



State Disposal System (SDS) Permit Program Fact Sheet

Water Treatment Plant Subsurface Disposal SDS General Permit Number: MNG820000

Current Permit Expiration: June 30, 2012

Public Comment Period Begins: June 25, 2012
Period Ends: July 24, 2012

Proposed Action: General Permit Reissuance

Permitting Contacts

Robin Novotny
Ph. 218-316-3851

or

Nicole Blasing
Ph. 218-316-3890

7678 College Road, Suite 105
Baxter, MN 56425
Fax. 218-828-2594

Table of Contents

Purpose and Participation.....	3
Fact Sheet Purpose	3
Applicable Statutes	3
Public Participation	3-4
Facility Description.....	4-6
Basis for Issuance of a General Permit	4-5
Components and Treatment Technology	6
General Treatment Description	6
Changes to Facility or Operation	6
Significant Industrial Users	6
Recent Compliance History.....	6
Existing Permit Effluent Limits	6-7
Technology Based Effluent Limits	7
Water Quality Based Effluent Limits.....	7
Proposed Permit Effluent Limits	7-8
Technology Based Effluent Limits.....	8
Water Quality Based Effluent Limits.....	8
Additional Requirements	8
Compliance Schedules	8
Variances.....	8
Total Facility Requirements	8
Nondegradation and Anti-backsliding	8-9

Purpose and Participation

Applicable Statutes

This fact sheet has been prepared according to the Title 40 Federal Code of Regulations (CFR) 124.8 and 124.56 and Minn R. 7001.0100, Subp. 3 in regards to a draft SDS permit to construct and/or operate wastewater treatment facilities and to discharge into waters of the State of Minnesota.

Purpose

This fact sheet outlines the principal issues related to the preparation of this draft permit and documents the decisions that were made in the determination of the effluent limitations and conditions of this permit.

Public Participation

You may submit written comments on the terms of the draft permit or on the Commissioner's preliminary determination. Your written comments must include the following:

1. A statement of your interest in the permit application or the draft permit.
2. A statement of the action you wish the Minnesota Pollution Control Agency (MPCA) to take, including specific references to sections of the draft permit that you believe should be changed.
3. The reasons supporting your position, stated with sufficient specificity as to allow the Commissioner to investigate the merits of your position.

You may also request that the MPCA Commissioner hold a public informational meeting. A public informational meeting is an informal meeting which the MPCA may hold to help clarify and resolve issues.

In accordance with Minn. R. 7000.0650 and Minn. R. 7001.0110, your petition requesting a public informational meeting must identify the matter of concern and must include the following: items 1 through 3 identified above; a statement of the reasons the MPCA should hold the meeting; and the issues you would like the MPCA to address at the meeting.

In addition, you may submit a petition for a contested case hearing. A contested case hearing is a formal hearing before an administrative law judge. Your petition requesting a contested case hearing must include a statement of reasons or proposed findings supporting the MPCA decision to hold a contested case hearing pursuant to the criteria identified in Minn. R. 7000.1900, subp. 1 and a statement of the issues proposed to be addressed by a contested case hearing and the specific relief requested. To the extent known, your petition should include a proposed list of witnesses to be presented at the hearing, a proposed list of publications, references or studies to be introduced at the hearing, and an estimate of time required for you to present the matter at hearing.

You must submit all comments, requests, and petitions during the public comment period identified on page 1 of this notice. All written comments, requests, and petitions received during the public comment period will be considered in the final decisions regarding the permit. If the MPCA does not receive any written comments, requests, or petitions during the public comment period, the Commissioner or other

MPCA staff as authorized by the Commissioner will make the final decision concerning the draft permit. During the public comment period, however, you may request that the draft permit be presented to the MPCA's Citizens' Board (Board) for final decision. You may participate in the activities of the Board as provided in Minn. R. 7000.0650.

Comments, petitions, and/or requests must be submitted by the last day of the public comment period to:

Robin Novotny
Minnesota Pollution Control Agency
7678 College Road, Suite 105
Baxter, MN 56425

The permit will be reissued if the MPCA determines that the proposed Permittee or Permittees will, with respect to the facility or activity to be permitted, comply or undertake a schedule to achieve compliance with all applicable state and federal pollution control statutes and rules administered by the MPCA and the conditions of the permit and that all applicable requirements of Minn. Stat. ch. 116D and the rules promulgated thereunder have been fulfilled.

More detail on all requirements placed on the facility may be found in the Permit document.

Facility Description

Basis for Issuance of a General Permit

Section 301(a) of the Clean Water Act (CWA) and Minn. R. 7001.0210 provides authority to the Minnesota Pollution Control Agency (MPCA) to issue a single permit to a category of permittees whose discharges are the same or substantially similar. This single SDS Permit that can apply to numerous facilities is referred to as a general permit. Minn. R. 7001.0210 states that a general permit can be issued if the MPCA determines that:

- a) There are several permit applicants or potential permit applicants who have the same or substantially similar operations, emissions, activities, discharges, or facilities;
- b) The permit applicants or potential permit applicants discharge, emit, process, handle, or dispose of the same types of waste;
- c) The operations, emissions, activities, discharges, or facilities are subject to the same or substantially similar standards, limitations, and operating requirements; and
- d) The operations, emissions, activities, discharges, or facilities are subject to the same or substantially similar monitoring requirements.

As required by Minn. R. 7001.0100, subp. 3(C), MPCA shall publish a notice of intent to issue a general permit in the *State Register*.

MPCA has reviewed data to determine if a category, or categories, of discharge facilities in Minnesota met the stipulated criteria for development of a general permit for water treatment plants. The MPCA found that publicly and privately owned water treatment facilities (Facilities), that discharge wastewater resulting from the treatment of domestic drinking water meet the stipulated criteria. These facilities have similar effluent limitations, operations, wastes to treat, and monitoring conditions. The MPCA has determined that a Water Treatment Plant Subsurface Disposal SDS General Permit (General Permit) is an appropriate permitting mechanism for these WTPs that treat predominantly domestic drinking water and discharge to groundwaters of the State. The MPCA has determined that WTPs that discharge to surface waters require unique permit conditions that will be covered by a separate General Permit (MNG640000).

Permittees are authorized to discharge wastewater in accordance with the General Permit only after:

- a) The Permittee seeking authorization to discharge under this general permit has submitted all necessary application forms to be covered under the general permit;
- b) The Permittee meets all eligibility criteria listed in the following section of this chapter; and
- c) The Permittee has received a written Notice of Coverage (NOC) indicating that coverage has been granted.

Facilities that meet the following general permit applicability criteria are granted coverage under the General Permit:

- a) New discharges with subsurface disposal must be covered under an individual permit for one permit cycle prior to qualification under the general permit.
- b) The discharge consists of wastewater from domestic water treatment plants.
- c) The discharge of wastewater to groundwater indirectly through seepage will not have a significant impact on water quality.
- d) The facility is not proposing a significant upgrade.
- e) The discharge does not contain a contaminant that is not included in the limits and monitoring section of this permit.
- f) No surface water discharge is allowed under this permit.
- g) Facilities that fail or have failed to comply with a regulation, permit schedule, or compliance order issued by the MPCA may be excluded from coverage under the general permit and required to apply for coverage under an individual permit.

Components and Treatment Technology

General Treatment Description

All water treatment plants covered under this general permit use media filters for treatment of water.

Filtration is used to remove suspended particles in the source water. Media filters remove suspended solids by adsorption and straining. Single media beds or multi-media beds may be used. The most common type of filter is a rapid sand filter. There are two different types of filtration; gravity filtration and pressure filtration. In gravity filtration water is allowed to pass through the filter by gravity and in pressure filtration the water is forced through the filter under pressure.

To clean the filter, water is passed quickly upward through the filter, opposite the normal direction (called backwashing) to remove embedded particles. Prior to this, compressed air may be blown up through the bottom of the filter to break up the compacted filter media to aid the backwashing process; this is known as air scouring. The filter backwash water is discharged to a seepage basin/pond or rapid infiltration basin (RIB). Under this general permit, filter backwash is not discharged to surface water.

Water filter backwash solids (WFBS) settled out in the seepage basin/pond or RIB are periodically cleaned out and disposed of. Disposal of WFBS is regulated under this general permit. There are four options for disposal: wastewater treatment facility, landfilling, use as non-residential construction fill, and land application. The requirements for each of these options is listed in a guidance document titled, "Guidelines – Disposal Methods for Water Filter Backwash Solids," included in Appendix B of the General Permit.

Changes to Facility or Operation

Facilities with significant changes to the system or operations are not eligible for coverage under this General Permit.

Significant Industrial Users (SIUs)

There are no SIUs for the Facilities covered under this General Permit.

Recent Compliance History

Facilities that fail or have failed to comply with a regulation, compliance schedule, or compliance order issued by the MPCA are excluded from coverage under the General Permit.

Existing Permit Effluent Limits

The limits and monitoring requirements are summarized in the following table:

**Waste Stream Station – Intermediate Sampling Point
(Discharge into Subsurface Treatment System)**

PARAMETER	LIMIT	UNITS	LIMIT TYPE	EFFECTIVE PERIOD	SAMPLE TYPE	FREQUENCY
Flow	Monitor Only	mgd	Calendar Quarter Average	Jan – Dec	Measurement, Continuous	Daily
Flow	Monitor Only	MG	Calendar Quarter Total	Jan – Dec	Measurement, Continuous	Daily
pH	9.00	standard units	Instantaneous Maximum	Jan – Dec	Grab	Quarterly ¹
pH	6.00	standard units	Instantaneous Minimum	Jan – Dec	Grab	Quarterly ¹

¹ Analyze immediately.

Technology Based Effluent Limits (TBELs)

pH limits were technology based effluent limits that were derived from federal regulation (40 CFR pt. 123), Minn. R. 7001, and the CWA.

Water Quality Based Effluent Limits (WQBELs)

There were no WQBELs applicable to Facilities covered under this General Permit. A WQBEL is required when it is determined to be necessary to protect the use classification of the receiving water [40 CFR Part 122.44(d)]. There are no surface discharges permitted under this General Permit.

Proposed Permit Effluent Limits

The limits and monitoring requirements are summarized in the following table:

**Waste Stream Station: Intermediate Sampling Point
(Discharge to Subsurface Treatment System)**

PARAMETER	LIMIT	UNITS	LIMIT TYPE	EFFECTIVE PERIOD	SAMPLE TYPE	FREQUENCY
Flow	Monitor Only	mgd	Calendar Quarter Average	Jan - Dec	Measurement, Continuous	Daily
Flow	Monitor Only	MG	Calendar Quarter Total	Jan - Dec	Measurement, Continuous	Daily
pH ¹	9.00	standard units	Calendar Quarter Maximum	Jan - Dec	Grab	1 X Quarter
pH ¹	6.00	standard units	Calendar Quarter Minimum	Jan - Dec	Grab	1 X Quarter

¹ Analyze immediately. This means within 15 minutes or less of sample collection.

Technology Based Effluent Limits

Category 1 and 2 Facilities are required to meet technology based effluent limits (TBEL) for pH. The TBELs are developed for achieving secondary treatment standards and/or state discharge restrictions. The limits are specified in 40 CFR §133.102 and Minn. R. 7053.0215.

Water Quality Based Limits

There are no WQBELs applicable to Facilities covered under this General Permit. A WQBEL is required when it is determined to be necessary to protect the use classification of the receiving water [40 CFR Part 122.44(d)]. There are no surface discharges permitted under this General Permit.

Additional Requirements

Compliance Schedules

Facilities that are eligible for coverage under this General Permit do not require a compliance schedule in their permit. If a compliance schedule is required for any reason the Facility is not eligible for coverage under this General Permit.

Variances

This General Permit does not include a variance to a Clean Water Act (CWA) requirement. Any Facility that would have a variance for a water quality standard would not be eligible for coverage under the General Permit.

Total Facility Requirements (TFR)

All SDS permits issued in the State of Minnesota contain certain conditions that remain the same regardless of the size, location, or type of discharge. The standard conditions satisfy the requirements outlined in 40 CFR 122.41, Minn. R. 7001.0150 and Minn. R. 7001.1090. These conditions are listed in the Total Facility Requirements chapter of the SDS permit. These requirements cover a wide range of areas, including recordkeeping, sampling, equipment calibration, equipment maintenance, reporting, facility upsets, bypass, solids handling, changes in operation, facility inspections, and permit modification and reissuance.

Nondegredation and Anti-Backsliding

In accordance with Minnesota Pollution Control Agency rules regarding nondegredation for all waters (that are not Outstanding Resource Value Waters), nondegredation review is required for any new or expanded significant discharge (Minn. R. 7050.0185). A significant discharge is 1) a new discharge (not in existence before January 1, 1988) that is greater than 200,000 gallons per day or 2) an expanded

discharge that expands by greater than 200,000 gallons per day that discharges to any non-ORVW water other than a Class 7 water or 3) a new or expanded discharge containing any toxic pollutant at a mass loading rate likely to increase the concentration of the toxicant in the receiving water by greater than one percent over the baseline quality.

This General Permit also complies with Minn. R. 7053.0275 regarding anti-backsliding.

Any point source discharger of sewage, industrial, or other wastes for which a national pollutant discharge elimination system permit has been issued by the agency that contains effluent limits more stringent than those that would be established by parts 7053.0215 to 7053.0265 shall continue to meet the effluent limits established by the permit, unless the permittee establishes that less stringent effluent limits are allowable pursuant to federal law, under section 402(o) of the Clean Water Act, United States Code, title 33, section 1342.