



Minnesota
Pollution
Control
Agency

Minnesota River Basin General NPDES Phosphorus Phase I Permit

New and Expanding Dischargers

Water Quality/Basins #3.15, Updated April 2007

Municipal Division
Municipal
Wastewater
Section

NPDES:
National Pollutant
Discharge Elimination
System

SDS:
State Disposal System

**Minnesota River
Basin General
NPDES Phosphorus
Phase I Permit** is also
referred to as the
**General Phosphorus
Permit**

TMDL:
Total Maximum Daily
Load project – a water
quality study that
addresses a specific
pollutant exceeding
water quality

MPCA Area Offices

Brainerd:
218/828-2492
Detroit Lakes:
218/847-1519
Duluth:
218/723-4660
Mankato:
507/389-5977
Marshall:
507/537-7146
Rochester:
507/285-7343
St. Paul:
651/296-6300
800/657-3864
Willmar:
320/214-3786

This factsheet provides an overview of requirements in the Minnesota River Basin General NPDES Phosphorus Phase I Permit for new or expanding wastewater treatment facilities (WWTF)s. The requirements for new and expanding facilities vary according to the characteristics of the facility seeking permit coverage. Characteristics such as geographic location, size and type will affect the permit requirements. In addition, the requirements will change depending on whether the facility is expanding within the basin or new to the basin. This factsheet also applies to unsewered or undersewered communities (i.e. those communities currently without a WWTF).

The goal of the General Phosphorus Permit is to protect water quality in the basin according to state and federal rules and statutes. The General Phosphorus Permit covers the five-year timeframe 2005-2010. The permit represents the first phase of implementation of the wastewater discharge requirements detailed in the Lower Minnesota River Low Flow Dissolved Oxygen TMDL project.

Permit Requirements Expanding Facilities

Increasing hydraulic or organic capacity

WWTFs listed in Appendix B of the General Phosphorus Permit

(Continuous dischargers with design capacity for more than 1,800 pounds of phosphorus discharge per year, discharging upstream of the City of Jordan)

1. Limit phosphorus loading to what is allowed in Appendix B of General Phosphorus Permit

WWTFs listed in Appendix C or D of the General Phosphorus Permit

(Continuous dischargers with design capacity of 1) less than 1,800 pounds of phosphorus discharge per year or 2) greater than 1,800 pounds per year if discharging from the City of Jordan to the City of Shakopee)

1. First apply for, and receive an individual NPDES/SDS permit or general NPDES/SDS permit before upgrading to a secondary treatment system;
2. Demonstrate no net increase in mass of phosphorus discharged to the Basin between May 1st and September 30th, or
3. Offset through trading any increased mass of phosphorus discharged from May 1st through September 30th resulting from the expansion; and
4. If trading is necessary, first submit an NPDES/SDS permit application for coverage under Appendix B of this Permit.

WWTFs listed in Appendix E of the General Phosphorus Permit

(Controlled Discharge Stabilization Ponds)

1. Design and construct so that there is no discharge to the Basin from June 1st through September 30th.

New Facilities

Starting operation after the date of the General Phosphorus Permit issuance

Continuously Discharging WWTFs

1. Apply for, and receive, an individual NPDES/SDS permit or general NPDES/SDS permit;



2. Submit an NPDES/SDS permit application for coverage under Appendix B of this Permit; and
3. Offset through trading any mass of phosphorus discharged from May 1st through September 30th.

Controlled Discharge Stabilization Ponds

1. Designed and constructed so that there is no discharge from June 1st through September 30th as authorized under an individual NPDES/SDS permit or general NPDES/SDS permit;
2. Monitor for phosphorus; and
3. Develop a Phosphorus Management Plan.

Unsewered or Undersewered Communities

There are 13 unsewered or undersewered communities above Shakopee listed in the phosphorus permit. These and any newly verified communities must obtain an individual or general NPDES/SDS operating permit before upgrading to a secondary treatment system. When a system is developed, they must:

1. Demonstrate no net increase in phosphorus discharged between May 1 and September 30;
2. Offset through trading any phosphorus increase between May 1 and Sept. 30 that is associated with growth; and
3. If trading is necessary, submit an NPDES/SDS permit application under Appendix B of the phosphorus permit.

35 Percent Reduction by 2010

This permit is separate from the existing NPDES permits under which the facilities operate. It covers all 143 municipal and industrial wastewater treatment facilities and 13 small, unsewered communities. The goal is to achieve a combined 35 percent reduction in phosphorus discharged from these facilities by 2010 (Phase I). The ten-year goal (Phase II) of reducing phosphorus discharge to 752 pounds will result in a phosphorus discharge limit for wastewater treatment facilities of 1 milligram per liter. The 40 largest facilities, those discharging 1,800 pounds or more of phosphorus annually, will be required to meet a phosphorus effluent mass limit or engage in pollutant trading to meet their limit. The smaller wastewater treatment facilities will not be subject to a phosphorus limit under this permit unless they expand.

For More Information

Minnesota River Basin General NPDES Phosphorus Phase I Permit contact:

Lisa McCormick, MPCA Municipal Division,
320-231-5343, e-mail: lisa.mccormick@pca.state.mn.us

Lower Minnesota River dissolved oxygen at low flow TMDL project contact:

Larry Gunderson, MPCA Regional Division,
651-297-3825, e-mail: larry.gunderson@pca.state.mn.us

MPCA phosphorus strategy available on the Web at www.pca.state.mn.us/water/phosphorus.html

TMDL program information on the Web at www.pca.state.mn.us/water/tmdl/index.html

Additional information about the Minnesota River Basin General NPDES Phosphorus Phase I Permit is available in the following factsheets on the MPCA Web site: www.pca.state.mn.us.

- Minnesota River Basin General NPDES Phosphorus Phase I Permit
- Minnesota River Basin General NPDES Phosphorus Phase I Permit - Phosphorus Trading Overview
- Minnesota River Basin General NPDES Phosphorus Phase I Permit – Continuous Dischargers with Design Capacity to Discharge Over 1,800 Pounds per Year
- Minnesota River Basin General NPDES Phosphorus Phase I Permit – Continuous Dischargers with Design Capacity to Discharge Under 1,800 Pounds per Year
- Minnesota River Basin General NPDES Phosphorus Phase I Permit – Pond Facilities
- Minnesota River Basin General NPDES Phosphorus Phase I Permit – New and Expanding Facilities