



Environmental Spill Report Centre

1-800-667-7525

Operates 24 hours
a day and 365 days
per year

EPB 267 Sept/05



Saskatchewan
Environment

Upset Reporting at Waterworks/Sewage Works

Applicable Legislation and Example Reporting Instances for Waterworks

Section 37 of *The Water Regulations, 2002* requires reporting of known or anticipated upset conditions. An **upset condition** is defined in Clause 2(1)(jj) as meaning any abnormal conditions, anomalies or interruptions in the treatment process or the distribution system within a waterworks that may have adverse affect on the quality of water supplied to consumers, whether known or anticipated.

Section 37(1) states: "Every permittee of a waterworks and every employee, agent or contractor engaged by a permittee shall immediately report to the minister any known or anticipated upset condition, bypass condition or events at or affecting a waterworks that could adversely affect the quality of water produced by the waterworks". Additionally, Section 37(2) states: "The persons mentioned in subsection (1) shall immediately report to the minister any instance where:

- disinfection equipment fails; or
- the level of disinfection required by section 30 is not achieved or is not anticipated to be achieved."

The following are examples of upset conditions that would require reporting for waterworks under Section 37 of the *Water Regulations, 2002*. Other situations may exist which may also require upset reporting. In the instance where the owner or operator of the waterworks is uncertain if an event qualifies as an upset condition, reporting is suggested.

General disruptions:

- power failure; and
- vandalism.

Source disruptions:

- heavy rainfall causing change in raw water quality conditions which the water treatment plant cannot handle/or handle in time;
- instances of known contamination of raw water supplies; and
- change in approved raw water source.

Treatment component failures or conditions:

- chemical feed breakdown;
- coagulation-flocculation or filtration problems that result in turbidity spikes above normal operating levels;
- inadequate chlorine levels leaving the water treatment plant;
- changes to finished water quality beyond the normal for water produced by the waterworks; and
- online test equipment failure.

Distribution disruptions or conditions:

- unusually high chlorine demand;
- inadequate chlorine levels;
- unusual treated water colour or odour concerns;
- online test equipment failure; and
- system depressurization.

Applicable Legislation and Example Reporting Instances for Sewage Works

Section 17(1) of the *Water Regulations, 2002* states: In this section, **upset condition** means any abnormal conditions, anomalies or interruptions in the treatment process or the collection system within the sewage works or industrial effluent works that would adversely affect the quality of effluent discharged into the environment.

Section 17(2) states: "Every permittee and every employee, agent or contractor engaged by a permittee shall immediately report to the minister any known or anticipated upset condition, bypass condition or event at or affecting a sewage works or industrial effluent works that would adversely affect the quality of effluent discharged to the environment."

Based on the above, every spill of sewage from a sewage works is therefore an upset condition.

The following are examples of upset conditions for sewage that would require reporting for sewage works under Section 17 of *The Water Regulations, 2002*. Other situations may exist which may also require upset reporting. In the instance where the owner or operator of the sewage works is uncertain if an event qualifies as an upset condition, reporting is suggested:

- sewage spills such as by-pass or anticipated by-pass conditions caused by such things as heavy rainfall or other causes of heavy sewage flows;
- interruption to the treatment process such as a loss of chemical feed, clarification disruption, etc;
- emergency discharge from a lagoon; and
- equipment failure such as chlorinator or disinfection process breakdown or failure of lift station pumps.

How do I report an upset at a waterworks or sewage works?

Upset conditions should be reported immediately and directly by telephone. The owner, permittee, or any employee, agent of contractor is required to report upset conditions to the minister.

To accommodate reporting there are two methods that should be used. Upset reports during normal business hours should be relayed by telephone and be directed to the Environmental Project Officer (EPO) that normally inspects or deals with the waterworks or sewage works. In the event that the EPO cannot be directly contacted by telephone during regular business hours, report the upset condition to the Environmental Spill Report Centre at 1-800-667-7525.

If a report must be placed outside normal business hours, on weekends or holidays, persons reporting should contact the Environmental Spill Report Centre at 1-800-667-7525. The Centre operates 24 hours/day, 365 days per year and they will then contact a department official to follow-up with the upset report.

How does Upset Reporting for Sewage Spills overlap with the requirements of *The Environmental Spill Control Regulations*?

Spills of sewage are also governed by the *Environmental Spill Control Regulations (ESCR)*. Every offsite spill of raw or treated sewage in excess of 300 litres over any 24 hour period is a reportable spill and is also a reportable **upset condition**.

Until changes to the *ESCR* can be made, those persons required to report spills which are also a form of upset, must also directly report to the Environmental Spill Report Centre at 1-800-667-7525.