

Wastewater incident notification and communication protocol

This Wastewater Incident Notification and Communication Protocol is to be used by councils and other operators of wastewater treatment systems (excluding SA Water, United Water and United Utilities¹) in accordance with the requirements of the Environment Protection Authority's (EPA) *Code of practice for wastewater overflow management*².

It is an abridged version of the inter-agency document entitled, *Water/Wastewater Incident Notification and Communication Protocol* (Department of Health May 2009) that has been in operation since 1999.

Purpose

Wastewater collection and distribution systems provide health and environmental benefits to South Australian communities. However, despite the best efforts of operators, incidents such as overflows and plant failures do occur.

In the event of an incident early intervention is critical in preventing or minimising the risks to both human and environmental health. The protocol is an essential element in the early intervention process as it provides operators with direction as to how and under what circumstances the Department of Health (DH), Environment Protection Authority (EPA) and other relevant bodies should be notified. The process then allows for these agencies to communicate serious incidents to their respective Ministers.

This abridged version of the protocol may be amended from time to time with updates published on the EPA website³.

¹ SA Water and United Water report incidents according to *Water/Wastewater Incident Notification and Communication Protocol* (DH May 2009).

² www.epa.sa.gov.au/environmental_info/waste/liquid_waste/wastewater_management

³ www.epa.sa.gov.au/environmental_info/waste/liquid_waste/wastewater_management

Incident classification and reporting

Incidents are classified into three types:

PRIORITY TYPE 1 INCIDENTS

These incidents are likely to require immediate interagency meetings to consider responses and possible issuing of public advice. Priority Type 1 incidents are to be reported immediately by direct voice contact (phone messages can be used as a prompt but must be followed up within an hour to ensure voice contact) to the Water Incident Coordinator (WIC).

Other procedures for Type 1 incidents apply as outlined below.

TYPE 1 ALERT INCIDENTS

These incidents are either:

- **Health:** an incident that without appropriate intervention* could cause serious risk to human health, or
- **Environmental:** an incident that without appropriate intervention* could cause or threaten to cause serious or material environmental harm.

Type 1 incidents require immediate notification to defined agencies and will always be reported to the **Water Incident Coordinator** (WIC). Notification to the WIC and identified agencies will be immediately by telephone and within 24 hours by email/hard copy, eg:

- if an incident occurs at 4.10 pm on Tuesday, notification via email/hardcopy must occur by 4.10 pm on Wednesday
- if an incident occurs at 2.40 pm on Friday, notification via email/hardcopy must occur by 2.40 pm on Saturday.

The WIC provides a single point of contact for Type 1 incidents and is responsible for the communication of water/wastewater incidents within the government and to ensure that the Ministers for Environment and Conservation, Health and Water Security are notified of these serious incidents.

Type 1 incidents will also be reported within three hours by telephone to other agencies where indicated in the incident criteria table.

TYPE 2 NOTIFICATION INCIDENTS

These incidents are either:

- **Health:** incidents that without appropriate intervention* represent a low risk to human health, or
- **Environmental:** incidents that without appropriate intervention* cause or could cause environmental harm but are not of a high impact or on a wide scale.

Type 2 incidents require notification to defined agencies but will not routinely be reported to the WIC.

Type 2 incidents will be reported within 24 hours. Where this is not practicable, ie incident occurs late Friday afternoon, on a weekend or public holiday, notification must occur by no later than 12 noon the next business day, eg:

- if an incident occurs at 9.10 am on Wednesday, notification via telephone or email/hardcopy must occur by 9.10 am the next day (Thursday)
- if an incident occurs at 3 pm on Friday notification via telephone or email/hardcopy on the same day is preferable, but in any case no later than 12 noon the following Monday (unless it is a public holiday in which case notification is due by 12 noon Tuesday)

- if an incident occurs at 10.30 am on a Saturday, notification via telephone or email/hardcopy must occur by 12 noon the following Monday (unless it is a public holiday in which case notification is due by 12 noon Tuesday).

Certain Type 2 incidents require **immediate** notification to the EPA by telephone, and within 24 hours by email/hard copy (see Tables 1 and 2)

NOTE: An allowance for notifying Type 2 incidents by 12 noon the next business day is included to eliminate reporting requirements over a weekend or on a public holiday

Any other environmental or health incident that could be of public concern/interest will also be reported immediately as a Type 1 incident to the WIC and other relevant agencies. This includes any evidence/suspicion of external contamination or interference with infrastructure that gives rise to concern about risks to public or environmental health.

ONGOING INCIDENTS

Generally incidents will be followed by remedial action and subsequent clear evidence of recovery. However where there is uncertainty about control being re-established, an incident will remain ongoing.

Wastewater incident criteria tables

Table 1 General wastewater treatment plants (Priority Type 1/Type 1 incidents)

- Priority Type 1/Type 1 incidents will be reported to agencies as indicated, and
- The Water Incident Coordinator (WIC) informed immediately by telephone and within 24 hours by email/hard copy.

Parameter	Priority Type 1 criteria	Notification
Effluent disinfection	When the disinfection system fails and there is continual release (> 2 hrs) of undisinfecting effluent to receiving waters with potential for high public exposure	EPA, DH immediately by telephone & within 24 hrs by email/hard copy LC, URE by telephone within 3 hrs (+ NRM for discharge to fresh or estuarine waters)
Sewage overflows	Overflow of ≥ 1 megalitre of untreated wastewater not contained by the drainage systems in the plant	EPA, DH immediately by telephone & within 24 hrs by email/hard copy
Sludge spills	Sludge spill of ≥ 100 kilolitres not contained by the drainage systems in the plant	LC, NRM by telephone within 3 hrs
Chlorine/methane leak	Uncontrolled chlorine or methane gas leakage or significant chemical spills that cause exposure to the public	EPA, DH immediately by telephone & within 24 hrs by email/hard copy LC by telephone within 3 hrs
Type 1 criteria		
Effluent disinfection	When the disinfection system fails and there is continual release (> 2 hrs) of undisinfecting effluent to receiving waters	EPA, DH immediately by telephone & within 24 hrs by email/hard copy
Effluent turbidity	When plant effluent is highly turbid beyond the normal process range, sufficient to cause marked discolouration above normal levels in receiving waters	LC, URE by telephone within 3 hrs (+ NRM for discharge to fresh or estuarine waters)
Treated effluent overflows	Overflows or leakage of ≥ 1 megalitre of final treated effluent not contained by the drainage systems in the plant	EPA, DH immediately by telephone & within 24 hrs by email/hard copy
Sludge spills	Sludge spill of ≥ 10 kilolitres not contained by the drainage systems in the plant	LC, NRM by telephone within 3 hrs

Key to agencies

DH	Department of Health
EPA	Environment Protection Authority
LC	Local Council
NRM	Natural Resources Management Board
URE	Users of recycled wastewater

General wastewater treatment plants (Type 2 Incidents)

- Type 2 incidents are generally not reported to the WIC.

Parameter	Type 2 criteria	Notification
E coli (or enterococci or thermotolerant coliforms)	When numbers of E coli or enterococci in the plant effluent discharge to receiving waters after chlorination or UV irradiation exceed 400 per 100 mL	EPA, DH within 24 hrs
Sewage overflows	Overflow of < 1 megalitre but ≥ 10 kilolitres of untreated wastewater not contained by the drainage systems in the plant and discharged to a natural wastercourse or wetland either directly or through the local stormwater system	EPA immediately by telephone and within 24 hrs by email/hard copy* DH, LC, NRM within 24 hrs by telephone or email/hardcopy*
Sewage overflows	Overflow of < 10 kilolitres of untreated wastewater not contained by the drainage systems in the plant and discharged to a natural wastercourse or wetland either directly or through the local stormwater system	EPA, DH, LC, NRM within 24 hrs by telephone or email/hardcopy*
Treated effluent overflows	Overflows or leakage of < 1 megalitre of final treated effluent not contained by the drainage systems in the plant and discharged to a natural wastercourse or wetland either directly or through the local stormwater system	
Sludge spills	Sludge spill of < 10 kilolitres not contained by the drainage systems in the plant and discharged to a natural wastercourse or wetland either directly or through the local stormwater system	
Odours	Release of odours significantly worse than the normal range for the plant	EPA, DH immediately by telephone & within 24 hrs by email/hard copy LC By telephone within 3 hrs

* Type 2 incidents will be notified within 24 hrs. Where this is not practicable, ie incident occurs late Friday afternoon, on a weekend or public holiday, notification must occur by no later than 12 noon the next business day.

Table 2 Wastewater networks

- Priority Type 1/Type 1 incidents will be reported to agencies as indicated, and
- The WIC informed immediately by telephone and within 24 hours by email/hard copy.

Type 2 incidents are generally not reported to the WIC.

Parameter	Priority Type 1 criteria	Notification
Sewage discharges	<p>≥ 1 megalitre as a result of failure within wastewater networks system</p> <p>Any overflow where sewage is discharged to an area with potential for high public exposure (eg parklands, ponds, water courses, child care centres, markets, commercial food preparations, etc) or where public access cannot be easily controlled</p>	<p>DH, EPA immediately by telephone & within 24 hrs by email/hard copy</p> <p>LC, NRM within 3 hrs by telephone</p>
Sludge spills	Sludge spill of ≥ 100 kilolitres due to failure in the sludge main	
Parameter	Type 1 Criteria	Notification
Treated effluent discharges	≥ 1 megalitre as a result of failure within wastewater networks system	<p>DH, EPA immediately by telephone & within 24 hrs by email/hard copy</p> <p>LC, NRM within 3 hrs by telephone</p>
Sludge spills	Sludge spill of ≥ 10 kilolitres due to failure in the sludge main	
Parameter	Type 2 Criteria	Notification
Sewage discharges	Where there is evidence of sewage discharges (< 1 megalitre but ≥ 10 kilolitres) to a natural watercourse or wetland either directly or through the local stormwater system	<p>EPA immediately by telephone & within 24 hrs by email/hard copy*</p> <p>DH, LC, NRM within 24 hrs by telephone or email/hardcopy*</p> <p>EPA, DH, LC NRM within 24 hrs by telephone or email/hardcopy*</p>
Sewage discharges	Where there is evidence of sewage discharges (< 10 kilolitres) to a natural watercourse or wetland either directly or through the local stormwater system	
Treated effluent discharges	Where there is evidence of treated effluent discharges (< 1 megalitre) to a natural watercourse or wetland either directly or through the local stormwater system	
Sludge spills	Where there is evidence of a sludge spill (< 10 kilolitres) to a natural watercourse or wetland either directly or through the local stormwater system	

* Type 2 incidents will be notified within 24 hrs. Where this is not practicable, ie incident occurs late Friday afternoon, on a weekend or public holiday, notification must occur by no later than 12 noon the next business day.

Emergency contacts for water quality incidents

Department of Health

Emergency contacts are listed in general order of communication

Name	Position	Telephone	A/H	Facsimile
David Cunliffe	Principal Water Quality Adviser	8226 7153	8226 7100	8226 7102
Renay Cooke/ Nerissa Walton	Senior Scientific Officer (Water Quality)	8226 6867	8226 7100	8226 7102
Tony Farror	A/Manager, Wastewater Management	8226 7161	82267100	8226 7102

Environment Protection Authority

Name	Position	Telephone	Facsimile
EPA first point of contact	Emergency response for Type 1 (manned 24 hours)	1800 100 833	
Nenita Sison	Team Leader Industry Services	8204 2016 0411 231 952	8124 4674
David Daminato	Senior Environment Protection Officer	8204 2195 0409 902 223	8124 4674
Clive Jenkins	Principal Advisor—Water Quality	8204 1679 0419 216 374	8124 4673
Shaun Thomas (for Type 1 treated water incidents)	Senior Scientific Officer (Water Chemistry)	8204 2023 0400 923 313	8124 4673

Natural Resources Management Boards

Name	Position	Telephone	Facsimile
Adelaide and Mount Lofty Ranges			
Steven Gatti	Manager Projects and Investigations	8273 9100	8271 9585
Alan Ockenden	Director Operations and Projects	8273 9100	8271 9585
Kym Good	General Manager	8273 9100	8271 9585
SA Murray Darling Basin			
Simon Sherriff	Program Leader Water Quality	8391 7519	8291 7524

SA Water and United Water

Emergency: 8381 0300