



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

Purpose: 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.

Instructions: 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.

- Review the application to ensure all requested items are submitted with this application.
- Please make a copy for your records.
- Refer to the *Transmittal Form* for mailing instructions.

Permittee name: Enbridge Energy, Limited Partnership **Permit number:** MN

Facility information

- Principal facility activity: Oil Transmission Pipeline
- Product(s) produced: Transport of crude oil from Canada
- Amount of product produced per Unit Time (such as tons/year, kilograms/day)*.
 Average: _____ Maximum: 760,000 barrels per day (bpd)
- Raw material(s) consumed: NA
- Amount of product consumed per Unit Time (such as tons/year, kilograms/day)*.
 Average: NA Maximum: NA
**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.*
- Standard Industrial Classification (SIC) Code Number (list all that apply):
4612
- If established, please indicate what you believe to be the applicable federal effluent limitation guideline(s) for your waste stream(s): 40CFR Part 122.41, 122.42, 136, 403 and 503
- What date did the facility initiate operation? TBD

Water supply

- What is the source of the intake water supply for the facility?

	Source	Rate of supply (gallons/day)
<input type="checkbox"/> Municipal water supply, city name: _____	See Section 4.0 and Attachment F of the Supplement.	See Section 4.0 and Attachment F of the Supplement.
<input checked="" type="checkbox"/> Ground water, intake location: _____	See Section 4.0 and Attachment F of the Supplement.	See Section 4.0 and Attachment F of the Supplement.
<input checked="" type="checkbox"/> Surface water, name: _____	See Section 4.0 and Attachment F of the Supplement.	See Section 4.0 and Attachment F of the Supplement.

10. If this is a surface or ground water intake, please provide the Minnesota Department of Natural Resources (DNR) Water Appropriation Permit Number: 2018-3690 and 2018-3420
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)?
No sanitary wastewater will be discharged at this facility.
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.
See Section 8.0 and Attachments J and K of the Supplement.
16. What products, by-products, and wastes are stored at the facility? Describe all storage facilities.
See Sections 9.0 and 10.0 of the Environmental Protection Plan which is provided as Attachment C of the Supplement.
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.
See Section 3.0 of the Supplement.

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

Flow (gallons)	Average	Maximum	Design
Daily	See Attachments E and F of the Supplement	See Attachments E and F of the Supplement	See Attachments E and F of the Supplement
Monthly	See Attachments E and F of the Supplement	See Attachments E and F of the Supplement	See Attachments E and F of the Supplement
Annually	See Attachments E and F of the Supplement	See Attachments E and F of the Supplement	See Attachments E and F of the Supplement

19. Provide the number of days of storage at peak production rate: NA
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
See Attachme nts E and F of the Supplem ent	See Attachments E and F of the Supplement	See Attachments E and F of the Supplement	See Attachment s E and F of the Supplemen t	See Attachm ents E and F of the Supple ment	See Attachm ents E and F of the Supple ment	See Attachments E and F of the Supplement

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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
NA		Crop watering is not proposed.

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
NA	Crop watering is not proposed.

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
See Attachment G of the Supplement	See Attachment G of the Supplement

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
See Attachment G of the Supplement	See Attachment G of the Supplement	See Attachment G of the Supplement

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

- If yes, provide the minimum depth of tiled area: Water discharge and infiltration areas are not proposed near draitiles.
- 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

Water discharge and infiltration areas are not proposed near monitoring wells.				

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

a. If yes, describe: NA

b. What is the plan to address the exceedances?

Chemical additives

28. Go to the MPCA chemical additive webpage at: <http://www.pca.state.mn.us/a6krka9> to find the documents necessary to complete the approval process. Your additives will **not** be approved for use until you complete this process. MPCA approval is required for any additives that are new, increasing in usage, or not previously approved. 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, freeze conditioning agents, etc.

Chemical	Purpose	Location of chemical addition in process	Frequency of addition	Type of application (slug dosing or continuous feed)	Average rate of use (weight or volume per day)	Maximum rate of use (weight or volume per day)	Previously approved? Yes or No	Date of approval (mm/dd/yyyy)
Sodium Hypochlorite 12.5%	Oxidize soluble iron and manganese	Prior to greensand filter	Continuous	Continuous	24 gallons per day (assuming 24hr operation)	72 gallons per day (dependent on flowrate and influent concentrations)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Chlorine Tablets	Oxidize dissolved iron and manganese	Immediately before influent holding tanks, before infiltration	Addition required as tablets are consumed over time	Addition required as tablets are consumed over time	Dependent on actual processing rates, water quality	Dependent on actual processing rates, water quality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Sodium Sulfate Tablets	Dechlorination, if no carbon is used within treatment train	After greensand media filtration and bag filters, but before circulation loop	Addition required as tablets are consumed over time. Tablets will not be used if carbon is present after bag filtration in order to prevent duplicate dechlorination methods	Addition required as tablets are consumed over time. Tablets will not be used if carbon is present after bag filtration in order to prevent duplicate dechlorination methods	Dependent on actual processing rates, water quality	Dependent on actual processing rates, water quality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
							<input type="checkbox"/> Yes <input type="checkbox"/> No	

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.

9. Do you use chemical dust suppressants at your facility? Yes No

If yes, fill out table below:

Product name	Location of use	Frequency of use	Average rate of use	Maximum rate of use
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			(weight or volume per day)	(weight or volume per day)
NA				

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 dust suppressant. Chemical dust suppressants are approved separately from the process required in question 28.

Water quality sample results

30. 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.

31. Certified laboratory analyzing samples:

Laboratory	Sample type (water or soil)	Minnesota Department of Health certification number
See Attachment A of the Supplement		

Stormwater

32. 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):

Application for coverage under the general stormwater permit will be submitted 30 days prior to construction per agency conversation; coverage is expected.

33. 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:

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

35. Indicate where stormwater from the facility discharges to: Various conveyances along the linear corridor.
36. Summarize any treatment or best management practices that are used to regulate stormwater discharges at the facility:
See Enbridge's Environmental Protection Plan which is provided as Attachment C of the Supplement. Enbridge's Stormwater Pollution Prevention Plan is available upon request.

Attachments

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