Public Notice of Intent to Issue Wastewater Permit and TMDL Wasteload Allocation

Wastewater Permit
MN0071234

General information

Public comment period begins: June 13, 2018
Public comment period ends: August 13, 2018 (4:30 p.m.)

The Minnesota Pollution Control Agency (MPCA) Commissioner has made a preliminary determination to issue this permit for a term of approximately five years.

Name and address of Permittee: Facility name and location: MPCA Wastewater Permit contact person:
City of DeGraff DeGraff Wastewater Treatment Facility Ashley Wahl
207 Atlantic Ave 207 Atlantic Ave Municipal Division
DeGraff, MN 56271 DeGraff, MN 56271 Minnesota Pollution Control Agency
Swift County Swift County 504 Fairgrounds Road, Suite 200
MPCA TMDL contact person:
Ashley Wahl
Southwest Watershed
Municipal Division
Minnesota Pollution Control Agency
504 Fairgrounds Road, Suite 200
Marshall, MN 56258
Phone: 507-476-4264
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File manager phone: 651-757-2728 or 1-844-828-0942

A draft permit and Statement of Basis for the city of DeGraff (City) Wastewater Treatment Facility (Facility) are available for review on the Minnesota Pollution Control Agency (MPCA) Public Notices webpage at http://www.pca.state.mn.us/publicnotices or at the MPCA office address listed under the MPCA contact person. In conjunction with the reissuance of this permit, the MPCA Commissioner has made a preliminary determination to modify the wasteload allocations (WLAs) in the following total maximum daily load (TMDL) studies: Chippewa River Watershed TMDL (bacteria, total suspended solids), Chippewa River Watershed Turbidity TMDL, Chippewa River Fecal Coliform TMDL, Lower Minnesota River – Low Dissolved Oxygen TMDL and the South Metro Mississippi TMDL Turbidity Impairment. The MPCA will mail or email a copy of the draft permit upon request. Comments, petitions, and other requests must be received at the MPCA in writing on or before the public comment period end date and time identified above.

Watershed: Chippewa River

Receiving water: Judicial Ditch No. 19 Lateral B Branch 1 (Class 2B, 3C, 4A, 4B, 5, 6 water)

Description of permitted facility

Application and planning documents indicate the proposed Facility will be located in the NW ¼ of the NE ¼ of Section 28, T121N, R38W, Swift County, Minnesota.

The Facility will have a controlled discharge to Judicial Ditch No. 19 Lateral B Branch 1 (Class 2B, 3C, 4A, 4B, 5, 6 water), and will be designed to treat an average wet weather (AWW) flow of 21,400 gallons per day (gpd) with a five-day carbonaceous biochemical oxygen demand (CBOD₅) of 39 pounds per day (219 milligrams per liter (mg/l)) at AWW flow, and provide a 217 days of storage. The Facility will not be authorized to discharge June through September, based on the Lower Minnesota River Low Dissolved Oxygen TMDL study and the Minnesota River Basin General Phosphorus Permit. The Facility has been designed to account for this discharge restriction.
The treatment system will consist of the following:

• A gravity collection system with Lift Station and approximately 6,200 feet of six-inch diameter forcemain.
• One 1.78-acre primary pond with a two foot to six foot mean operating depth.
• One 1.78-acre secondary pond with a two foot to six foot mean operating depth.
• Liquid alum chemical addition for phosphorus removal.

This will be a Class D Facility.

An antidegradation assessment is required for new, reissued, or modified individual NPDES wastewater will result in net increases in loading or other causes of degradation to surface waters (7050.0280 Subp 1). Even though the proposed project will result in an overall reduction in pollutant loading to the JD 19 system, the proposed activity is defined in rule as a “net increase” in pollutant loading (Minn. R. 7050.0255 Subp. 26). Therefore, an antidegradation analysis was completed, “DeGraff NPDES Antidegradation – Preliminary MPCA Determination (Weiss, S. May 2018),” to satisfy State Rules (Minn. R. 7050.0280 Subp. 2., Minn. R. 7050.0265 Subp. 5. B.)

The Permit complies with Minn. R. 7053.0275 regarding anti-backsliding.

Any point source discharger of sewage, industrial, or other wastes for which a NPDES permit has been issued by the MPCA 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.

The MPCA has made a preliminary determination that the project will satisfy anti-degradation standards in Minnesota Rules 7050.0265 and the preliminary determination to issue this wastewater permit is tentative.

Procedure for public participation

As stated in Minn. R. chs. 7000 and 7001, there are three formal procedures for public participation in the MPCA's consideration of this matter. Interested persons may:

1. Submit written comments on the draft permit.
2. Petition the MPCA to hold a public informational meeting.
3. Petition the MPCA to hold a contested case hearing.

Submitting written comments

To submit comments or petitions to the MPCA through the mail or email, you must state:

1. Your interest in the permit application or the draft permit.
2. The action you wish the MPCA to take, including specific references to the section of the draft permit you believe should be changed.
3. The reasons supporting your position, stated with sufficient specificity as to allow the MPCA to investigate the merits of the position.

Public informational meeting

A public informational meeting is an informal meeting during which interested persons can ask questions concerning the proposed facility. MPCA staff will be present to provide information. If an interested person would like the MPCA to hold a public informational meeting, the person should include all information identified above and in addition include a statement of the reasons the person desires the MPCA to hold a public informational meeting and the issues that the person would like the agency to address at the public informational meeting.

Contested Case Hearing

A contested case hearing is a formal proceeding before an administrative law judge empowered to advise the MPCA regarding issues of fact. As described in Minn. R. 7000.1800, persons who submit petitions for a contested case hearing must also state the issues they propose to address in a contested case hearing, the specific relief requested or resolution of the matter, and the reasons (which may be in the form of proposed findings) supporting an MPCA decision to hold a contested case hearing. Failure to comply with these rules exactly may result in a denial of the request. To the extent known, the petitioner may also submit a list of prospective witnesses to be called at a hearing, a proposed list of publications, references, or studies to be introduced at a hearing and the approximate time required for the petitioner to present the matter at a hearing. The decision whether to hold a contested case hearing will be made under Minn. R. 7000.1900.
Description of TMDL Wasteload Allocation (WLA) Modifications

This NPDES/SDS Permit authorizes the modification of the TMDL WLAs listed below due to construction of the DeGraff WWTF. Expansion of the WLAs will not contribute to downstream impairments because permit limits and conditions are protective of water quality standards. The South Metro Mississippi River TSS TMDL includes reserve capacity which was specifically designed to be available to accommodate new WWTPs built to serve unsewered communities.

Affected Total Maximum Daily Load WLAs:

- **Chippewa River Watershed TMDL (bacteria, TSS)** - approved June 7, 2017
- **Chippewa River Watershed Turbidity TMDL** - September 29, 2014
- **Chippewa River Fecal Coliform TMDL** - January 11, 2007
- **Lower Minnesota River – Low Dissolved Oxygen TMDL**
- **South Metro Mississippi TMDL Turbidity Impairment** - approved April 26, 2016

Because this is a newly proposed WWTP, wasteload allocations (WLAs) were not assigned in the relevant TMDLs listed above.

**Fecal Coliform/E.Coli**

**Chippewa River Fecal Coliform and Chippewa River Watershed TMDLs**

For the Chippewa River Fecal Coliform TMDL, the expanded fecal coliform WLA for the DeGraff WWTF is 2.195 billion organisms per day. For the Chippewa River Watershed TMDL, the expanded E.coli WLA is 1.383 billion organisms per day. The expanded WLAs were calculated using the proposed maximum discharge volume of 0.290 million gallons per day (mgd). The addition of 0.290 mgd is equal to 0.445 cubic feet per second (cfs) to the Chippewa River Watershed and the Minnesota River Basin.

Expansion of the WLAs will not contribute to the Fecal Coliform impairment in the Chippewa River Watershed or the Minnesota River Basin because the NPDES/SDS Permit’s Fecal Coliform permitted discharge limit of 200 organisms per 100 ml is consistent with the water quality standard.

**Total Suspended Solids (TSS)**

**Chippewa River Watershed Turbidity TMDL and Chippewa River Watershed TMDL**

Expansion of the WLAs will not contribute to the TSS impairments in the Chippewa River Watershed and the Minnesota River Basin because the NPDES/SDS Permit’s 45 mg/L TSS proposed discharge limit will ensure that the discharge does not have reasonable potential to cause or contribute to an exceedance of the applicable 65 mg/L TSS water quality standard.

- Maximum Daily Flow: 1.78 acres x 0.5 ft = 0.89 ac-ft x 325,851 g/ac-ft = 0.29 mgd
- TSS: 45 mg/L x 0.29 mgd x 3.785 = 49.39 kg/day = 108.86 lbs/day ÷ 2,000 = 0.05 tons/day

**South Metro Mississippi River TSS TMDL**

The South Metro Mississippi River TSS TMDL included reserve capacity for the upgrading of unsewered communities such as the city of DeGraff. Using a portion of this reserve capacity, WLAs of 49.39 kilograms per day (kg/day) and 1,331 kilograms per year (kg/yr) were calculated for the DeGraff WWTF. The annual WLA for the proposed facility is a function of the facility’s 0.290 mgd average wet weather design flow and the 45 mg/L calendar month average TSS effluent limit.

- Maximum Daily Flow: 1.78 acres x 0.5 ft = 0.8 ac-ft x 325,851 g/ac-ft = 0.29 mgd
- Daily WLA = 0.290 mgd x 45 mg/L TSS x 3.785 L/gal = 49.39 kg/day
- Annual WLA = 0.0214 mgd x 45 mg/L x 3.785 L/gal x 365.25 day/year = 1,331 kg/year