

Water Treatment Plant Release Guidance

This fact sheet provides guidance for the proper notification and sampling in the event of a water treatment plant release/overflow.

Background

Water filter backwash is generated when potable water treatment plants treat well water or surface water to reduce suspended and dissolved solids.

Sand filter systems pump well water into the top of a tank that is pressurized or gravity fed down through a porous (usually sand-rock) media. Periodically the filter media is backwashed to remove the entrained solids.

Water filter backwash is conveyed to wastewater treatment facilities, settling basins/ponds, or reclaim tanks. Many water treatment plants have a release/overflow point that enables the water to discharge outside the plant in the event of an emergency.

In the event of a release, the city/facility must take all necessary precautions to prevent nuisance conditions that may be created by the release. The city/facility must notify the Minnesota Duty Officer of the release immediately and must take samples of the water released to the environment.

Relevant Regulations

Minn. R. 7050.0210, subp. 2

Nuisance conditions prohibited. No sewage, industrial waste, or other wastes shall be discharged from either a point or non-point sources into any waters of the state so as to cause any nuisance conditions, such as the presence of significant amounts of floating solids, scum, visible oil film, excessive suspended solids, material discoloration, obnoxious odors, gas ebullition, deleterious sludge deposits, undesirable slimes or fungus growth, aquatic habitat degradation, excessive growths of aquatic plants, or other offensive or harmful effects.

Minn. Stat. § 115.061; Duty to Notify and Avoid Water Pollution

(a) Except as provided in paragraph (b), it is the duty of every person to notify the agency immediately of the discharge, accidental or otherwise, of any substance or material under its control which, if not recovered, may cause pollution of waters of the state, and the responsible person shall recover as rapidly and as thoroughly as possible such substance or material and take immediately such other action as may be reasonably possible to minimize or abate pollution of waters of the state caused thereby.

What to do in the event of a release

1. Take all reasonable steps to immediately end the release.
2. Notify the Minnesota Department of Public Safety Duty Officer at 800-422-0798 (toll-free) or 651-649-5451 (metro area) immediately upon discovery of the release. In addition, you may also contact the Minnesota Pollution Control Agency (MPCA) during business hours at 800-657-3864.
3. Collect representative samples of the release. The MPCA may be contacted during business hours to discuss the sampling parameters and protocol.
4. Submit the sampling results and release information to the MPCA using the Water Treatment Plant Sampling Report form. This form can be found at <http://www.pca.state.mn.us>, or by request from the MPCA.

Sampling requirement

Parameter	Units	Sample type
Flow	mgd	measurement, continuous
TSS	mg/L	grab
pH	standard units	grab
Phosphorus, Total (as P)	mg/L	grab

mgd = million gallons per day

TSS = Total Suspended Solids

mg/L = milligrams per liter