm, to impact on Cooma Creek, but with insignificant public health consequences. Whilst the facility has physical containment and pollution control measures in place that will minimise the risk of a pollution incident occurring, it is recognised that there are residual risks of spillage/discharge to Cooma Creek that could have major environmental consequences.

Operating Hours:

The Glen Wastewater Treatment Facility operates continuously on demand 24 hours per day, 7 days per week. The operating system is fully automated utilising Programmable Logic Controllers (PLC's) and radio SCADA (telemetry) systems for monitoring and emergency response.

The facility is staffed 7 days a week, Monday to Friday from 6.00am to 3.00pm and Saturday, Sunday & Public Holidays from 6.00am to 12.00pm, by trained wastewater treatment plant operators or technicians.

Description of surrounding area:

The Glen Wastewater Treatment Facility is located on Council owned land, categorised as 'operational', above Cooma Creek at the end of Glen Road approximately 3.5 km due north of Cooma town centre. The environment surrounding the Facility is predominately native bush land with isolated dwellings. Cooma North residential area is the closest populated area approximately 1 km south east of the Facility and on the eastern side of Snowy Ridge.

Cooma Creek borders The Glen Wastewater Treatment Facility for 160 meters on its eastern boundary and at a distance of 30 meters from the facilities security fence.

Likelihood of a pollution incident occurring: *(The combination of design, construction, contingency planning and long-term maintenance for this facility should result in a system where overflows occur only in exceptional circumstances e.g. A catastrophic electrical or equipment failure/an earthquake damaging wastewater structures or underground pipeline).*

Rare but with Major Environmental Consequences:

Refer to the Cooma-Monaro Shire Council, Risk Assessment for Water Supply & Wastewater Workshop Report, February 2011.(appendix 'C' p1)

Hazards to human health & the environment at this site as a result of a failure of the Wastewater Treatment Facility and discharge of wastewater to the environment:

Risk assessments of the facility have concluded that in the event of a discharge or spillage of wastewater to the environment there would be **insignificant consequences to public and operational staff health but could have major environmental consequences.**

Hazard	Risk Rating Estimates		Contributing/Condition or Event	Action
	Likelihood	Consequence to the Environment		
Untreated or raw wastewater discharged to Cooma Creek.	Rare	Major	Major failure of the electrical energy or electricity supply or associated cables and associated equipment.	Activate emergency power procedure. Activate spill cleanup procedure.
Untreated or raw wastewater discharged to Cooma Creek.	Rare	Major	Major failure of equipment due to mechanical problems.	Activate replacement equipment procedure. Activate spill cleanup procedure.
Untreated or raw wastewater discharged to Cooma Creek.	Rare	Major	Major structural failure. Damaged wastewater structures or underground pipelines	Activate drainage system isolation procedure. Activate spill cleanup procedure.

Pollution Prevention/Mitigation Measures:

The Glen Wastewater Treatment facility has the following pollution prevention/mitigation measures incorporated into the facility design to minimise the risk of wastewater being spilled/discharged into Cooma Creek:

- The Glen Wastewater treatment facility electricity is supplied from Substation 11-3021 (500kVa) and the 11kV is a 1700 metre radial off Western Rural feeder that has backup from a second (2nd) feeder.
- Standby generators can be connected to the treatment facility station if a long duration electricity outage has been advised by Essential Energy. Permanent generator connection terminals have been constructed for each of the pumping stations.
- The Glen wastewater treatment Facility has the capacity to hold in the order of 24 hours of average dry weather flow (ADWF) before surcharging from the decanted effluent tank via the treated effluent outfall to Cooma Creek.

Emergency & Early Warning Systems:

The Glen Wastewater Treatment Facility has 61 separate process and equipment alarms linked to a 24 hour alarm system that notifies CMSC staff in the event of a system failure. In the event of a failure the telemetry system will keep attempting to make contact until such time as the call is answered.

The response time by CMSC staff in the event of a failure is less than one (1) hour.

Chemical Product Inventory & Material Handling Sheets (Hazardous)				
Trade Name Substance	Solid/liquid/gas/powder	Maximum volume of storage	Location (marked on site plan)	Type of Containment
Ferrous Chloride Solution	Liquid	30,000 litres	Chemical Storage	Concrete bund area with a valved pipeline link to sludge lagoon No1. In the event of the concrete bund being compromised a gate valve can be opened and the Ferrous Chloride drained to Sludge Lagoon No1 for subsequent reprocessing.
Aluminium Sulphate	Liquid	30,000 litres	Chemical Storage	

Safety Equipment and Personal Protective Equipment		
Equipment	Location	Personnel Trained/Certified in use if equipment
3 Sets of Breathing Apparatus 1 Spare BA Cylinder	The Glen WTF. Blue cabinet on south wall of the laboratory	Water & Wastewater Supervisor – 0419 256 323 WTF Technician - 0409 669 576 Relief WTF Operator - 0409 669 576 Wastewater Drainage Operator - 0419 251 378
Confined spaces access equipment Harnesses, lanyards, lifelines, portable Davit, lifting tripod etc,	The Glen WTF. Electrical room Workshop	Water & Wastewater Supervisor – 0419 256 323 WTF Technician - 0409 669 576 Relief WTF Operator - 0409 669 576 Wastewater Drainage Operator - 0419 251 378

Pollution Prevention Equipment Inventory/(On site and Off Site Resources)			
Type	Amount	Equipment Location	Contact
Spill Sock	100 metres	The Glen Workshop	Water & Wastewater Supervisor – 0419 256 323
Sewer cleaning equipment	1	CMSC Works Depot Polo Flat	Water & Wastewater Supervisor – 0419 256 323
Waste water pumps	4	CMSC Works Depot Polo Flat	Water & Wastewater Supervisor – 0419 256 323
Pressure washers	1	CMSC Works Depot Polo Flat	Water & Wastewater Supervisor – 0419 256 323
Duel Control Sweeper	1	CMSC Works Depot Polo Flat	Water & Wastewater Supervisor – 0419 256 323
Various tipper trucks	7	CMSC Works Depot Polo Flat	Water & Wastewater Supervisor – 0419 256 323
Tractor drawn road broom	1	CMSC Works Depot Polo Flat	Water & Wastewater Supervisor – 0419 256 323
Backhoe loader	1	CMSC Works Depot Polo Flat	Water & Wastewater Supervisor – 0419 256 323
Volvo loaders	2	CMSC Works Depot Polo Flat	Water & Wastewater Supervisor – 0419 256 323
Tractors	3	CMSC Works Depot Polo Flat	Water & Wastewater Supervisor – 0419 256 323
Portable generators (towable)	1	CMSC Works Depot Polo Flat	Water & Wastewater Supervisor – 0419 256 323

External Resources			
Service Provider	Service Providers address	Services supplied /available	Contact details
Top To Bottom Plumbing Cooma	69 Barron Street Cooma 2630	Truck mounted vacuum pump 9m ³ capacity, excavator, backhoe, tipper truck, skilled day labour.	02 6452 2410, mobile phone 0418 630 233
VanGlen Services Jindabyne	PO Box 457 Jindabyne 2627	Truck mounted vacuum pump 7.5m ³ capacity.	02 6456 7037, mobile phone 0429 809 995
South East Waste Recovery Pty Ltd	52 Jindabyne Road Berridale 2628	1 – 23,500 litre semitrailer mounted vacuum tank 1 – 5,000 litre truck mounted vacuum tank 1 – 2,500 litre 4WD mounted heavy sludge vacuum tank 1 – 12,500 litre vacuum tank, tipper truck mounted 1 – 27,000 road tanker trailer 1 - 4 inch non clog pump & generator	02 6456 4657 0428 409 669
Transpacific Industries Group	42 Aurora Avenue Queanbeyan 2620	Specialist chemical spills and emergency response company.	24 hour emergency spills response 1800 774 557 02 6297 8185
ALS Environmental Division Water Resources Group - Water sampling and reporting	16B Lithgow Street Fyshwick 2609	ALS Environmental Division Water Resources Group - Water sampling and reporting.	02 6202 5400

Emergency Power/Diesel Generator Hire		
Company Name	Generators Available	Contact details
Aggreko Generator Rentals	Sydney - up to 1250kVa	1800 808 109
Atlas Copco Sydney	Sydney – up to 1000kVa	13 34 20
Genlec Power Systems	Queanbeyan depot – up to 1000kVa	0416 314 010
SGH Southern Generators & Electrical	Queanbeyan – up to 1400kVa	1300 350 706
Genplus Hire & Sales	Queanbeyan – up to 1250 kVa single unit, up to 20,000 kVa combination	02 6297 2641 0412 663 566
Coates Hire	Fyshwick – up to 200kVa but can source larger items	02 6452 5460

CMSC staff responsible for the PIRMP		
Position	Phone number	Responsibilities
Director Engineering Services	0417 211 383	Authorisation & activation of the PIRMP.
Water & Wastewater Manager	0409 440 733	Liaison with EPA NSW. Notification of other relevant authorities listed in this plan. Management of a Pollution Incident Response.
Water & Wastewater Technical Officer	0409 627 026	Management of a Pollution Incident Response.
Water & Wastewater Supervisor	0419 256 323	Management of a Pollution Incident Response.
Water & Wastewater Technician	0409 669 576	Management of a Pollution Incident Response.

Procedures to be followed by CMSC (the license holder) in notifying a pollution incident:

The procedures to be followed by CMSC in the event of a pollution incident are set out in the CMSC Water & Wastewater, Emergency Response & Crisis Management Plan, (ER&CMP) which includes the following EPA requirements,

Immediate notification of relevant authorities by the ER&CMP authorised officer – Water & Wastewater Manager.

1. (i) Call 000, 'notify only' Fire and Rescue, no immediate threat to life or serious threat to property. **NO EMERGENCY RESPONSE REQUIRED**
- (ii) Call 000 if the incident presents an immediate threat to human health or property. **EMERGENCY RESPONSE REQUIRED**

(Fire and Rescue NSW, the NSW Police Force and Ambulance Service of NSW are the first responders, responsible for controlling and containing incidents).

2. The Environment Protection Authority (EPA), NSW – Environment Line on 13 15 55
3. NSW Health – Emergency Number 0418 464 916
4. WorkCover 13 10 50

Communications

Persons through whom all communications are to be made and procedures to be followed for co-ordinating with the authorities and other persons that have been notified, including 'Property owners downstream on Cooma Creek' and 'External Organisations' are set out in SECTION 7, COMMUNICATIONS MANAGEMENT TEAM of the CMSC (ER&CMP).

Training

An annual desk top training exercise will be conducted with the staff responsible for the management and operation of the PIRMP. The support contractors/clean-up companies listed in the PIRMP will be invited to participate in the desk top exercise. A record of the exercise including the names of participants and issues raised will be maintained for each exercise and used to initiate improvements in the PIRMP.

An annual field training exercise will be conducted with the staff responsible for the management and operation of the PIRMP including the use of a range of equipment that could be required in a real event. A record of the exercise including the names of participants and issues raised will be maintained for each exercise and used to initiate improvements in the PIRMP.

The training exercise record can be found in CMSC's record management system. Container – SC502 – POLLUTION INCIDENCE RESPONSE MANAGEMENT.

Action Plan – in response to possible or actual effluent overflow from the Glen Wastewater Treatment Facility.		
CMSC Responsibility	Actions	Notes and Contact Details
Council staff receiving report	Report from the Public, Council staff or telemetry system <ul style="list-style-type: none"> - Obtain details of spill & location - Obtain contact details of person reporting the spill 	Report details of the spill to Wastewater Operator on call 0419 251 378
Wastewater Operator on Call	Notify Water & Wastewater Supervisor.	Report details of the spill to Water &Wastewater Supervisor 0419 256 323
Water & Wastewater Supervisor	Carry out Worksite Risk Assessment to identify; <ul style="list-style-type: none"> - Assess incident/take photographs to document the overflow/spill - Determine the cause of the failure/spill <ul style="list-style-type: none"> Electrical failure Mechanical Failure Blockage Structural Failure - Estimate of time to return the Glen Wastewater Treatment facility to full service. - Possible environmental concerns e.g. effluent overflows to the environment. - Extent of work to be carried out and if any hazards exist e.g. phone/power cables, gas &/or water, storm water drains etc. - If additional resources/materials are required e.g. personnel, suitable barricades, sandbags, sludge pump, vacuum truck etc. - Conduct Work Health Safety (WHS) risk assessment. - Personal Protective Equipment & Clothing (PPEC). - Manual handling issues. 	Site Risk Assessment IS-HR-HS-FM-00002

	<ul style="list-style-type: none"> - Traffic control methods/issues (where necessary). - Note prevailing weather conditions and obtain a 5 day forecast. - Complete or have completed appropriate forms e.g. Confined Space Entry Permit, Traffic Control Plan (TCP), Safe Work Method Statement (WMS) and Environmental Control Plan. 	
Water & Wastewater Supervisor	<ul style="list-style-type: none"> - Carry out site induction and/or toolbox meeting for all workers involved with the incident on the site (both council employees and contractors) so everyone is aware of their responsibilities and what work is to be carried out. 	
Water & Wastewater Supervisor	<p>Notify the Water & Wastewater Manager that the system failure/spill could have major environmental consequences:</p> <ul style="list-style-type: none"> - Provide an estimate of time to return the Glen Wastewater Treatment facility to full service. (Cooma Central and Cooma North Pumping Stations have 42.7 & 47.1 hours respectively ADWF storage capacity if required). - Confirm minor incident that can be managed by CMSC staff and/or local contractors. - Confirm major incident requiring the services of an accredited emergency pollution incident management company. 	Contact Water & Wastewater Manager 0409 440 733
Water & Wastewater Manager	<p>In the event of a major incident notify Director of Engineering who will authorise and activate the PIRMP:</p> <ul style="list-style-type: none"> - Notify The Environment Protection Authority (EPA), NSW. - Commence CMSC Water & Wastewater Emergency Response and Crises Management Plan, and the CMSC Water & Wastewater Business Continuity Management Strategy Plan. - If required, contact an accredited emergency pollution incident management company. e.g. Transpacific Industries Group (Canberra & Bega). 	<p>Director of Engineering 0417 211 383</p> <p>EPA 13 15 55</p> <p>24 hour emergency spills response 1800 774 557</p>

Water & Wastewater Supervisor	<ul style="list-style-type: none"> - Implement traffic control plan and pedestrian management plan at the Glen Wastewater Treatment Facility. - Implement environmental controls by placing absorption /containment barriers, sandbags between The Glen WWTF and Cooma Creek. - Implement Cooma Creek water sampling and testing plan. 	
Water & Wastewater Supervisor/ Water & Wastewater Manager	<p>General Procedure:</p> <p>Minor Incident</p> <ul style="list-style-type: none"> - Engage a local contractor from the list of clean up companies if required and commence pollution prevention/mitigation measures as required. Continue the process until such times as the surcharge ceases and/or the failure is corrected. Then commence clean-up, disinfection and incident reporting procedures. <p>Major Incident</p> <ul style="list-style-type: none"> - In the event that local resources are unable to contain and manage the spill, maintain all reasonable attempts to use available vacuum pumps to remove wastewater from the pump well and drainage system and continue with spill containment and clean up measures until such time as an external resource with the capacity to manage a major pollution incident is engaged and arrives on site. - If necessary engage external resources to project manage and implement the emergency response, waste removal and remediation works until such time as the surcharge ceases and/or the failure is corrected including clean-up, disinfection and incident reporting procedures. <p>Minor & Major Incident</p> <ul style="list-style-type: none"> - At the completion of the clean up and remediation works undertake a site inspection to confirm that the site has been successfully decontaminated. - Remove all temporary works and traffic control signs. - Undertake a debriefing with all staff and contractors and provide Council with an incident report for approval and forwarding to the EPA as required. 	