Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Industrial Land Discharge of Process Wastewater Application

SDS Permit Program

Doc Type: Permit Application

The State Disposal System (SDS) Permit Program regulates wastewater discharges to land. This application applies to industrial facilities that treat process wastewater for disposal by land application. Any other discharge types will require a different permit 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 _____

Facility Information

1. Principal facility activity: _____
2. Product(s) produced: _____
3. Amount of product produced per Unit Time (such as tons/year, kilograms/day)*.
   Average: _____ Maximum: _____
4. Raw material(s) consumed: _____
5. Amount of product consumed per Unit Time (such as tons/year, kilograms/day)*.
   Average: _____ Maximum: _____

   ***Provide both daily maximum and long-term monthly average expected during the five-year permit term. If an effluent limitation guideline applies and is expressed in terms of production (or other measure of operation) please report the expected actual production rates in the units used in the applicable effluent guideline. Consumptive use and/or production rates should be in sufficient detail so as to aid in the development of technology-based effluent limitations. For new discharges, actual production shall be estimated using projected production.*
6. Standard Industrial Classification (SIC) Code Number (list all that apply):
   _____
7. If established, please indicate what you believe to be the applicable federal effluent limitation guideline(s) for your waste stream(s): 40CFR
   _____
   _____
8. What date did the facility initiate operation? _____

Water Supply

9. What is the source of the intake water supply for the facility?

		Rate of supply (gallons/day)
☐ Municipal water supply, city name:	_____	_____
☐ Ground water, intake location:	_____	_____
☐ Surface water, name:	_____	_____
10. If this is a surface or ground water intake, please provide the Minnesota Department of Natural Resources (DNR) Water Appropriation Permit Number: _____
11. Is the intake water supply chlorinated or otherwise disinfected? ☐ Yes ☐ No
12. Is the intake water supply treated with a scale and/or corrosion inhibitor? ☐ Yes ☐ No

Wastewater Treatment

13. How does the facility dispose of sewage (sanitary wastewater)?
    _____
    _____

14. Does the facility generate process wastewater? ☐ Yes ☐ No

If yes, the process wastewater from the facility is disposed of to: (check all that apply)

☐ Municipal storm sewer ☐ Land

☐ Sanitary sewer ☐ Surface water: _____

☐ Stormwater retention basin or pond ☐ Other (specify): _____

☐ Septic tank/drainfield

15. Provide a complete description of the existing or proposed wastewater treatment system, including the land treatment system. For existing facilities, indicate what changes, if any, have occurred since the last permit was issued.

16. What products, by-products, and wastes are stored at the facility? Describe all storage facilities.

17. Completely describe the type, amount, and fate of all residual solids, sludge, silage, and by-products generated from plant operations and/or wastewater treatment.

18. Provide the flow of wastewater to be land applied. (If this is an existing facility use flow data from the last 5 years)

Flow (gallons)	**Average**	**Maximum**	**Design**
Daily			
Monthly			
Annually			

19. Provide the number of days of storage at peak production rate: _____

20. Complete the table below for each land discharge site. Attach a map with the location of each site.

Existing/ Proposed	**Site name/ID** (LA-001,etc.)	**Legal description** (Township/Range/Section/Quarter)	**County**	**Acreage used**	**Leased/ Owned**	**If leased, owners name and mailing address**

21. For each site, indicate the crop type and how the crop is managed (include crop yields, crop rotations over the past five years and timing of each harvest).

Site name/ID (LA-001, etc.)	**Crop type**	**Crop management**

22. For each site, indicate the application system (number and size of pumps, center pivot, stationary solid set, hand move solid set, wheel roll, traveling gun, ridge and furrow, other; length and size of force-main; length and size of irrigation pipe).

Site name/ID (LA-001, etc.)	**Application system**

23. For each site, indicate the runoff protection measures (dike, collection basin, respraying equipment, other). Attach a map indicating the location and specifications of all runoff protection measures.

Site name/ID (LA-001, etc.)	**Runoff protection measures**

24. For each site, indicate all soil types encountered and information on the slope, depth to groundwater or bedrock and any other information. Attach a soil map and soil boring logs.

Site name/ID (LA-001, etc.)	**Soil types**	**Soil information**

25. Are any draintiles present on any of the sites? ☐ Yes ☐ No

    a. If yes, provide the minimum depth of tiled area: _____

    b. Provide a map of the locations of existing tiles, tile inlets, tile discharge points, monitoring locations for sampling the tile line discharges, and any monitoring devices present in the tile system.

Groundwater Monitoring

26. Are any groundwater monitoring wells or lysimeters present at the facility? ☐ Yes ☐ No

    If yes, complete the following table. Attach a map identifying well locations.

Local name/MPCA identifying number	**Unique well number**	**Well location**	**Upgradient or downgradient**	**Depth of water table**

27. Have there been limit exceedances in any of the monitoring wells? ☐ Yes ☐ No

    a. If yes, describe: _____

    b. Is there a plan to address the exceedances? _____

Chemical Additives

28. List below all chemical additives that are used or proposed to be used at the facility. This includes the process reagents, flocculants, descalants, corrosion inhibitors, biocides, wastewater treatment chemical additives, chlorine or other disinfectants, detergents, cleaning products, chemical dust suppressants, freeze conditioning agents, etc.

Chemical	**Purpose**	**Location of chemical addition in process** (e.g., to raw water supply, at greensand filter, before RO unit #2, etc.)	**Amount/duration/frequency of addition** (i.e., continuous or slug dosing. If slug dosing give amount/duration and frequency of addition; e.g., slug dosing 13.5 gal/3hours, once every two weeks)	**Average rate of use** (weight or volume per day)	**Maximum rate of use** (weight or volume per day)

Attach the Material Safety Data Sheets, complete product labels and any other information on chemical composition, aquatic toxicity, human health, and environmental fate for each chemical additive.

An Additional Chemical Additives Attachment is available on the MPCA website at http://www.pca.state.mn.us/water/permits/index.html if more space is needed.

Water Quality Sample Results

29. Attach a list of all pollutants known or reasonably believed to be present at each facility discharge point and provide sample results for those pollutants.

    Pollutants may include, but are not limited to, total suspended solids, biochemical oxygen demand, pH, fecal coliform, temperature (heat), nutrients (phosphorus, ammonia, nitrate, nitrite), metals, salts, cyanide, residual chlorine, fluoride, oil and grease, polychlorinated biphenyls, phenols, polynuclear aromatic hydrocarbons, volatile organic compounds, pesticides and/or radioactivity. Clearly indicate the date, location where sample was taken, types of wastewater sampled, and method(s) of sampling (e.g. grab, composite) for each sample.

    At a minimum, sample results must be provided for total suspended solids (TSS), biochemical oxygen demand (BOD), fecal coliform (if believed present or sanitary wastes will be discharged), pH, and total phosphorus, irrespective of what might be required by an existing permit.

    If this is an application for reissuance of an existing permit, review your existing NPDES/SDS permit to see if it has special testing requirements as part of the application for reissuance process.

30. Certified laboratory analyzing samples:

Laboratory	**Sample type** (water or soil)	**Minnesota Department of Health certification number**

Stormwater

31. Is the facility covered by an MPCA stormwater NPDES permit? ☐ Yes ☐ No

    If yes, indicate the permit number (if stormwater discharges are authorized under the stormwater general permit give unique identifying number rather than general permit number): _____

32. Does stormwater contact **any** raw or processed materials, finished products, industrial waste, byproducts, or any other type of materials at the facility? ☐ Yes ☐ No

    If yes, describe these materials: _____

33. Is any vehicle maintenance, transportation equipment cleaning, or airport deicing conducted at the facility? ☐ Yes ☐ No

34. Indicate where stormwater from the facility discharges to: _____

35. Summarize any treatment or best management practices that are used to regulate stormwater discharges at the facility:

Attachments

☐ **Pond Attachment:** If your facility has a pond treatment component (i.e., primary, secondary, aerated, polishing, cooling, etc.), complete the Pond 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.