



Municipal Land Discharge Application

SDS Permit Program

Doc Type: Permit Application

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The State Disposal System (SDS) Permit Program regulates wastewater discharges to land. This application applies to municipal and privately owned facilities that treat domestic wastewater for disposal by land application (i.e., spray irrigation, rapid infiltration basins). Large Subsurface Treatment System (LSTS) facilities complete the Municipal LSTS Application.

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 Disposal

1. Provide a complete description of your existing or proposed facility:

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

3. Design flows of the existing or proposed facility:

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

4. 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

5. Flow of wastewater to be land applied:

a. Seasonal discharges (i.e., spray irrigation, rapid infiltration basins)

Month	Average gallons (5-year average)	Maximum gallons (specify year)
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

b. Provide the total average annual gallons applied: _____

c. Based on recent trends, do you expect an increase in wastewater flows over the next five years? ☐ Yes ☐ No

If yes, please describe: _____

6. Provide a legal description for each land discharge site (spray irrigation, rapid infiltration basin) using the format below.

Site #	Land application method	Legal description (quarter, section, township, range)	County	Acreage	Leased/ Owned	Crop

7. For spray irrigation sites identified in question #6 above, describe crop management, including time of harvest, crop yields and crop rotations over the last five years.

8. Identify anything, other than your wastewater, that is applied to the land discharge site. Specify type and average annual amounts. (e.g. manure, fertilizer, irrigation water, etc.)

9. Describe the runoff protection (if any) provided at all application areas (e.g., dike, collection basin, re-spraying equipment). Please attach a map that indicates the location and specifications of all runoff protection measures.

10. If this is a new land discharge facility please describe all soil types encountered at each site identified in question #6. Attach soils map, soils boring information and logs, slopes, depth to groundwater/bedrock, and any other pertinent information.

11. Are drain tiles present on any of the sites? ☐ Yes ☐ No If yes, minimum depth of drain tile lines? _____

If yes, attach a map of the locations of existing drain tiles, drain tile inlets, discharge points, and monitoring locations for sampling drain tile effluent.

12. Are there any groundwater monitoring wells or piezometers at your facility? ☐ Yes ☐ No

If yes, include the following information for each piezometer or groundwater monitoring well. Attach a map identifying the location of each in relation to your facility:

Unique well number
Legal land description
Indicate if well or piezometer is upgradient or downgradient
Copy of well log for each well
Surveyed elevation of inside riser pipe (where groundwater elevations are measured from) in well casing

13. Were there any changes or additions made to the facility since your last permit issuance (e.g. crop changes, equipment, etc.)?
☐ Yes ☐ No If yes, complete the following table:

New and/or removed component	Quantity	Date of installation/ removal (mm/dd/yy)	Additional information

14. Are any changes or additions to the facility planned in the next five years (e.g. crop changes, equipment, etc.)?
☐ Yes ☐ No If yes, complete the following table:

New and/or removed component	Quantity	Proposed date of installation/ removal (mm/dd/yy)	Additional information

Collection System

15. Inflow/Infiltration

a. Do you have any known sources of inflow and infiltration?

- 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:

16. Does the facility contain any designed bypass points? ☐ Yes ☐ No If yes, how many: _____

a. Is/are the bypass structure(s): ☐ Manual or ☐ Automatic

b. Is/are the bypass structure(s): ☐ Controlled and ☐ Kept locked

c. Was/were the bypass structures(s) approved in the plans and specifications? ☐ Yes ☐ No

17. Have any release/bypass/overflow events occurred in any part of the sanitary collection system in the past five years?

☐ Yes ☐ No If yes, provide the following for each release/bypass/overflow event:

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

18. 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

19. 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:

a. Name of water treatment facility: _____

b. Type of water treatment facility (reverse osmosis, filter, etc.): _____

c. Any potential wastes (arsenic, radium, etc.) that may impact the facility: _____

d. The flow in gallons per week or gallons per month: _____

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

21. 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

22. 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

23. Do you anticipate significant changes in volume or quality of discharge from existing industrial users to the facility?

☐ Yes ☐ No If yes, please describe: _____

24. Do you anticipate any new industrial users to the facility in the next five years?

☐ Yes ☐ No If yes, please describe: _____

25. 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 user and the events which caused the problems.

26. 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.

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. Include the number of lift stations, feet of force main, pond acreage, storage capacity, detention time and operating depth; describe spray irrigation equipment, acres of wetted area at spray sites and number of sites, size and number of rapid infiltration basins cells, etc.

Question 3. Refer to Minn. R. ch. 9400.0500 for information on determining facility class.

Question 3. 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 13. Complete the table with all changes or additions made to the facility since the last permit issuance. 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.

Example:

New and/or removed component	Quantity	Date of installation/removal	Additional information
Chemical addition P removal	1	June 2005	Alum addition
Lift station	1	October 2007	Services Lakes Development.

Question 14. Refer to the instructions for Question 13. Changes to the facility components and/or design flow may result in different/stricter limits and/or a facility classification change. The number of components, date the components are planned to be constructed and/or removed and any additional information should be included.

Question 15. 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 17. Any release, bypass or overflow where untreated wastewater is discharged from the collection system or treatment facility shall be included.

Example:

Date (mm/dd/yy)	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 18. 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 19. 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 20. Delegated Pretreatment Program: Federal regulations and State rules require POTWs with one or more significant industrial users (SIUs) and have a design flow of 5 million gallons per day or more to develop delegated pretreatment programs.

Question 21. 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 22. 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-wwtp7-21.doc>.

Question 23. List any anticipated changes at any existing SIU's within the next 5 year term of this permit. This would include plans to increase flows, changes or increases in chemical usage, etc.

Question 25. Provide information concerning any problems the facility has experienced that are attributable to discharges from the SIUs. Problems may include upsets or interference at the facility, corrosion in the collection system, or other similar events in the past three years.