



Minnesota
Pollution
Control
Agency

Industrial Division

Municipal Division

Environmental Analysis
and Outcomes Division

DEFINITIONS

C.F.R. Code of Federal Regulations

CWA Clean Water Act

EPA U.S. Environmental Protection Agency

Impaired Water A water body that does not meet water quality standards for one or more uses due to pollutant levels and is on the Minnesota Impaired Waters List

NPDES National Pollutant Discharge Elimination System

TMDL Total Maximum Daily Load

Guidance for Issuing NPDES Permits for Discharge to Impaired Waters

Expanding Facilities

Water Quality, Wastewater Permitting 1-14 • UPDATED: June 2007

In a decision issued on May 17, 2007, the Minnesota Supreme Court upheld the NPDES permit issued to the cities of Annandale and Maple Lake, Minn. for construction of a joint wastewater treatment facility. Effluent from the facility will discharge to the North Fork of the Crow River and ultimately flow to Lake Pepin. Each of these water bodies is on the state list of impaired waters and neither has an approved TMDL in place. In the majority opinion of the court, the permit represented a reasonable interpretation of the Clean Water Act by allowing a reduction of phosphorus discharged at one facility to make up an increase of phosphorus discharged at another facility in the same watershed.

In the wake of this ruling, the MPCA has developed guidance for issuing permits to new facilities intending to discharge to impaired waters (see *Guidance for Issuing NPDES Permits for Discharge to Impaired Waters: New Facilities*). Although the case in question did not specifically address existing facilities proposing expanded discharge to impaired waters, the MPCA has re-evaluated the guidance related to such proposals as follows.

Federal Regulation

Federal Regulation 40 C.F.R 122.44(d)1 has the primary purpose of ensuring that impaired waters are not further degraded before a TMDL is complete.

Enacted in the early 1980s, Federal Regulation 40 C.F.R. 122.44(d)1 fulfills the CWA objective to restore and maintain the chemical, physical and biological

integrity of the nation's waters. This regulation requires effluent limits in permits to ensure discharges do not cause, have a reasonable potential to cause or contribute to the violation of a numeric or narrative water quality standard. This regulation applies to all existing dischargers.

Affected Facilities

Expanding facilities proposing additional discharge to or upstream of an impaired surface water may be affected by Federal Regulation 40 C.F.R. 122.44(d)1. Facilities are affected

- If the proposed discharge contains a pollutant of concern that would impact an identified impairment, **and**
- If no approved TMDL is in place for the pollutant of concern.

If an approved TMDL is in place for the pollutant of concern, the facility must meet the conditions of the TMDL.

Limits for Affected Facilities

All facilities are capped at their existing phosphorus mass using the Average Wet Weather Design Flow (AWWD) for municipal sites and Average Annual Design Flow (AAD) for industrial sites. Also, proposed expansions

- **Greater than 1,800 pounds** of phosphorus per year must meet the 1mg/L phosphorus concentration limit
- **Less than 1,800 pounds** per year are capped at their existing phosphorus mass, but will not receive a 1mg/L phosphorus concentration limit.*

* This approach is consistent with the current MPCA Citizens' Board approved Phosphorus Strategy and proposed Water Quality Rules.

Discharge Alternatives

To meet the requirements of Federal Regulation 40 C.F.R. 122.44(d)1, affected facilities have the following options

1. Provide treatment to meet the mass limit and, if discharging greater than 1,800 pounds of phosphorus per year, provide treatment to meet a 1mg/L concentration limit.
2. Eliminate some or all surface water discharge by using land treatment options such as spray irrigation, rapid infiltration basin or soil treatment systems.
3. Initiate pollution prevention actions to reduce source pollutant to meet the mass limit.
4. Discharge to a permitted wastewater treatment facility that has available phosphorus capacity.
5. Participate in Pre-TMDL Trading by purchasing the needed pollutant load from another facility.

For More Information

Online Resources

Minnesota's Impaired Waters Program
<http://www.pca.state.mn.us/water/tmdl/index.html>

Pre-TMDL Phosphorus Trading
<http://www.pca.state.mn.us/water/tmdl/ptpt.html>

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