



**Minnesota Pollution
Control Agency**

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

Municipal LSTS Application

SDS Permit Program

Doc Type: Permit Application

Instructions on Page 4

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 using large subsurface treatment systems (LSTS).

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. Is this a new facility? ☐ Yes ☐ No

If yes, please complete and submit the LSTS Design Guidance Attachments 1-9 and 11 in addition to this application.

2. Is this an existing facility that currently does not have a SDS Permit? ☐ Yes ☐ No

If yes, please complete and submit the LSTS Design Guidance Attachments 1-9 and 11 in addition to this application.

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

Existing component	Quantity	Date of construction/ installation	Additional information

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

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

Please complete the following table by listing all of the **proposed** changes to the facility components:

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

6. 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

7. Design influent concentration in milligrams per liter (mg/L) 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
Ammonia Nitrogen	mg/L	lbs/day	mg/L	lbs/day

8. Does this facility have nitrogen pretreatment? ☐ Yes ☐ No

If yes, does the system use chemical addition? ☐ Yes ☐ No

If yes, indicate what chemical is used: _____

9. Does this facility operate year-round? ☐ Yes ☐ No

If no, specify the approximate dates the facility is in use: _____

10. Please complete the following table by indicating the number of service connections the facility was designed for and the number of those service connections that are currently connected the facility:

Type	Designed	Connected
Residential house		
Mobile home		
Restaurant		
Business		
Campground site		

11. Provide the total average annual gallons currently discharged to the drainfield: _____ Gallons

12. How was the total average annual gallons determined? (examples: flow meter, pump run time, estimation)

13. Do you expect an increase in total average annual gallons discharged to the drainfield in the next five years?

☐ Yes ☐ No If yes, please describe: _____

Groundwater Monitoring Wells

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

If yes, please include the following information for each piezometer or groundwater monitoring well.

- Unique well number
- Legal land description (PLS coordinates)
- Indicate if well or piezometer is upgradient or downgradient
- Copy of well log for each well or piezometer
- Surveyed elevation of inside riser pipe (where groundwater elevations are measured from) in well casing. Also indicate date of last survey and name of the certified land surveyor who conducted the survey

Pretreatment

15. Is this facility a municipally or publicly owned facility? ☐ Yes ☐ No

If yes, complete Questions 16-22.

If no, Questions 16-22 **do not** need to be completed.

16. 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: _____

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

18. Provide a list of all Significant Industrial Users (SIUs) and Categorical Industrial Users (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?	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
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					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

19. Has a completed *Pretreatment Notification of a Significant Industrial User's Form* been submitted to the MPCA for all of the above listed SIUs? ☐ Yes ☐ No

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

☐ Yes ☐ No If yes, please explain: _____

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

☐ Yes ☐ No If yes, please explain: _____

22. 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, describe each episode, including the name of the industrial users and the events which caused the problems.

23. 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, please 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

- ☐ **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, 2. The LSTS Design Guidance Attachments can be found on the MPCA Web site at <http://www.pca.state.mn.us/publications/wq-wwprm8-01.pdf> or by contacting Beckie Olson at 651-757-2123. The attachments are located at the end of the LSTS Design Guidance document.

Question 3. Complete the table with all of the existing facility components. Existing components to include are lift stations, grinder pumps, collection system, septic tanks, drainfield, nitrogen pretreatment, any additional treatment (peat filters, chemical addition). Provide the quantity, 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 the type of collection system (gravity or pressure), type of nitrogen pretreatment, type of drainfield (traditional, chambers, drip line, etc.), square footage of drainfield area, drainfield material, etc.

If your facility is comprised of more than one system, duplicate this table for each additional system.

Example:

Existing component	Quantity	Date of construction/ installation	Additional information
Septic Tank	40	2004	1,000 gallon septic tank at each house
Forcemain	1	2004	2" forcemain to treatment system
Septic Tank	1	2004	6,000 gallon influent tank
Recirculating Sand Filter	2	2004	50' by 100' each
Recirculation Tank	1	2004	6,000 gallons
Denitrification Tank	1	2004	6,000 gallons with acetic acid addition and BIOPAC media
Dosing Tank	1	2004	6,000 gallons
Drainfield	4	2004	20,000 sq. ft. of trenches

Question 4. Refer to Minn. R. ch. 9400.0500 for information on determining facility class.

Question 5. Complete the table with all the proposed facility components. Refer to the instructions for Question 3.

Question 6. 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 10. A service connection is a connection for each individual house, mobile home, campsite, etc. If the facility services a type of connection not listed, for example, a dump station, community laundry or community bathroom/bathhouse, please indicate it in blank spaces provided in the chart.

Question 15. Only municipally owned or publicly owned treatment works need to complete the Pretreatment Section. If the facility is privately owned, serves a housing development or serves a campground the Pretreatment Section does not apply.

Question 18. 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.