Sewer Overflow Policy

Policy Type	Council Policy	Version:	3.0
Responsible Officer	Manager Water and Waste	Date Approved:	20/04/2022
Review Officer:	Manager Water and Waste	Review Due:	20/03/2026
Author:	Water & Waste Technical Officer	Commencement:	20/04/2022

1. PURPOSE

To provide the framework for discharge of Council's compliance obligations under the *Environmental Protection Act 1994* (Qld) (EP Act) as applies to the management of sewer releases to the environment.

2. SCOPE

This policy applies to releases that may occur from Council's sewage pump stations, overflow structures and other ancillary assets in sewage networks as a result of:

- Excessive rainfall;
- System blockages;
- Power failure;
- Accidental damage to, or failure of, pump stations or ancillary equipment;
- Planned shutdown of equipment; or
- Other emergencies

These are typically known as sewer overflows.

3. BACKGROUND/SUPPORTING INFORMATION

The EP Act requires that Council take all reasonable and practicable steps to prevent or minimise the environmental harm caused by its activities.

Council holds an Environmental Authority under the EP Act[1] for the operation of the environmentally relevant activities for sewer pump stations that have a capacity to pump out more than 40 kL in an hour, and sewage treatment, inclusive of sewer pump sub-stations.[2]

Council has two sewage treatment networks comprised of reticulation, sewer pump stations, manholes and the treatment plants. The authorised sewer pump stations with greater than 40kL per hour capacity are as follows:

[1] *Environmental Authority EPPR01792213.*

[2] See *Environmental Protection Regulation 2019* (Qld) sch 2 s 63.

PUMP STATION DESCRIPTION	OVERFLOW LOCATION
Barang Street, Kuranda	Jum Rum Creek
Myola Road, Kuranda	Open gully
Atherton Street, Mareeba	Barron River
Robins Street, Mareeba	Granite Creek
Eccles Street, Mareeba	Granite Creek
Keneally Road, Mareeba	Unnamed tributary flowing to Barron River
Palm Close, Mareeba	Open gully flowing to Barron River
Ceola Drive, Sunset Park, Mareeba	Open gully flowing to Barron River

There are a number of sewer pump sub-stations that also have dedicated overflow points. Sewage infrastructure is normally designed to overflow as a safety feature and overflows can occur in both dry and wet weather conditions due to a variety of causes. This reduces backups and overflows at random uncontrolled locations and serves to minimise potential health risks.

4. POLICY STATEMENT

4.1 CONTINGENCY PLAN

Sewer overflows will be managed in accordance with Council's *Sewerage Incident Emergency Response Manual* (Emergency Response Manual) which sets out detailed procedures for handling of overflow events. Council implements a 24 hour/7 day per week *Emergency Response Plan* (ERP)[3] for overflow events. The ERP includes:

- Flow charts of Emergency Response Plans; and
- Detailed Incident Response Plans; and
- Remediation and clean-up plans; and
- Incident Debrief Plan; and
- Improvement Plans

The ERP deals with sewer overflows caused by:

- Excessive rainfall;
- System blockages;
- Power failure;
- Accidental damage to, or failure of, pump station or ancillary equipment;
- Planned shutdown of equipment; or
- Other emergencies

Council will ensure that adequate resources are available to carry out the necessary works.

4.2 PREVENTATIVE MANAGEMENT

Mareeba Shire Council will practice preventative management of the sewer system. This will involve ensuring that:

- The Council's wastewater infrastructure is maintained in a sustainable manner to minimise environmental impact.

[3] See *Sewerage Incident Emergency Response Manual* (MSC) s 3.

- The relevant Council plan is maintained for wastewater assets.
- Council infrastructure is maintained to sustain industry and development and supports future growth of the region.
- Infrastructure is further developed to mitigate against future severe weather events.
- The natural environment is considered in Council decision making about the sewer system.

4.3 GOVERNANCE

- Council will maintain a clear strategic direction to achieve regulatory compliance in respect of sewer overflows via adherence with any relevant environmental compliance codes, standard conditions and minimum operating requirements under Council's *Environmental Authority EPPR01792213.*
- Council will maintain an *Integrated Environmental Management System* and operating procedures for all treatment plants and will ensure that such procedures are reviewed annually.

4.4 DUTY TO NOTIFY ENVIRONMENTAL HARM

Sewer overflows will be notified to the regulatory authority within the statutory timeframe (3 hours).[4] Notification procedures, including identification of 'trigger' events, have been established in the Emergency Response Manual.

5. PERFORMANCE MEASURES

Table 1 identifies the performance criteria and acceptable solutions for sewer overflows.

Performance Criteria		**Acceptable Solutions**	
P1	Ensure a Sewer Overflow Contingency Plan is implemented and reviewed.	A2	Implement the Emergency Response Manual. Incident Response Plans in place. Remediation and clean-up plans in place for areas affected by sewer overflows. Methodology is in place to investigate the cause of overflows, initiate preventative measures, and measure and report on the effectiveness of the preventative measures.
P2	To practice preventative management.	**A2**	Clearly defined accountabilities. Structured system planning and record keeping for sewer system and overflows. Asset management program in place. Risk assessment and mitigation evaluation carried out. Training program for relevant staff implemented.
P3	Governance	**A3**	Compliance is promoted within the Council. Sewer overflow enterprise risk is commonly understood across the organisation to manage risk. Ensure that systems and practices cover sewer

[4] See Department of Environment and Science (Qld), *Code of Environmental Compliance for certain aspects of sewage treatment activities (ERA 63)*, V 1.00, s 9, standard environmental condition 11.

Performance Criteria		Acceptable Solutions	
			overflows and are compliant with statutory requirements.
P4	The regulatory authority is notified of all reportable instances of sewer overflows.	**A4**	Complete adherence to statutory requirement to notify. Notification to be within 24 hours.

6. REPORTING

A General Release Report[5] must be submitted to the administering authority by 30 September each year in accordance with the CEC.[6]

7. DEFINITIONS

Term	Meaning
Environmental Authority	A statutory authority issued under the EP Act[7] to undertake Environmentally Relevant Activities.
Environmentally Relevant Activity (ERA)	Prescribed activities where a contaminant will or may be released from an activity and the release may cause environmental harm. These activities are listed in a schedule of the *Environmental Protection Regulation 2019* (Qld).
Sewage	Wastewater that is produced by a community. Domestic sewage consists mostly of greywater (from sinks, tubs, showers, dishwashers etc) and blackwater (toilet waste). Industrial sewage consists of domestic sewage and tradewaste (wastewater from industrial processes).
Sewerage	Sewerage is the infrastructure that conveys sewage using sewers. It encompasses reticulation components such as pipes, manholes, pumping stations, overflow outlets, and screening chambers of the combined sewer. Sewerage ends at the entry to a sewage treatment plant or at the point of discharge into the environment. It is the system of pipes, chambers, manholes, etc. that conveys the sewage or storm water.
Sewer overflow	Wastewater that is discharged to a holding chamber, basin or to the environment from the sewerage system.
Sewage pump station	A pumping station designed to pump sewage through the reticulation network.
Sewage treatment network	The network consists of the sewerage and sewage treatment plant.
Overflow structures	Parts of the reticulation system such as manholes, sewage pump stations and includes broken pipes.
Wastewater	Water that has been affected by human use. Wastewater is a by-product of domestic, industrial, commercial or agricultural activities. The characteristics of wastewater vary depending on the source and can contain physical, chemical and biological pollutants.

[5] See *Sewerage Incident Emergency Response Manual* (MSC) s 5.

[6] See Department of Environment and Science (Qld), *Code of Environmental Compliance for certain aspects of sewage treatment activities (ERA 63)*, V 1.00, s 9, standard environmental conditions 14-15.

[7] See *Environmental Protection Act 1994* (Qld) ch 5 pt5 div 4.

8. RELATED DOCUMENTS AND REFERENCES

- *Code of Environmental Compliance for certain aspects of sewage treatment activities (ERA 63), V 1.00,* Department of Environment and Science (Qld)
- *Environmental Authority EPPR01792213*
- *Environmental Protection Act 1994* (Qld)
- *Environmental Protection Regulation 2019* (Qld)
- *Integrated Environmental Management System* (MSC)
- *Sewerage Incident Emergency Response Manual* (MSC)

9. REVIEW

It is the responsibility of the Manager Water and Waste to monitor the adequacy of this policy and implement and approve appropriate changes. This policy will be formally reviewed in the year 2026 or as earlier required by Council.