



**Minnesota Pollution
Control Agency**

520 Lafayette Road North
St. Paul, MN 55155-4194

Municipal Surface Water Discharge Application

NPDES/SDS Permit Program

Doc Type: Permit Application

Instructions on Page 5

The National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit Program regulates wastewater discharges to land and surface waters. This application applies to municipal and privately owned facilities that treat domestic wastewater for disposal to a surface water of the state.

Complete the application by typing or printing in black ink. Attach additional sheets as necessary. For more information, please contact the Minnesota Pollution Control Agency (MPCA) at: In Metro Area: 651-296-6300 or Outside Metro Area: 800-657-3864.

Permittee name: _____ **Permit number:** MN

Wastewater Treatment and Discharge

1. Please complete the following table by listing all **existing** facility components:

Existing component	Quantity	Date of construction/ installation	Additional information

2. What is the classification of your facility? ☐ A ☐ B ☐ C ☐ D

3. Are there any plans to make changes to the facility within the next five years? ☐ Yes ☐ No

If yes, please complete the following table by listing all of the **proposed** changes to the facility components:

New and/or removed component	Quantity	Estimated date of installation/ removal	Additional information

4. Design flows of the existing and/or proposed facility:

	Existing	Proposed (if applicable)
Average wet weather design flow (AWW)	mgd	mgd
<i>If available, please provide:</i>		
Average annual design flow (AAD)	mgd	mgd
Average dry weather design flow (ADW)	mgd	mgd
Peak hourly wet weather flow (PHWW)	mgd	mgd

mgd = million gallons per day

5. Design influent concentration in milligrams per liter and/or the design loading in pounds per day for the following parameters:

Parameter	Existing		Proposed (if applicable)	
5-day Biochemical Oxygen Demand (BOD ₅)	mg/L	lbs/day	mg/L	lbs/day
Total Suspended Solids (TSS)	mg/L	lbs/day	mg/L	lbs/day
Total Phosphorus	mg/L	lbs/day	mg/L	lbs/day
Ammonia Nitrogen	mg/L	lbs/day	mg/L	lbs/day

mg/L = milligrams per liter

6. Type of discharge (check one):

Existing: ☐ Continuous ☐ Intermittent ☐ Periodic/Seasonal

Proposed (if applicable): ☐ Continuous ☐ Intermittent ☐ Periodic/Seasonal

If the discharge is intermittent or periodic/seasonal, specify below:

	Existing	Proposed (if applicable)
Number of times per year when discharge occurs		
Average duration of each discharge		
Average flow per discharge		
Months in which discharge occurs		

7. Does the facility have the ability to measure effluent flow (i.e., effluent flow meter)? ☐ Yes ☐ No

Collection System

8. Inflow/Infiltration

- a. Do you have any known sources of inflow and infiltration? ☐ Yes ☐ No

If yes, please describe: _____

- b. Explain any work that has been completed in the last five years to minimize inflow and infiltration:

- c. Explain any planned efforts to minimize inflow and infiltration:

9. Does the facility contain any designed bypass points? ☐ Yes ☐ No

If yes, how many: _____

Also, if yes, answer the following questions regarding each bypass point:

- Is/are the bypass structure(s) ☐ Manual or ☐ Automatic?
- Is/are the bypass structure(s) ☐ Controlled and ☐ Kept locked?
- Was/were the bypass structures(s) approved in the plans and specifications? ☐ Yes ☐ No

10. Releases (Provide the number of releases/bypass/overflow incidents in the last five years.)

Date (mm/dd/yy)	Discharge point description	Location	Flow (total gallons)	Receiving water (if applicable)	Degree of treatment	Reason

11. Areas serviced by the facility:

Name of entity	Population served	Is this portion of the collection system owned and operated by the entity?
		<input type="checkbox"/> Yes <input type="checkbox"/> No
		<input type="checkbox"/> Yes <input type="checkbox"/> No
		<input type="checkbox"/> Yes <input type="checkbox"/> No
		<input type="checkbox"/> Yes <input type="checkbox"/> No

Pretreatment

12. Does the facility influent waste stream include wastewater/residual waste from a municipal or industrial water treatment plant?

☐ Yes ☐ No If yes, provide the following:

- Name of water treatment facility: _____
- Type of water treatment facility (reverse osmosis, filter, etc.): _____
- Any potential wastes (arsenic, radium, etc.) that may impact the facility: _____
- The flow in gallons per week or gallons per month: _____

13. Does the facility have, or is it subject to, a formally delegated pretreatment program? ☐ Yes ☐ No

14. Provide a list of all SIUs and CIUs that discharge to the facility:

Name	Total average flow (mgd)	Flow from process wastewater (mgd)	Flow from non- process wastewater (mgd)	Principal products or raw materials used	Considered a SIU?	Is there currently a control mechanism and/or local limits?	Is the IU subject to Categorical Standards?
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

15. Has a completed *Pretreatment Notification of a Significant Industrial User's Form* been submitted to the Minnesota Pollution Control Agency (MPCA) for all of the above listed SIUs? ☐ Yes ☐ No
16. Do you anticipate significant changes in volume or quality of discharge from existing industrial users to the facility?
☐ Yes ☐ No If yes, please describe: _____

17. Do you anticipate any new industrial users to the facility in the next five years?
☐ Yes ☐ No If yes, please describe: _____

18. Have any of the industrial users caused or contributed to any problems (e.g. upsets, interference) at the facility in the past three years? ☐ Yes ☐ No If yes, please describe each episode, including the name of the industrial users and the events which caused the problems.

19. Is the facility subject to the Hazardous Waste Management program under the Resource Conservation and Recovery Act (RCRA), or does it accept any known hazardous waste material? ☐ Yes ☐ No

If yes, attach a copy of your existing RCRA permit per 40 CFR 122.21 regulations, including facility maps showing the location at which hazardous waste enters the treatment facility; copies of any sampling results of hazardous waste taken at your facility, etc.

Sampling Requirements

This section must be completed for municipal facilities with an average wet weather design flow equal to or greater than 0.100 mgd.

20. A facility discharge sample needs to be analyzed for the parameters listed below. Complete the table with the sample results.

Parameter	SD:		SD:		SD:	
	Results	Units	Results	Units	Results	Units
Total Dissolved Solids (TDS)						
Ammonia (as N)						
Total Kjeldahl Nitrogen (TKN)						
Nitrate plus Nitrate Nitrogen						

Attachments

- ☐ **Pond Attachment:** If your facility has a pond treatment component (i.e., primary secondary, polishing, cooling, etc.), complete the *Pond Attachment*.
- ☐ **Biosolids Attachment:** If your facility generates biosolids (sewage sludge) or if you intend to become a preparer of biosolids within the next five years, complete the *Biosolids Attachment*.

Review the application and ensure all requested items are submitted with this application.

Please make a copy for your records.

Refer to the *Transmittal Form* for mailing instructions.

Instructions

Question 1. Complete the table with all of the existing facility components. Add in the number of components, date the components were constructed and additional information providing further clarification of the facility components. The additional information must include, if applicable, but is not limited to pond size (in acres), pond depth, type of pond liner, component size and/or detention time, type of nutrient removal and chemicals used in treatment process.

Areas of facility to include:

- Lift Stations
- Preliminary Treatment
- Primary Treatment
- Biological/Secondary Treatment
- Nutrient Removal
- Advanced Tertiary Treatment
- Disinfection
- Biosolids Treatment

Question 2. Refer to Minn. R. ch. 9400.0500 for information on determining facility class.

Example:

Existing component	Number	Date of construction/installation	Additional information
Bar Screen	2	September 1984	1 mechanical, 1 manual
Primary Clarifier	2	September 1984	
Activated sludge, conventional	3	September 1984	
Secondary Clarifier	2	September 1984	
Chemical addition P removal	1	June 2001	Alum addition
Chlorination	1	September 1984	Chlorine Gas
Dechlorination	1	April 1995	Sulfur dioxide gas
Sludge holding tank	1	April 1995	
Primary anaerobic digester	2	April 1995	
Secondary anaerobic digester	2	April 1995	
Lift stations	3	1984, 1995, 2004	One main and 2 smaller.

Question 3. Changes to the facility components and/or design flow may result in different/stricter limits and/or a facility classification change. Complete the table with all the proposed facility components. Refer to the instructions for Question 1.

Question 4. Refer to the MPCA Design Flow and Loading Determination Guidelines for a definition of each flow type. The MPCA Design Flow and Loading Determination Guidelines for Wastewater Treatment Plants can be found at:
<http://www.pca.state.mn.us/publications/wq-wwtp5-20.pdf>.

Question 8. Inflow and infiltration are major defects in collection systems that can result in failure of the system as well as hydraulic overloading. Inflow is stormwater making its way into the collection system through roof leaders, foundation drains, manhole covers, catch basins and surface runoff. Infiltration is groundwater making its way into the collection system through cracks, leaky joints, roots, etc. Efforts to minimize inflow and infiltration, for example, are televising, smoke testing, replacement, house inspections ordinance revision, etc.

Question 10. Any release, bypass, or overflow where untreated wastewater is discharged from the collection system or treatment facility shall be included.

Example:

Date	Discharge Point Description	Location	Flow (total gallons)	Receiving Water (if applicable)	Degree of Treatment	Reason
8/12/2006	Lift station #1	4 th Avenue and Main Street	2,300	Storm Sewer to Little River	None	Plugged sewer line-industry disposed of towels

Question 11. Provide the name and population of the municipalities, private communities, unincorporated areas, etc. served by the facility. If the facility serves a sewer district list all the communities in the district. Indicate if the portion of the collection system is owned and operated by the entity instead of the Permittee.

Example:

Name of Entity	Population Served	Is this portion of the collection system owned and operated by the entity?
Lakes Development	53	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Question 12. If the facility receives wastewater/residual waste from water treatment facilities (ex. filter backwash, lime and ion-exchange softening wastes, and membrane treatment reject concentrate), please indicate the name of the facility and the potential pollutants present in the discharge which may affect the wastewater treatment plant.

Question 13. Delegated Pretreatment Program: Federal regulations and State rules require Publicly Owned Treatment Works (POTWs) with one or more significant industrial users (SIUs) and have a design flow of five million gallons per day or more to develop delegated pretreatment programs.

Question 14. A *Significant Industrial User* (SIU) is defined as any industrial user that discharges an average of 25,000 gallons per day or more of processed wastewater to the wastewater treatment facility, excluding sanitary, noncontact cooling, and boiler blowdown wastewater; process wastewater which makes up at least five percent of the facility's design BOD loading; or has the potential, in the opinion of the Permittee or MPCA, to adversely impact the Permittee's treatment works or the quality of the effluent.

A *Categorical Industrial User* (CIU) is defined as a user discharging pollutants which are regulated by pretreatment standards established by the EPA which address various processes and activities being performed within the establishment; may or may not have been assigned a standard industrial classification (SIC) number.

Question 15. All facilities are required to complete a "Pretreatment Notification of a SIU" form when the facility identifies a SIU. The form can be obtained online at <http://www.pca.state.mn.us/publications/wq-wwwtp7-21.doc>.)

Question 16. List any anticipated changes at any existing industrial users within the next five-year term of this permit. This would include plans to increase flows, changes or increases in chemical usage, etc.

Question 18. Provide information concerning any problems the facility has experienced that are attributable to discharges from the industrial users. Problems may include upsets or interference at the facility, corrosion in the collection system, or other similar events in the past three years.

Question 20. The sample type shall be consistent with the effluent sample type in the facility's NPDES/SDS Permit. For example, if the facility is required to take 24-hour composite samples at the permitted outfall stations the parameters listed in the table should be analyzed from a 24-hour composite sample. If the facility has more than one permitted outfall a sample must be taken from each outfall. Indicate the permitted Station ID in the table. If the parameters listed in the table are required to be sampled by the facility's current NPDES/SDS Permit, include the most recent sample result. Sample preservation and test procedures for the analysis of the parameters shall conform to 40 CFR Part 136 and Minn. R. 7041.3200.