

National Pollutant Discharge Elimination System/State Disposal System**MN0071366**

Permittee: Enbridge Energy Limited Partnership
Facility name: Enbridge Energy Line 3 Replacement Project
Receiving water: Multiple – See facility description
City or Township: Multiple – See facility description
County: Kittson, Marshall, Pennington, Red Lake, Clearwater, Hubbard, Wadena, Cass, Aitkin, St. Louis, and Carlton
Issuance date: TBD
Expiration date: TBD

The state of Minnesota, on behalf of its citizens through the Minnesota Pollution Control Agency (MPCA), authorizes the Permittee to operate a disposal system at the facility named above and to discharge from this facility to the receiving water named above, in accordance with the requirements of this permit.

The goal of this permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with the U.S. Clean Water Act, Minnesota statutes and rules, and federal laws and regulations.

This permit is effective on the issuance date identified above. This permit expires at midnight on the expiration date identified above.

Signature: ([REDACTED])

for the Minnesota Pollution Control Agency

Laura Bishop
Commissioner

Submit eDMRs

Submit via the MPCA e-Services at
https://rsp.pca.state.mn.us/TEMPO_RSP/Orchestrate.do?initiate=true

Submit WQ reports to:

Electronically: wq.submittals.mPCA@state.mn.us

Include *Water quality submittals form*:
<https://www.pca.state.mn.us/sites/default/files/wq-wwprm7-71.docx>

Or, by mail:

Attention: WQ Submittals Center
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

*Whole Effluent Testing (WET) and Pretreatment Annual Reports
must be mailed to the WQ Submittals Center*

Questions on this permit?

For eDMR and other permit reporting issues, contact:
Jennifer Satnik (jennifer.satnik@state.mn.us) 651-757-2692

For specific permit requirements, please refer to:

Craig Weingart (craig.weingart@state.mn.us) 218-302-6650

Wastewater Permit Program general questions, contact:

MPCA, 651-282-6143 or 1-800-657-3938

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1. Permitted facility description

The Enbridge Energy Line 3 Replacement (L3R) Project consists of approximately 355 miles of new 36-inch-diameter pipeline traversing the states of North Dakota, Minnesota, and Wisconsin, and terminating at the existing Enbridge Superior terminal facility near Superior, Wisconsin. This permit does not cover the segments of the line that cross into Fond Du Lac Band of Lake Superior Chippewa Reservation. Further details on the route can be found in the Fact Sheet, and the map below.

This NPDES/SDS permit authorizes the discharge of waters associated buoyancy control and hydrostatic testing of new pipeline. Enbridge will seek a separate permit for authorization to discharge waters associated with construction stormwater. Hydrostatic testing is done to test the integrity of the pipeline. It involves filling the new pipeline segments with water, raising the internal pressure level, and holding that pressure for a specific period of time per U.S. Department of Transportation specifications. Buoyancy control water may be introduced when using HDD and push-pull construction methods to temporarily maintain the pipe in place during the installation process. More information on each discharge type can be found in the Fact Sheet.

This permit authorizes 23 surface water discharge locations to the following waterbodies (may be more than one discharge at a given waterbody): Red River, Tamarac River, Middle River, Red Lake River, Clearwater River, Lost River, Island Lake, Shell River, Crow Wing River, Clear (Eagle) Lake, Pine River, Willow River, Mississippi River, East Savanna River, Chub Lake, Snake River, Daggett Brook, Lake George, and the St. Louis River. The number of SD stations in the permit goes up to 27, because some locations have been removed, and are no longer authorized for use. For tracking purposes, the numbering was not changed. Discharges associated with each individual activity (i.e., HDD buoyancy control, HDD pre-test, mainline hydrostatic test) will occur once; however, because these activities do not occur concurrently, additional separate discharges could occur at a surface water depending on the number of activities proposed at each discharge location. Additional discharges may also occur at a given surface water if a different discharge location is unavailable. The pipe is unused, and has had no contact with petroleum. The source water used for each surface water discharge will go back to the water from which it was appropriated, or the water may be discharged to an upland location for infiltration as described below. Water sourced from groundwater will not be discharged to surface waters. Each discharge will be treated such that it will meet the limits and monitoring section of this permit.

This permit authorizes 26 upland discharge locations used for infiltration. The number of stations goes to 27, because some locations have been removed, and are no longer authorized for use. For tracking purposes, the numbering was not changed. Discharges associated with each individual activity (i.e., push-pull buoyancy control, HDD buoyancy control, HDD pre-test, mainline hydrostatic test) will occur once; however, because these activities do not occur concurrently, additional separate discharges could occur at an infiltration site depending on the number of activities proposed at each discharge location. Additional discharges may also occur if other sites are not available. The facility has submitted an Infiltration Plan (Plan) for discharges to upland areas that describes the operation and maintenance requirements for the upland discharge areas. This Plan has been incorporated into the permit by reference and shall direct the actions to be taken to maintain and prevent unauthorized discharges from the application areas. Any changes to the Plan, to accommodate unexpected conditions, shall be submitted to the MPCA for review and approval.

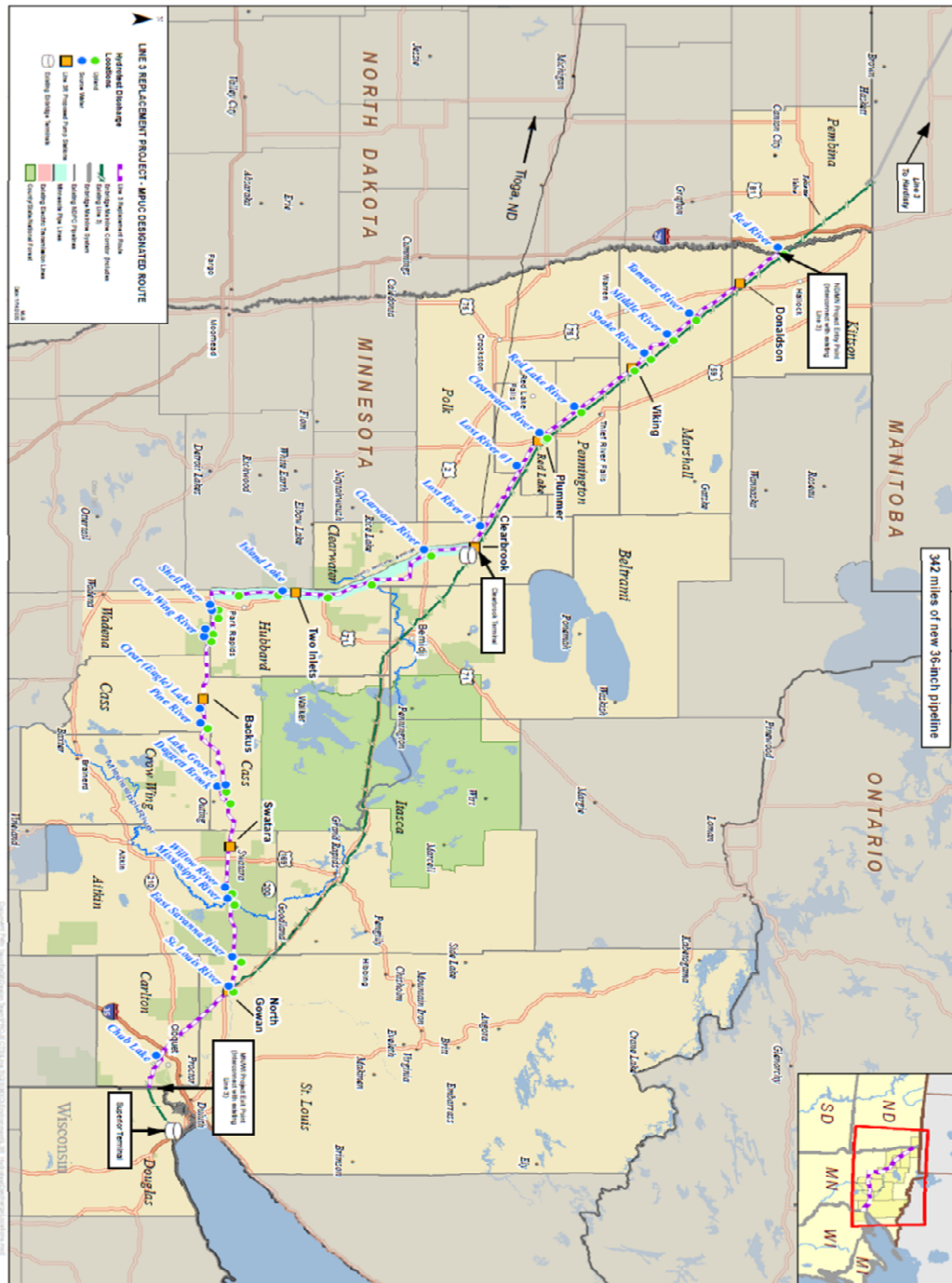
A draft preliminary anti-degradation determination was completed as part of the proposed facility application. A copy of the draft determination can be found in the Fact Sheet.

Changes to the facility may result in an increase in pollutant loading to surface waters or other causes of degradation to surface waters. If a change to the facility will result in a net increase in pollutant loading or other causes of degradation that exceed the maximum loading authorized through conditions specified in the existing permit, the changes to the facility are subject to antidegradation requirements found in Minn. R. 7050.0250 to 7050.0335.

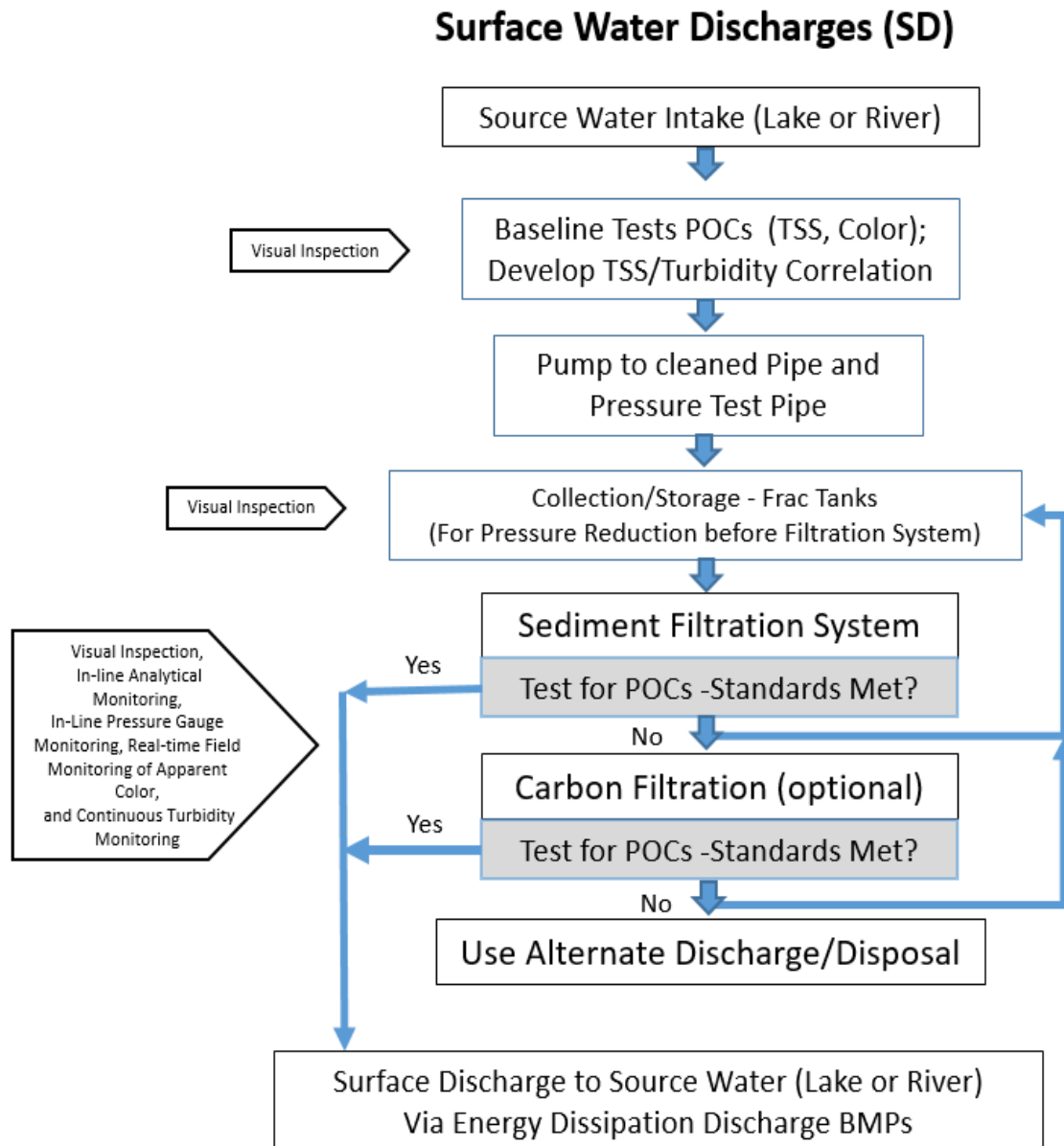
This Permit also complies with Minn. R. 7053.0275 regarding anti-backsliding which states, any point source discharger of sewage, industrial, or other wastes for which a NPDES permit has been issued by the MPCA that contains effluent limits more stringent than those that would be established by Minn. R. 7053.0215 to 7053.0265 shall continue to meet the effluent limits established by the permit, unless the permittee establishes that less stringent effluent limits are allowable pursuant to federal law, under section 402(o) of the Clean Water Act, United States Code, title 33, section 1342.]

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2. Location map of permitted facility

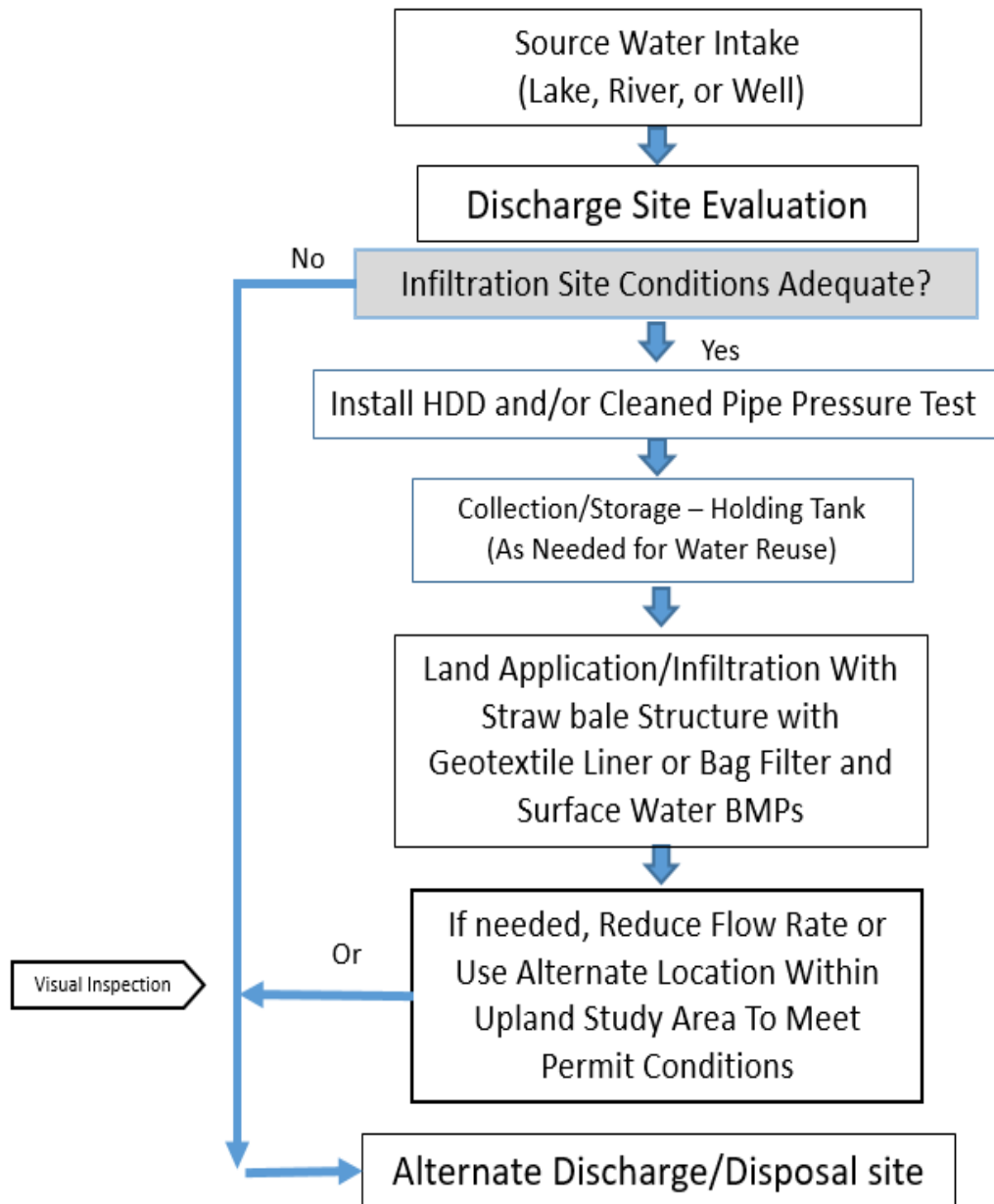


3. Flow diagram

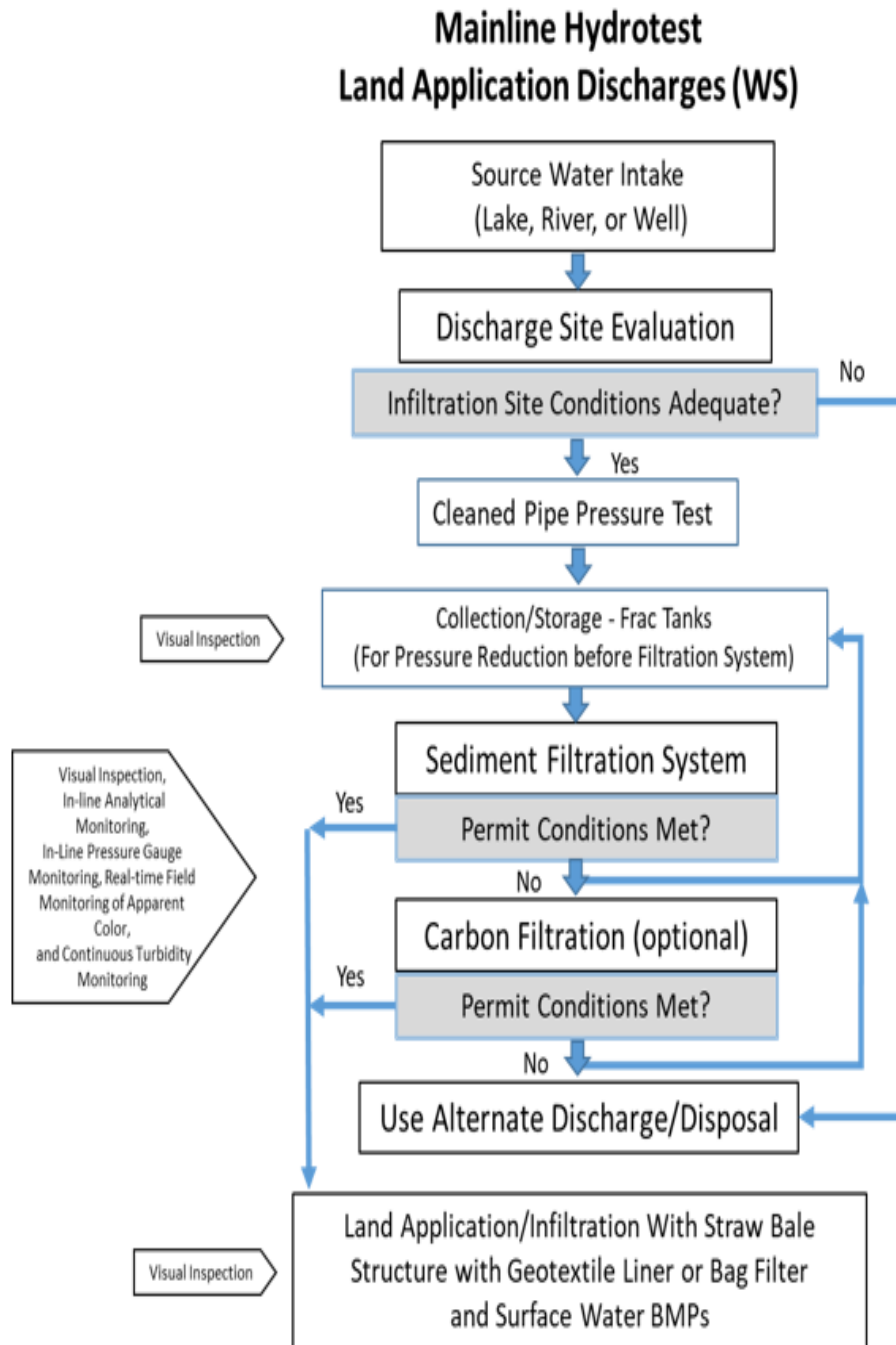


The figure above is a generalized process flow diagram for surface water discharges. Included is an overview of the generation, treatment, and oversight conditions applied during the process.

HDD Hydrotest and HDD Buoyancy Control Land Application Discharges (WS)

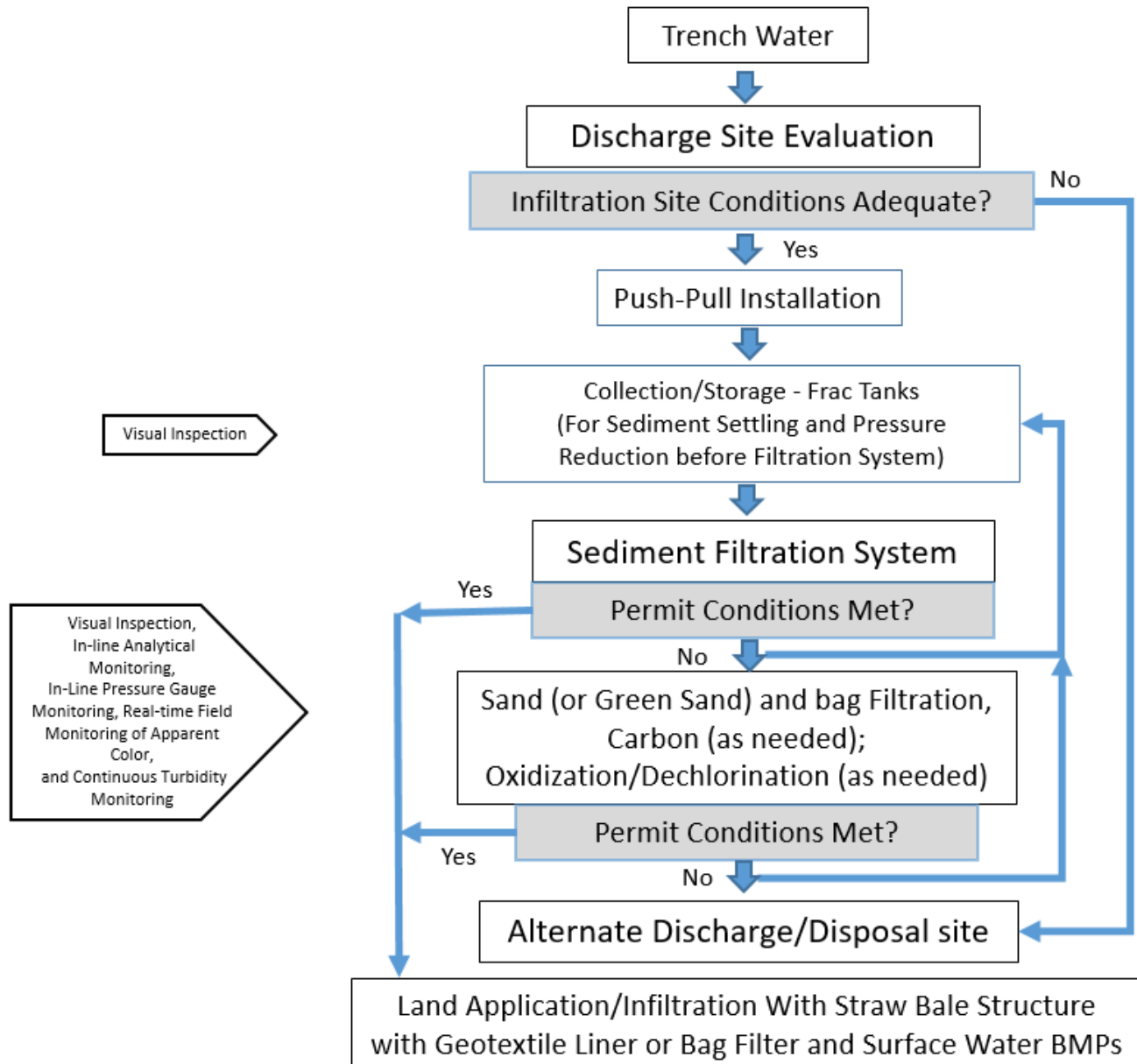


The figure above is a generalized process flow diagram for HDD hydrostatic test (hydrotest) and HDD buoyancy control land application discharges. Included is an overview of the generation, treatment, and oversight conditions applied during the process.



The figure above is a generalized process flow diagram for mainline discharges to land application sites. Included is an overview of the generation, treatment, and oversight conditions applied during the process.

Push-Pull Buoyancy Control Land Application Discharges (WS)



The figure above is a generalized process flow diagram for push-pull buoyancy control discharges to land application sites. Included is an overview of the generation, treatment, and oversight conditions applied during the process.

4. Summary of stations and station locations

Station	Type of station	Local name	PLS location
LA301	Application Site, Spray with Soils Tests	Upland discharge - Red River (milepost 802.1)	T160N, R50W, S09
LA302	Application Site, Spray with Soils Tests	Upland Discharge - Tamarac River (milepost 828.7)	T157N, R47W, S16
LA303	Application Site, Spray with Soils Tests	Upland Discharge - Middle River (milepost 836.2)	T156N, R46W, S18
LA304	Application Site, Spray with Soils Tests	Upland Discharge - Snake River (milepost 843.2)	T155N, R46W, S12
LA305	Application Site, Spray with Soils Tests	Upland Discharge - Red Lake River (milepost 864.8)	T153N, R43W, S32
LA306	Application Site, Spray with Soils Tests	Upland Discharge - Clearwater River (milepost 875.8)	T151N, R42W, S09
LA307	Application Site, Spray with Soils Tests	Upland Discharge - Clearwater River (milepost 922.1)	T147N, R37W, S21
LA308	Application Site, Spray with Soils Tests	Upland Discharge - Mississippi River (milepost 941.2)	T145N, R36W, S35
LA309	Application Site, Spray with Soils Tests	Upland Discharge - Well 718159 (milepost 952.5)	T143N, R35W, S20
LA310	Application Site, Spray with Soils Tests	Upland Discharge - Well 763975 (milepost 964.4)	T141N, R35W, S20
LA311	Application Site, Spray with Soils Tests	Upland Discharge - Well 232423 (milepost 973.9)	T139N, R35W, S06
LA313	Application Site, Spray with Soils Tests	Upland Discharge - Shell River (milepost 983.5)	T139N, R35W, S35
LA314	Application Site, Spray with Soils Tests	Upland Discharge - Shell River (milepost 985.8)	T139N, R34W, S32
LA315	Application Site, Spray with Soils Tests	Upland Discharge - Well 465115 (milepost 991.1)	T138N, R34W, S01
LA316	Application Site, Spray with Soils Tests	Upland Discharge - Well 465115 (milepost 993.1)	T138N, R33W, S05
LA317	Application Site, Spray with Soils Tests	Upland Discharge - Mississippi River (milepost 1069.4)	T51N, R24W, S27
LA318	Application Site, Spray with Soils Tests	Upland discharge - Willow River (milepost 1066.6)	T51N, R24W, S31
LA319	Application Site, Spray with Soils Tests	Upland discharge - East Savanna River (milepost 1085.7)	T51N, R21W, S20
LA320	Application Site, Spray with Soils Tests	Upland Discharge - Pine River (milepost 1017.1)	T138N, R29W, S08
LA321	Application Site, Spray with Soils Tests	Upland Discharge - Daggett Brook (milepost 1017.3)	T139N, R26W, S19
LA322	Application Site, Spray with Soils Tests	Upland Discharge - Daggett Brook (milepost 1041.1)	T139N, R26W, S15
LA323	Application Site, Spray with Soils Tests	Upland Discharge - Trench water (milepost 1094.6)	T51N, R20W, S27

LA324	Application Site, Spray with Soils Tests	Upland Discharge - Tamarac River/Red Lake River (milepost 848.2)	T155N, R45W, S33
LA325	Application Site, Spray with Soils Tests	Upland Discharge - Pine River (milepost 1017.3)	T138N, R29W, S08
LA326	Application Site, Spray with Soils Tests	Upland Discharge - Red Lake River/Clearwater River (milepost 875.4)	T151N, R24W, S04
LA327	Application Site, Spray with Soils Tests	Upland Discharge - Mississippi River (milepost 1069.6)	T51N, R24W, S27
SD001	Hydrostatic Testing	Red River (milepost 801.8)	T160N, R50W, S04
SD002	Hydrostatic Testing	Tamarac River (milepost 828.5)	T157N, R47W, S16
SD003	Hydrostatic Testing	Middle River (milepost 835.9)	T156N, R46W, S07
SD004	Hydrostatic Testing	Red Lake River (milepost 864.7)	T153N, R43W, S32
SD005	Hydrostatic Testing	Clearwater River (milepost 875.4)	T151N, R42W, S09
SD006	Hydrostatic Testing	Lost River (milepost 904)	T149N, R38W, S15
SD007	Hydrostatic Testing	Clearwater River (milepost 922.2)	T147N, R37W, S21
SD009	Hydrostatic Testing	Island Lake (milepost 961.7)	T141N, R35W, S05
SD010	Hydrostatic Testing	Shell River (milepost 985.4)	T139N, R34W, S31
SD011	Hydrostatic Testing	Crow Wing River (milepost 993.3)	T138N, R33W, S05
SD012	Hydrostatic Testing	Clear (Eagle) Lake (milepost 1013.4)	T138N, R30W, S10
SD013	Hydrostatic Testing	Pine River (milepost 1017.4)	T138N, R29W, S08
SD015	Hydrostatic Testing	Willow River (milepost 1066.5)	T51N, R24W, S31
SD017	Hydrostatic Testing	Mississippi River (milepost 1069.7)	T51N, R24W, S27
SD018	Hydrostatic Testing	East Savanna River (milepost 1086)	T51N, R21W, S20
SD020	Hydrostatic Testing	Chub Lake (milepost 1120.1)	T48N, R17W, S23
SD021	Hydrostatic Testing	Snake River (milepost 843.2)	T155N, R46W, S12
SD022	Hydrostatic Testing	Lost River (milepost 885.8)	T150N, R41W, S01
SD023	Hydrostatic Testing	Shell River (milepost 983.7)	T139N, R35W, S36

SD024	Hydrostatic Testing	Shell River (milepost 991.2)	T138N, R34W, S01
SD025	Hydrostatic Testing	Daggett Brook (milepost 1037.4)	T139N, R26W, S19
SD026	Hydrostatic Testing	Lake George (milepost 1036.6)	T139N, R26W, S07
SD027	Hydrostatic Testing	St. Louis River (milepost 1094.4)	T51N, R20W, S27
WS001	Intermediate: WW to Land	Wastewater to land - Red River (LA301 milepost 802.1)	
WS002	Intermediate: WW to Land	Wastewater to land - Tamarac river (LA302 milepost 828.7)	
WS003	Intermediate: WW to Land	Wastewater to land - Middle River (LA303 milepost 836.2)	
WS004	Intermediate: WW to Land	Wastewater to land - Snake River (LA304 milepost 843.2)	
WS005	Intermediate: WW to Land	Wastewater to land - Red Lake River (LA305 milepost 864.8)	
WS006	Intermediate: WW to Land	Wastewater to land - Clearwater River (LA306 milepost 875.8)	
WS007	Intermediate: WW to Land	Wastewater to land - Clearwater River (LA307 milepost 922.1)	
WS008	Intermediate: WW to Land	Wastewater to land - Mississippi River (LA308 milepost 941.2)	
WS009	Intermediate: WW to Land	Wastewater to land - Well 718159 (LA309 milepost 952.5)	
WS010	Intermediate: WW to Land	Wastewater to land - Well 763975 (LA310 milepost 964.4)	
WS011	Intermediate: WW to Land	Wastewater to land - Well 232423 (LA311 milepost 973.9)	
WS013	Intermediate: WW to Land	Wastewater to land - Shell River (LA313 milepost 983.5)	
WS014	Intermediate: WW to Land	Wastewater to land - Shell River (LA314 milepost 985.8)	
WS015	Intermediate: WW to Land	Wastewater to land - Well 465115 (LA315 milepost 991.1)	
WS016	Intermediate: WW to Land	Wastewater to land - Well 465115 (LA316 milepost 993.1)	
WS017	Intermediate: WW to Land	Wastewater to land - Mississippi River (LA317 milepost 1069.4)	
WS018	Intermediate: WW to Land	Wastewater to land - Willow River (LA318 milepost 1066.6)	
WS019	Intermediate: WW to Land	Wastewater to land - East Savanna River (LA319 milepost 1085.7)	
WS020	Intermediate: WW to Land	Wastewater to land - Pine River/Trench Water (LA320 milepost 1017.1)	
WS021	Intermediate: WW to Land	Wastewater to land - Daggett Brook/trench water (LA321 milepost 1037.1)	
WS022	Intermediate: WW to Land	Wastewater to land - Daggett Brook (LA322 milepost 1041.1)	
WS023	Intermediate: WW to Land	Wastewater to land - Trench Water (LA323 milepost 1094.6)	
WS024	Intermediate: WW to Land	Wastewater to land - Tamarac River/Red Lake River (LA324 milepost 848.2)	
WS025	Intermediate: WW to Land	Wastewater to land - Pine River (LA325 milepost 1017.3)	
WS026	Intermediate: WW to Land	Wastewater to land - Red Lake River/Clearwater River (LA326 milepost 875.4)	
WS027	Intermediate: WW to Land	Wastewater to land - Mississippi River (LA327 milepost 1069.6)	

5. Permit requirements

SD001	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.1.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.1.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.1.3	Samples for Station SD001 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.1.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD002	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.2.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.2.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.2.3	Samples for Station SD002 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.2.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD003	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.3.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.3.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.3.3	Samples for Station SD003 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.3.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD004	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.4.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.4.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.4.3	Samples for Station SD004 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]

	5.4.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD005	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.5.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.5.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.5.3	Samples for Station SD005 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.5.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD006	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.6.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.6.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.6.3	Samples for Station SD006 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.6.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD007	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.7.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.7.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.7.3	Samples for Station SD007 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.7.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD009	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.8.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.8.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]

	5.8.3	Samples for Station SD009 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.8.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD010	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.9.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.9.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.9.3	Samples for Station SD010 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.9.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD011	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.10.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.10.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.10.3	Samples for Station SD011 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.10.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD012	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.11.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.11.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.11.3	Samples for Station SD012 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.11.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD013	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements

	5.12.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.12.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.12.3	Samples for Station SD013 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.12.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD015	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.13.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.13.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.13.3	Samples for Station SD015 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.13.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD017	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.14.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.14.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.14.3	Samples for Station SD017 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.14.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD018	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.15.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.15.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.15.3	Samples for Station SD018 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.15.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]

SD020	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.16.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.16.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.16.3	Samples for Station SD020 must be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.16.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD021	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.17.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.17.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.17.3	Samples for Station SD021 shall be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.17.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD022	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.18.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.18.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.18.3	Samples for Station SD022 shall be taken during the discharge event at points representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.18.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD023	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.19.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.19.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.19.3	Samples for Station SD023 shall be taken during the discharge event at a point representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]

	5.19.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD024	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.20.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.20.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.20.3	Samples for Station SD024 shall be taken during the discharge event at a point representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.20.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD025	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.21.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.21.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.21.3	Samples for Station SD025 shall be taken during the discharge event at a point representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.21.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD026	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.22.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.22.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.22.3	Samples for Station SD026 shall be taken during the discharge event at a point representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.22.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
SD027	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	5.23.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.23.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]

	5.23.3	Samples for Station SD027 shall be taken during the discharge event at a point representative of the discharge. [Minn. R. 7001.0150, Subp. 2(B)]
	5.23.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS001	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.24.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.24.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.24.3	Samples for Station WS001 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.24.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS002	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.25.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.25.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.25.3	Samples for Station WS002 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.25.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS003	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.26.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.26.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.26.3	Samples for Station WS003 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.26.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]

WS004	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
		5.27.1 The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
		5.27.2 Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
		5.27.3 Samples for Station WS004 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
WS005	Intermediate: WW to Land	5.27.4 The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
		Waste Stream: Effluent to Land Treatment Requirements
		5.28.1 The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
		5.28.2 Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
WS006	Intermediate: WW to Land	5.28.3 Samples for Station WS005 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
		5.28.4 The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
		Waste Stream: Effluent to Land Treatment Requirements
		5.29.1 The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS007	Intermediate: WW to Land	5.29.2 Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
		5.29.3 Samples for Station WS006 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
		5.29.4 The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
		Waste Stream: Effluent to Land Treatment Requirements
WS007	Intermediate: WW to Land	5.30.1 The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
		5.30.2 Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
		5.30.3 Samples for Station WS007 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]

	5.30.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS008	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.31.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.31.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.31.3	Samples for Station WS008 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.31.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS009	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.32.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.32.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.32.3	Samples for Station WS009 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.32.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS010	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.33.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.33.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.33.3	Samples for Station WS010 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.33.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS011	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements

	5.34.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.34.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.34.3	Samples for Station WS011 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.34.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS013	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.35.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.35.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.35.3	Samples for Station WS013 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.35.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS014	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.36.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.36.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.36.3	Samples for Station WS014 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.36.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS015	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.37.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.37.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.37.3	Samples for Station WS015 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]

	5.37.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS016	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.38.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.38.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.38.3	Samples for Station WS016 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.38.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS017	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.39.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.39.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.39.3	Samples for Station WS017 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.39.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS018	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.40.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.40.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.40.3	Samples for Station WS018 shall be taken at point representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.40.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS019	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements

	5.41.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.41.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.41.3	Samples for Station WS019 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.41.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS020	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.42.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.42.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.42.3	Samples for Station WS020 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.42.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS021	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.43.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.43.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.43.3	Samples for Station WS021 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.43.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS022	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.44.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.44.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.44.3	Samples for Station WS022 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]

	5.44.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS023	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.45.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.45.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.45.3	Samples for Station WS023 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.45.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS024	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.46.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.46.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.46.3	Samples for Station WS024 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.46.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS025	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.47.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.47.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.47.3	Samples for Station WS025 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.47.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS026	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements

	5.48.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.48.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.48.3	Samples for Station WS026 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.48.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
WS027	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	5.49.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.49.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.49.3	Samples for Station WS027 shall be taken at points representative of the discharge to the flow control/treatment BMPs. [Minn. R. 7001.0150, Subp. 2(B)]
	5.49.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
MN0071366	Enbridge Energy, Limited Partnership, Line 3 Replacement Project	
		Land Application Station General Requirements
	5.50.1	The waste stream requirements apply to all discharges to upland areas (infiltration). [Minn. R. 7001]
	5.50.2	The permittee shall sample for the following parameters at each upland discharge location: flow and area of disposal used. Results shall be submitted on the corresponding waste stream station DMR. [Minn. R. 7053]
		Surface Discharge Station General Requirements
	5.51.10	Sampling Location. [Minn. R. 7001]
	5.51.11	Total Suspended Solids (TSS). The Permittee shall undertake adequate sampling to establish a relationship between the receiving water's TSS and turbidity content as outlined in the Special Requirements Chapter. Sample results used in establishing the TSS and turbidity relationship shall be reported in the final surface discharge report. This shall be done for each discharge location. [Minn. R. 7001]
	5.51.12	The Permittee shall sample for the following parameters at each discharge location: TSS/turbidity, pH, CBOD5, and flow. The following parameters have narrative limits in the permit: color and oil and grease. Specific details for each parameter can be found in the Limits and Monitoring section and the Special Requirements section of this permit. [Minn. R. 7001]
	5.51.13	Representative Samples. [Minn. R. 7001]
	5.51.14	Samples and measurements required by this permit shall be representative of the monitored activity. [Minn. R. 7001]
	5.51.15	Surface Discharge Prohibitions. [Minn. R. 7001]

5.51.16	Floating solids or visible foam shall not be discharged in other than trace amounts. [Minn. R. 7001]
5.51.17	Wastewater discharges authorized in this permit are for buoyancy control water and hydrostatic testing water. The pipes in which these waters will come in contact, will be new, and unused for the transport of oil. [Minn. R. 7001]
5.51.18	The Permittee shall install and maintain outlet protection measures at the discharge stations to prevent erosion, as discussed in the Special Requirements chapter. [Minn. R. 7001]
5.51.19	Additional Instream Protection. [Minn. R. 7001]
5.51.20	Stream bottom protection shall be used at all surface discharge sties so as to protect the original condition of the stream bottom. Design, construction, operation and maintenance shall be in accordance with the approved submitted plans. Protection structures shall include, at a minimum, a splash pad along with stream bottom and bank protective mats. [Minn. R. 7001]
5.51.21	The rate of discharge to surface waters shall be controlled so as to not damage instream conditions. At the initiation of the discharges, the flows shall be slowly increased to the appropriate and allowable discharge rate. Discharge rates shall at no time exceed a maximum rate of 1500 gpm, or, a daily average flow rate of 1200 gpm. More restrictive discharge rates than these may be applicable to the individual discharge stations, as stated in the limits and monitoring section. Additionally, if the receiving stream structural or flow characteristics will require more restrictive discharge rates or conditions than originally designed, then the modifications must be made as necessary to protect the local stream environment. Regular monitoring of the effectiveness of the restricted flows and discharge protective structures must be conducted during the durations of the discharge events. [Minn. R. 7001]
	Waste Stream Station General Requirements
5.52.22	General Requirements. [Minn. R. 7001]
5.52.23	The Permittee shall monitor the rate of discharge during the entire length of discharge to ensure that it does not cause nuisance conditions. The flow rate and volume of each discharge shall be reported on the monthly DMR. [Minn. R. 7001]
5.52.24	The waste stream requirements apply to all discharges to upland areas (infiltration). [Minn. R. 7001]
5.52.25	Discharge Monitoring Reports. [Minn. R. 7001]
5.52.26	The permittee shall sample for the following parameters at each upland discharge location: flow and area of disposal used. Results shall be submitted on the corresponding waste stream station DMR. [Minn. R. 7053]
5.52.27	Representative Samples. [Minn. R. 7001]
5.52.28	Flow measurements shall be collected at a point representative of total influent flow to the land application system. [Minn. R. 7001]
5.52.29	Land Application Rates. [Minn. R. 7001]
5.52.30	Discharges of wastewaters shall be controlled so as to meet the following conditions: A. Discharges shall be maintained within the potential upland discharge study area. B. Flow shall not cause the formation of rills or gullies. C. If present, vegetation shall remain viable during and following land application. D. The permittee must be able to conduct inspections during all periods when discharge and flows are occurring. E. Discharges shall not exceed the BMP design. [Minn. R. 7001]
	Special Requirements
5.53.31	Land Application Site Evaluation. [Minn. R. 7001]

5.53.32	<p>All land application stations shall be evaluated in accordance with the Infiltration Plan submitted by the permittee. Each site evaluation shall be recorded on the "Field Conditions Inspection Sheet" included in the Plan.</p> <p>Each site evaluation shall document the following:</p> <ul style="list-style-type: none"> A. soil samples, B. grade conditions, C. a description of crop management practices which shall include at least the following: <ul style="list-style-type: none"> i. list of cover crop type(s) or if cover crop is not present; and, ii. description of crop establishment and maintenance procedures, D. determination of the type, number, size and placement of the discharge structures, and E. weather conditions. <p>The "Field Conditions Inspection Sheet" shall be submitted as part of the final Land Application Site Closure Report, submitted for each land application site. [Minn. R. 7001]</p>
5.53.33	Soil Samples. [Minn. R. 7001]
5.53.34	<p>Soil samples shall be taken at all land application sites in accordance with the "Infiltration Plan" as part of the determination of site conditions. As part of each site investigation, the field sheet contained in the "Infiltration Plan" shall be filled out in full and used to document the soil conditions and the operational and structural needs. At a minimum the following conditions shall be addressed at the time of the site evaluation:</p> <ul style="list-style-type: none"> A. Soil samples need to be done prior to the use of the upland area for infiltration. B. Soil evaluations shall be conducted to a minimum depth of 3 feet deep, observations for water table, soil type(s), and restrictive layers at the site. C. Number and depth of samples shall be sufficient to confirm design assumptions used to identify and delineate the infiltration area required for each individual site. Each site shall have a minimum of two samples conducted for the evaluation. D. Include BMP's needed to manage run-off waters, concentrated flows, and other site specific conditions so as to inhibit the discharge waters from reaching surface waters. E. Soil sampling findings and determinations shall be recorded and reported for each site. <p>Evaluations shall be conducted by staff qualified and familiar with the practices of land infiltration design. This can include qualified staff such as soils scientists, professional geologists, or geological, civil, agriculture or environmental engineers. The staff shall verify each report and provide information or qualifications or license. [Minn. R. 7001]</p>
5.53.35	<p>Soil samples shall be taken in a minimum of two locations, down-gradient of every discharge structure. Additional samples shall be taken in order to confirm the adequacy of the site infiltration conditions as needed. Samples shall be taken to a minimum depth of 3 feet. [Minn. R. 7001]</p>
5.53.36	Aquatic Invasive Species. [Minn. R. 7001]
5.53.37	<p>The permittee shall take precautions to manage the spread of aquatic invasive species (AIS) in accordance with permits acquired from the Minnesota Department of Natural Resources (DNR). [Minn. R. 7001]</p>
5.53.38	Additional Monitoring Requirements - Surface Discharges. [Minn. R. 7001]
5.53.39	<p>No Material Discoloration. The discharge of wastewater (i.e., hydrostatic test water or buoyancy control water) into a surface water shall not cause a material discoloration in the receiving water. Any discharge that results in a discernible change to the existing/ambient color of the receiving water would constitute material discoloration. Visual monitoring shall include the comparison of the colors of the receiving water and the post-treatment hydrostatic test water. Documentation of the color comparison shall be photo documented and submitted with the Surface Discharge Closure Report, for each surface water discharge. [Minn. R. 7001]</p>

5.53.40	<p>Total Suspended Solids (TSS). In order to determine levels of TSS in each discharge to surface water, the permittee shall develop a correlation between TSS and turbidity for each receiving water. The correlation shall be used to determine the TSS in the effluent based on turbidity monitoring of the effluent. The same make, model, and manufacturer of turbidity meter shall be used when doing both influent and effluent monitoring.</p> <p>The permittee shall do the following when developing this correlation:</p> <ol style="list-style-type: none">1. Take 5 grab samples per day, per appropriation event (influent) for both TSS and Turbidity. The samples shall be evenly spaced apart over the entire appropriation event so that the sample is representative of the influent.2. Take 2 grab samples per day, per discharge event (effluent) for turbidity. The samples shall be evenly spaced apart over the entire discharge period so that the sample is representative of the effluent. [Minn. R. 7001]
5.53.41	<p>Flow. Flow shall be monitored continuously, daily, during discharge events. If no discharge events occur, then the permittee shall check no discharge on the DMR. [Minn. R. 7001]</p>
5.53.42	<p>The discharge flow rates for each surface water discharge shall not exceed the daily maximum and daily average limits specified in the limits and monitoring section of this permit. The discharge shall begin at rates lower than the daily average and maximum, and gradually increase so as not to cause nuisance conditions or have negative impacts in the receiving stream. [Minn. R. 7001]</p>
5.53.43	<p>Each discharge to surface water shall be visually monitored during the entire duration of the discharge to ensure that the discharge is not causing nuisance conditions. Operators must be available during discharge events and shall be able to adjust discharges so that the discharge requirements are met. [Minn. R. 7001]</p>
5.53.44	<p>Color monitoring of surface discharges shall be conducted to prevent a discharge of a nuisance color condition. The following items shall be conducted for all surface water discharges:</p> <ol style="list-style-type: none">A. Monitoring for nuisance color change shall be conducted to determine if there is a material discoloration of the process wastewater. A material discoloration would be determined by comparing the source water and the process wastewater in a side by side comparison. A colorimeter may be used to conduct the comparisons.B. Monitoring of the color shall be conducted at a minimum of twice per day during discharge events.C. Records of the comparisons shall be recorded on the field sheets and shall be included in the final surface discharge report for each discharge location.D. Color of the discharge must not exceed the color of the source water. Therefore as needed, the color of the process wastewaters shall be treated to a level equal to or lower than the receiving water. <p>Results shall be included on the Final Surface Discharge Closure Report for each site. [Minn. R. 7001]</p>
5.53.45	<p>Oil and Grease. Discharges authorized in this permit are for new pipes that have not contained oil. No visible sheen in the discharge, from any substance, is allowed. Monitoring shall be done by visual observation for the presence of a sheen on the surface of the discharges near the final discharge control structure. Observed results shall be included on the final Surface Discharge Report for each site. [Minn. R. 7001]</p>
5.53.46	<p>Water Appropriations. [Minn. R. 7001]</p>
5.53.47	<p>Waters obtained from streams, rivers, and lakes shall be conducted in accordance with the applicable permits obtained from the Minnesota Department of Natural Resources. [Minn. R. 7001]</p>
5.53.48	<p>Outlet Protection Measures - Land Application Stations. [Minn. R. 7001]</p>

5.53.49	<p>The application supplemental information has been incorporated by reference into this permit. To protect both the nearby surface and sub-surface waters of the state near the land application sites, the following items must be employed during the discharge events:</p> <ul style="list-style-type: none">a. Straw bale structures shall be designed and constructed as proposed in the submitted plan.b. Control valves must be operated so as to not exceed the design discharge rate of the straw bale structures or the sediment filters.c. Treatment for color shall be conducted to a level such that the waters will not cause a nuisance condition at the land application sites. A description of the site after discharge is complete shall be included on the field sheet contained in the "Infiltration Plan".d. Quality Control sampling shall be conducted as follows:<ul style="list-style-type: none">i. TSS/turbidity shall be used to determine the proper treatment of the process wastewater.ii. Color monitoring shall be conducted to monitor the systems adequate treatment of potential pipe scale. [Minn. R. 7001]
5.53.50	New and Modified Proposed Discharge Site(s). [Minn. R. 7001]
5.53.51	<p>If the Permittee intends to propose a new or modified discharge site, as part of the permit modification application, the Permittee shall provide information necessary to evaluate the potential impact of this discharge and to ensure compliance with this permit. This information shall include, at a minimum, the applicable items identified below.</p> <p>A. New Discharges: The Permittee shall obtain a permit modification before discharging from a new surface water discharge point or to a new land application site that was not proposed and reviewed as part of this permit issuance. The permit modification requirements are outlined in the Total Facility Chapter, and shall also include the applicable requirements provided below.</p> <p>B. Modified Discharges: Modified or altered surface water or land application discharges will require a permit modification if the changes from the permitted facility or activity will result in or have the potential to result in significant alteration in the nature or quantity of permitted materials to be stored, processed, discharged, emitted, or disposed of by the permittee. The permit modification requirements are outline in the Total Facility Chapter, and shall also include the applicable requirements provided below. [Minn. R. 7001]</p>

5.53.52	<p>As part of the permit application, surface water modification requests shall be submitted to the MPCA with additional information on the facility and site conditions, along with detailed plans and specifications that include the following information:</p> <ul style="list-style-type: none">A. The proposed discharge dates,B. Type of wastewater to be generated and anticipated pollutant content,C. The estimated average and maximum discharge rates,D. The estimated total flow volume of discharge,E. The name and location of any receiving water bodies, the closest city and/or township if applicable, county, and quarter-section, section/township/range location,F. USGS 7.5 minute series (topographic) map showing proposed discharge location(s) and monitoring point(s) including the route of the discharge to the receiving water and any information that was required during the review and determination of the conditions of the current permit,G. The water source, with a copy of the Minnesota Department of Natural Resources (DNR) water appropriation permit, if applicable,H. Water quality data for the water supply, where the water supply source is the same as the receiving waterbody, if needed for background water quality information (may be submitted with discharge report),I. Process wastewater treatment methods and infrastructure, including a detailed map and diagram description of the proposed design for the flow control and discharge structures,J. Proposed methods of achieving discharge limits for total suspended solids (TSS) and applicable nuisance conditions, including TSS/turbidity correlation determinations,K. Best management practices to be used to prevent scouring, sediment transport and erosion due to the discharge,L. Expected weather conditions, andM. Other site specific information required to adequately support the request. [Minn. R. 7001]
5.53.53	<p>As part of the permit application, land application modification requests shall submit to the MPCA additional facility and site information along with detailed plans and specifications that include the following information:</p> <ul style="list-style-type: none">A. The proposed discharge dates,B. Type of wastewater to be generated and anticipated pollutant content,C. The estimated average and maximum discharge rates,D. The estimated total flow volume of discharge,E. USGS 7.5 minute series (topographic) map showing proposed discharge locations (s) and monitoring point(s),F. A current map of the newly proposed discharge site, showing the same types of information that was required during the review and determination of the conditions of the current permit,G. The water supply for the test waters, with a copy of the Minnesota Department of Natural Resources (DNR) water appropriation permit, if applicable,H. Treatment methods and infrastructure to include:<ul style="list-style-type: none">i. a detailed map and diagram with descriptions of the proposed design for the flow structures, and,ii. proposed methods of treatment and discharge so that the discharge waters will not alter the soils conditions, create nuisance conditions, prevent surface erosion, and prevent the discharge from going beyond the infiltration area,I. Information of expected best management needs and placement on the facility,J. Expected weather conditions,K. An updated Infiltration Plan (see the infiltration section of this permit for further specific submittal requirements), andL. Other site specific information required to adequately support the request. [Minn. R. 7001]

5.53.54	<p>Wild Rice. Discharges to surface waters upstream of wild rice production/protected areas shall be conducted in compliance with the following conditions:</p> <p>a. No discharges during the time period from April 1 to July 15, or;</p> <p>b. Discharges may occur during the above restricted time period if the following conditions are met;</p> <p>i. Discharges must not cause an elevation rise in the receiving water greater than 2 inches.</p> <p>ii. Allowable discharges must be calculated using sufficient site specific information and adequate monitoring plans to ensure the maximum elevation change is not exceeded. Calculations shall be conducted in accordance with an appropriately applied industry standard practice. Determinations shall include location information such as receiving water's slope, flow characteristics, dimensional shape, and other site specific information needed to make a determination.</p> <p>iii. Any records taken such as water elevation protective measures, calculations, monitoring and elevation records etc., shall be incorporated into the final surface discharge closure report for each site.</p> <p>These conditions apply to the following SD stations: SD003 (Middle River), SD004 (Red Lake River), SD005 (Clearwater River), SD007 (Clearwater River), SD009 (Island Lake), SD010 (Shell River), SD011 (Crow Wing River), SD013 (Pine River), SD022 (Lost River), SD023 (Shell River), SD024 (Shell River), SD025 (Daggett Brook), SD026 (Lake George), and SD027 (St. Louis River). [Minn. R. 7001]</p>
5.53.55	Surface Discharge Closure Report. [Minn. R. 7001]
5.53.56	<p>The Permittee shall submit a Surface Discharge Closure Report for each surface discharge. This report shall be submitted 30 days after the completion of discharge. The report must contain the following:</p> <p>a. The location and name of surface discharge</p> <p>b. results of any narrative limits required by this permit (color, oil and grease)</p> <p>c. results of the TSS/turbidity correlation developed by the Permittee</p> <p>d. rate of discharge</p> <p>e. site specific conditions</p> <p>f. Treatment methods used during discharge</p> <p>g. Outlet protection measures used during discharge [Minn. R. 7001]</p> <p>h. Discharge monitoring results comparing turbidity readings to the TSS/Turbidity correlation.</p>
5.53.57	<p>Cleaning Water. A cleaning pig will be used to push water through the pipe(s) in order to remove mil scale, dirt, dust, and construction debris prior to hydrostatic testing or the introduction of buoyancy control water to the pipes. With the exception of buoyancy water used during the "push-pull" method, all cleaning water must be trucked off site and treated, as stated in the application submitted to the MPCA.</p> <p>Buoyancy water used during the "push-pull" method must go through tertiary treatment prior to discharge, and is only authorized for infiltration to an upland location. See below for further treatment requirements for buoyancy water used during the "push-pull" method. [Minn. R. 7001]</p>
5.53.58	<p>Push Pull Buoyancy Control Water. Buoyancy control water introduced during the "push-pull" method shall at a minimum go through tertiary treatment prior to discharge. Example treatment could be the use of carbon or chemical additives to remove pollutants such that nuisance conditions do not occur at the point of discharge. This type of buoyancy control water shall be infiltrated at an upland area. Discharge of this type of buoyancy water to surface water is prohibited. [Minn. R. 7001]</p>
	Industrial Process Wastewater

5.54.59	Prohibited Discharges. [Minn. R. 7001]
5.54.60	This permit does not authorize the discharge of sewage, wash water, scrubber water, spills, oil, hazardous substances, or equipment/vehicle cleaning and maintenance wastewaters to ditches, wetlands or other surface waters of the state. [Minn. R. 7001.1090, Subp. 1(A)]
5.54.61	The Permittee shall not transport pollutants to a municipal wastewater treatment system that will interfere with the operation of the treatment system or cause pass-through violations of effluent limits or water quality standards. [Minn. R. 7049.140, Subp. 2]
5.54.62	Toxic Substance Reporting. [Minn. R. 7001]
5.54.63	The Permittee shall notify the MPCA immediately of any knowledge or reason to believe that an activity has occurred that would result in the discharge of a toxic pollutant listed in Minnesota Rules, pt. 7001.1060, subp. 4 to 10. [Minn. R. 7001.1090, Subp. 2]
5.54.64	Mobile Equipment Service Areas. [Minn. R. 7001]
5.54.65	Degreasing wastes, motor oil, oil filters, oil sorbent pads and booms, transmission fluids, power steering fluids, brake fluids, coolant/antifreeze, radiator flush wastewater and spent solvents shall be collected and disposed of in accordance with applicable solids and hazardous waste management rules. These materials shall not be discharged to surface or groundwaters of the state. [Minn. R. 7001.0150, Subp. 2]
5.54.66	Mobile equipment washing shall not use solvent-based cleaners such as those available for brake cleaning and degreasing, unless the cleaning fluids are completely contained and not allowed to flow to surface or ground waters of the state. Soaps and detergents used in washing shall be biodegradable. [Minn. R. 7001.0150, Subp. 2]
5.54.67	Mobile equipment maintenance and repairs shall not be conducted in wash bays. [Minn. R. 7001.0150, Subp. 2]
5.54.68	Wastewater containment systems, including pipes shall be inspected regularly. Leaks that are detected shall be repaired immediately. [Minn. R. 7001.0150, Subp. 2]
5.54.69	If the Permittee discovers that recoverable amounts of petroleum products have entered wastewater containment systems, they shall be recovered immediately, and reported to the MPCA. [Minn. R. 7001.0150, Subp. 2]
5.54.70	Spill cleanup procedures shall be accessible to all personnel in mobile equipment maintenance and repair areas. [Minn. R. 7001.0150, Subp. 2]
	Infiltration
5.55.71	Authorization. [Minn. R. 7001]
5.55.72	This chapter authorizes the Permittee to apply wastewater associated with hydrostatic testing and buoyancy control, using methods described in the Infiltration Plan. The final Infiltration Plan was submitted to the MPCA and approved prior to issuance of this permit. The Infiltration Plan is incorporated into this permit by reference, and is an enforceable part of this permit. This activity is limited by the 'Limits and Monitoring' section of this permit, as well as the other terms and conditions of this permit. [Minn. R. 7001]
5.55.73	Site Management, Limitations, and Restrictions. [Minn. R. 7001]
5.55.74	Site Selection and Use Procedure. [Minn. R. 7001]
5.55.75	Site selection and discharge design verification needs must be determined at a time prior to discharge, when the site conditions will be similar to the proposed discharge period. Requirements for evaluating the adequacy of the area in the Infiltration Plan, and individual requirements are discussed in the Special Requirements Chapter. [Minn. R. 7001.0150, Subp. 3(F)]
5.55.76	Hydraulic Loading Rates. [Minn. R. 7001]

5.55.77	<p>Hydraulic loading rate limits are to be determined prior to discharges for each site based upon site specific conditions. Loading rates shall be such that they prevent runoff from the land application sites. The limitations specified in this part shall not cause any other application limits of this chapter or the 'Limits and Monitoring' section of this permit to be exceeded.</p> <p>All of the following limitations apply to the infiltration of industrial wastewater:</p> <p>A. No runoff of discharge water from the application site is allowed.</p> <p>B. The discharge shall be limited to prevent the runoff of any industrial wastewater mixed with rain water.</p> <p>C. Discharge water may not be discharged during any rainfall event that causes runoff from the site.</p> <p>E. Discharge water shall not be applied when the cover crop is dormant as a result of frost or below freezing temperatures. [Minn. R. 7001.0150, Subp. 3(F)]</p>
5.55.78	Miscellaneous Management Practices/Restrictions. [Minn. R. 7001]
5.55.79	<p>All of the following standards apply to the infiltration of process wastewater:</p> <p>A. The Permittee shall operate each infiltration area in accordance with the Infiltration Plan approved by the MPCA.</p> <p>B. The discharge shall be evenly distributed to individual sections of the area and allow for sufficient resting periods to maintain the absorptive capacity of the soil.</p> <p>C. The discharge of industrial wastewater to any authorized land application site shall not have physical or chemical characteristics that prevent the proper operation of the land disposal system. The discharge shall be free of material that interferes with the operation of the treatment systems or the flow dispersion structures. [Minn. R. 7001.0150, Subp. 3(F)]</p>
5.55.80	<p>Nuisance Conditions. The permittee shall provide reasonable assurance that the land application of wastewater will not cause nuisance conditions. Operational and structural controls, or some combination thereof, may be considered in providing reasonable assurance, and shall be specified in the facility's Infiltration Plan.</p> <p>Operational controls include methods such as timing discharge to minimize ponding or flooding after a rain event, increasing setback distances and lowering the discharge rate. Structural controls include methods such as innovative structural design; use of additional energy dispersal devices, or use of additional Best Management Practices (BMPs).</p> <p>In the event that the measures or equipment intended to create reasonable assurance no longer function as intended, corrective action (which may include additional maintenance or modifications of the treatment system) shall be taken by the Permittee. The Permittee shall include a written description of the corrective actions taken to eliminate the nuisance conditions in the individual land application closure report. [Minn. R. 7001.0150, Subp. 3(F)]</p>
5.55.81	<p>At all times during the active discharge, the system operator must be present to monitor the activities and temporarily halt the discharges until necessary correction can be made. [Minn. R. 7001]</p>
5.55.82	Infiltration Plan. [Minn. R. 7001]
5.55.83	<p>To address the specific operations of the infiltration areas; optimize the performance of the treatment system; and, to maintain compliance with Minn. Stat. chs. 115 and 116, as amended, and Minn. R. chs. 7001, 7050, 7053 and 7060, the Permittee prepared an Infiltration Plan. The Plan was reviewed and approved by MPCA staff prior to issuance of this permit. [Minn. R. 7001.0150, Subp. 3(F)]</p>
5.55.84	<p>If the MPCA determines that the operating Infiltration Plan is not effective in preventing permit violations, the Permittee may be required by the MPCA to revise their Infiltration Plan. [Minn. R. 7001.0150, Subp. 3(F)]</p>

5.55.85	Changes or updates to the Infiltration Plan made by the Permittee that do not involve new discharge locations, shall be submitted to the MPCA WQ e-submittal service as notification that changes were made. [Minn. R. 7001.0150, Subp. 3(F)]
5.55.86	<p>The Infiltration Plan shall include the following elements, at a minimum:</p> <ul style="list-style-type: none"> a. Facility information, to include the following: <ul style="list-style-type: none"> i. Infiltration site description and maps; ii. Locations of all monitoring locations, BMP practices, etc.; and, iii. General description of discharge and infiltration operations. b. A description of the management of the discharge, including the following: <ul style="list-style-type: none"> i. Infiltration scheduling; ii. Infiltration intensity; iii. Loading rates (hydraulic); iv. Load/rest cycle; v. Runoff containment; c. A description of crop maintenance (where applicable). d. Identify areas susceptible to runoff and identify management practices to prevent and control runoff. e. Description of the inspection and maintenance program for all equipment required for discharge, as required in the 'Facilities Operation' part of this chapter. f. A 'Spill Prevention and Response Procedure', as described in the following subparts. g. A 'Contingency Plan', as described in the following subparts. h. A 'Monitoring Plan', as described in the following subparts. [Minn. R. 7001.0150, Subp. 3(F)]
5.55.87	<p>A 'Spill Prevention and Response Procedure' shall be prepared and implemented, and shall include the following elements, at a minimum:</p> <ul style="list-style-type: none"> a. Identification of where spills have occurred and where they have the potential to occur; b. Determination and identification of drainage points for potential spill areas, and develop appropriate spill prevention and containment measures for these areas; c. Detailed description of procedures for notifying state, local, and company personnel in the event of a spill shall be developed and made available to appropriate personnel; d. Detailed procedures for containing and cleaning up spills shall be developed and made available to appropriate personnel; e. A list of all spill control equipment including the equipment location; and, f. An employee training program to inform appropriate personnel of notification and spill response procedures. <p>The procedure can be incorporated into the 'Contingency Plan' if the elements above are included in the Plan. [Minn. R. 7001.0150, Subp. 3(F)]</p>
5.55.88	<p>A 'Contingency Plan' for managing the infiltration system during time periods when infiltration is not possible due to adverse climatic conditions, equipment failure, or in the event the management requirements of the 'Site Management, Limitations and Restrictions' part of this chapter are violated, shall be prepared and implemented.</p> <p>The plan should include alternatives such as:</p> <ul style="list-style-type: none"> a. Storage tanks or lagoons; b. Additional land; c. Set-aside corners or other unused parcels of land; d. Transporting processed wastewater; e. Processing shutdown; and, f. Treatment facilities. [Minn. R. 7001.0150, Subp. 3(F)]

5.55.89	<p>A 'Monitoring Plan' shall be prepared and implemented, and shall contain the following information, at a minimum:</p> <ul style="list-style-type: none"> a. Sampling point identification; b. Sampling protocol for all monitoring points; c. Sampling schedule; d. List of parameters to be analyzed; e. Standard test methods; and, f. Reporting limits. [Minn. R. 7001.0150, Subp. 3(F)]
5.55.90	Facilities Operation. [Minn. R. 7001]
5.55.91	A 'Maintenance Plan' to eliminate water quality degradation shall be prepared. The plan can be incorporated into the "Infiltration Plan". The Permittee shall operate the disposal system in accordance with the plan, as approved by the MPCA. [Minn. R. 7001.0150, Subp. 3(F)]
5.55.92	<p>The Permittee shall at all times maintain in good working order and operate as efficiently as possible all facilities or systems of control installed or used to achieve compliance with the terms and conditions of this permit.</p> <p>Proper operation and maintenance includes effective performance; adequate funding; adequate staffing and training; and, adequate laboratory and process controls, including appropriate quality assurance procedures. [Minn. R. 7001.0150, Subp. 3(F)]</p>
5.55.93	The Permittee shall maintain the water treatment and discharge systems such that the discharges to infiltration areas will not affect the treatment efficiency of the disposal system's infiltration capacity and/or contribute to the degradation of the groundwater quality. This shall include limiting discharges to non-critical operational periods, and avoiding periods such as high groundwater table levels, precipitation events, or high precipitation run-on events. [Minn. R. 7001.0150, Subp. 3(F)]
5.55.94	Necessary control tests and observations shall be conducted at a frequency adequate to ensure continuous efficient operation of the land application facility. [Minn. R. 7001.0150, Subp. 3(F)]
5.55.95	The Permittee shall provide an adequate operating staff which is duly knowledgeable and adequately trained to carry out the operation, maintenance and testing functions required to ensure compliance with the conditions of this permit. [Minn. R. 7001.0150, Subp. 3(F)]
5.55.96	Frozen Conditions. [Minn. R. 7001]
5.55.97	The Permittee shall not discharge in conditions that do not allow the discharge water to infiltrate according to the designs in the Infiltration plan and this permit. This includes when the soil is frozen and the discharge water will not infiltrate. Ponding of hydrostatic test water on top of soil in frozen conditions is prohibited. [Minn. R. 7001]
5.55.98	Records. [Minn. R. 7001]
5.55.99	The Permittee shall maintain a daily record of the operations and observations of all discharges to upland areas. These records shall be available for review by the MPCA staff and submitted as an attachment to the Land Application Closure Report. At a minimum, daily operational records shall be maintained pertaining to flows, areas of discharge, inches of discharge water applied, and discharge rate. Visual observations shall be performed for each discharge to determine any ponding, runoff, and vegetation conditions. Photo documentation must be done for each discharge. [Minn. R. 7001]
5.55.100	Monitoring Report. [Minn. R. 7001]
5.55.101	The Permittee shall submit a land application closure report for all land application sites following the completion of the discharge. These reports shall be submitted within 30 days of the completion of the discharge. [Minn. R. 7001.0150, Subp. 3(F)]

5.55.165	<p>The Land Application Closure Report, for each site, shall include the following information:</p> <p>A. A description of the design of the treatment system, dispersion system, and BMP's implemented during infiltration, B. A map of the site including the area used for infiltration as well as the final placement of the treatment and dispersion systems(s) at the location, C. A description of any changes undertaken to address operation needs, D. A summary of discharge conditions to include dates, rates, weather conditions, and times of the discharges, E. Operation and observation daily records, and F. All steps necessary and taken to close the land application site. [Minn. R. 7001.0150, Subp. 3(F)]</p>
5.55.102	Definitions. [Minn. R. 7001]
5.55.103	"Groundwater" means water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near-surface unconsolidated sediment or regolith, or in rock formations deeper underground. [Minn. R. 7001]
5.55.104	"Infiltration Areas" means the area of land that receives the actual application of wastewater water. This area does not include buffer zones, setbacks or other land where wastewater is not applied. [Minn. R. 7001]
	Pipelines
5.56.105	Authorization. [Minn. R. 7001]
5.56.106	This permit authorizes the Permittee to dispose of buoyancy control and hydrostatic test waters used in new pipelines in accordance with the provisions of this permit. This permit does not authorize any discharges of wastewater from used pipe. [Minn. R. 7001]
5.56.107	Discharges of wastewater shall be in accordance with the terms and conditions provided in the plans and specifications presented to and approved by the MPCA during the permit application process. Where the submitted information and the conditions of this permit conflict, the conditions of this permit shall supersede the submitted plan. [Minn. R. 7001]
5.56.108	There shall be no use of new discharge locations not included in this permit, without prior approval from the MPCA (Industrial Division). Permit application requirements for permit modifications are provided in the Special Requirements Chapter, and in the Total Facility Chapter. [Minn. R. 7001]
5.56.109	Discharge authorizations shall be as given in this permit. [Minn. R. 7001]
5.56.110	<p>This permit DOES NOT authorize:</p> <p>a. the construction or installation of pipeline facilities; b. the Permittee to work in waters of the state; or c. the Permittee to appropriate waters. [Minn. R. 7001]</p>
5.56.111	Hydrostatic test and Buoyancy Control Discharges. [Minn. R. 7001]
5.56.112	The Permittee shall apply for a modification of this permit if new outfall locations are needed for hydrostatic testing or buoyancy control discharges. Information on applying for a modification are contained in the Special Requirements Chapter of this permit. [Minn. R. 7001]
5.56.113	The MPCA reserves the right to prohibit a surface water discharge if the MPCA determines that such a discharge will impair water quality and/or otherwise create a nuisance condition at or near the proposed discharge point. At no time during any discharge shall Minnesota Water Quality Standards, Minn. R. 7053 be violated. [Minn. R. 7001]
5.56.114	<p>Outstanding Resource Value Waters/Trout Waters</p> <p>Discharges to outstanding resource value waters (ORVW), as defined in Minn. R. 7050.0335, or trout waters as defined in Minn. R. 7050.0420, are prohibited. [Minn. R. 7050]</p>

5.56.115	This permit does not authorize a discharge on tribal lands. The Permittee shall seek authorization from the US Environmental Protection Agency for any discharge located within tribal land boundaries. [Minn. R. 7001]
5.56.116	<p>Erosion and Nuisance Conditions</p> <p>The Permittee shall maintain the discharge operation in such a manner so as to avoid and minimize erosion, scouring, sediment transport or other nuisance conditions in the area of the discharge or in the receiving stream. If erosion, scouring, sediment transport or other nuisance conditions are observed in the area of the discharge or in the receiving water, the permittee shall comply with Minnesota Statue 115.061 and take corrective action measures. A 'Contingency Plan' for managing wastewaters during time periods when erosion, scouring, sediment transport or other nuisance conditions occur in the area of the discharge or the receiving stream shall be prepared and implemented.</p> <p>The plan should include alternatives such as:</p> <ul style="list-style-type: none"> a. Storage tanks; b. Upland discharge; c. Transporting wastewater; d. Discharge shutdown; and e. Portable treatment facilities. [Minn. R. 7001]
5.56.117	<p>Additional Effluent Limitations and Requirements</p> <p>The effluent limitations contained in this permit are based on water quality standards for a discharge to a Class 2B, C&D water body. As such, the MPCA is not estopped from establishing more or less stringent limits and/or monitoring if necessary to protect the receiving water for its designated use(s). Water quality-based effluent limits shall be dependent on receiving water, discharge volume, in-stream flow volume, and discharge time, duration and location. [Minn. R. 7001]</p>
5.56.118	<p>Twenty-four Hour Advance Notice</p> <p>The Permittee shall provide the MPCA with twenty-four hour advance notice prior to every discharge of buoyancy control or hydrostatic test water. This shall be done for both surface water, and land infiltration discharges. This notice shall be emailed to the compliance staff listed on the first page of this permit. [Minn. R. 7001]</p>
5.56.119	<p>Environmental Assessment Worksheet Requirements</p> <p>In accordance with Minn. Stat. 116D.04 and Minnesota Environmental Quality Board R. 4410.3100, this permit does not authorize the discharge from pipeline hydrostatic testing or buoyancy control in the state of Minnesota for which an Environmental Assessment Worksheet (EAW) is required. [Minn. R. 7001]</p>
5.56.120	<p>Discharges of buoyancy control and hydrostatic test waters shall be controlled to meet the following conditions;</p> <ul style="list-style-type: none"> a. Discharges shall be maintained within the potential upland discharge study area. b. Flows shall not cause the formation of rills or gullies. c. If present, vegetation shall remain viable during and following land application. [Minn. R. 7001]
	Total Facility Requirements (NPDES/SDS)
5.57.121	Definitions. Refer to the 'Permit Users Manual' found on the MPCA website (www.pca.state.mn.us) for standard definitions. [Minn. R. 7001.]
5.57.122	Incorporation by Reference. The following applicable federal and state laws are incorporated by reference in this permit, are applicable to the Permittee, and are enforceable parts of this permit: 40 CFR pts. 122.41, 122.42, 136, 403 and 503; Minn. R. pts. 7001, 7041, 7045, 7050, 7052, 7053, 7060, and 7080; and Minn. Stat. ch. 115 and 116. [Minn. R. 7001]

5.57.123	Permittee Responsibility. The Permittee shall perform the actions or conduct the activity authorized by the permit in compliance with the conditions of the permit and, if required, in accordance with the plans and specifications approved by the Agency. [Minn. R. 7001.0150, subp. 3(E)]
5.57.124	Toxic Discharges Prohibited. Whether or not this permit includes effluent limitations for toxic pollutants, the Permittee shall not discharge a toxic pollutant except according to Code of Federal Regulations, Title 40, sections 400 to 460 and Minnesota Rules 7050, 7052, 7053 and any other applicable MPCA rules. [Minn. R. 7001.1090, subp. 1(A)]
5.57.125	Nuisance Conditions Prohibited. The Permittee's discharge shall not cause any nuisance conditions including, but not limited to: floating solids, scum and visible oil film, acutely toxic conditions to aquatic life, or other adverse impact on the receiving water. [Minn. R. 7050.0210, subp. 2]
5.57.126	Property Rights. This permit does not convey a property right or an exclusive privilege. [Minn. R. 7001.0150, subp. 3(C)]
5.57.127	Liability Exemption. In issuing this permit, the state and the MPCA assume no responsibility for damage to persons, property, or the environment caused by the activities of the Permittee in the conduct of its actions, including those activities authorized, directed, or undertaken under this permit. To the extent the state and the MPCA may be liable for the activities of its employees, that liability is explicitly limited to that provided in the Tort Claims Act. [Minn. R. 7001.0150, subp. 3(O)]
5.57.128	The MPCA's issuance of this permit does not obligate the MPCA to enforce local laws, rules, or plans beyond what is authorized by Minnesota Statutes. [Minn. R. 7001.0150, subp. 3(D)]
5.57.129	Liabilities. The MPCA's issuance of this permit does not release the Permittee from any liability, penalty or duty imposed by Minnesota or federal statutes or rules or local ordinances, except the obligation to obtain the permit. [Minn. R. 7001.0150, subp. 3(A)]
5.57.130	The issuance of this permit does not prevent the future adoption by the MPCA of pollution control rules, standards, or orders more stringent than those now in existence and does not prevent the enforcement of these rules, standards, or orders against the Permittee. [Minn. R. 7001.0150, subp. 3(B)]
5.57.131	Severability. The provisions of this permit are severable and, if any provisions of this permit or the application of any provision of this permit to any circumstance are held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. [Minn. R. 7001]
5.57.132	Compliance with Other Rules and Statutes. The Permittee shall comply with all applicable air quality, solid waste, and hazardous waste statutes and rules in the operation and maintenance of the facility. [Minn. R. 7001]
5.57.133	Inspection and Entry. When authorized by Minn. Stat. ch. 115.04; 115B.17, subd. 4; and 116.091, and upon presentation of proper credentials, the agency, or an authorized employee or agent of the agency, shall be allowed by the Permittee to enter at reasonable times upon the property of the Permittee to examine and copy books, papers, records, or memoranda pertaining to the construction, modification, or operation of the facility covered by the permit or pertaining to the activity covered by the permit; and to conduct surveys and investigations, including sampling or monitoring, pertaining to the construction, modification, or operation of the facility covered by the permit or pertaining to the activity covered by the permit. [Minn. R. 7001.0150, subp. 3(I)]
5.57.134	Control Users. The Permittee shall regulate the users of its wastewater treatment facility so as to prevent the introduction of pollutants or materials that may result in the inhibition or disruption of the conveyance system, treatment facility or processes, or disposal system that would contribute to the violation of the conditions of this permit or any federal, state or local law or regulation. [Minn. R. 7001.0150, subp. 3(F)]
5.57.135	Sampling. [Minn. R. 7001]
5.57.136	Representative Sampling. Samples and measurements required by this permit shall be conducted as specified in this permit and shall be representative of the discharge or monitored activity. [40 CFR 122.41(j)(1)]

5.57.137	Additional Sampling. If the Permittee monitors more frequently than required, the results and the frequency of monitoring shall be reported on the Discharge Monitoring Report (DMR) or another MPCA-approved form for that reporting period. [Minn. R. 7001.1090, subp. 1(E)]
5.57.138	Certified Laboratory. A laboratory certified by the Minnesota Department of Health and/or registered by the MPCA shall conduct analyses required by this permit. Analyses of dissolved oxygen, pH, temperature, specific conductance, and total residual oxidants (chlorine, bromine) do not need to be completed by a certified laboratory but shall comply with manufacturers specifications for equipment calibration and use. [Minn. R. 4740.2010, Minn. R. 4740.2050 through 2120]
5.57.139	Sample Preservation and Procedure. Sample preservation and test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and Minn. R. 7041.3200. [40 CFR 136, Minn. R. 7041.3200]
5.57.140	Equipment Calibration: Flow meters, pumps, flumes, lift stations or other flow monitoring equipment used for purposes of determining compliance with permit shall be checked and/or calibrated for accuracy at least twice annually. [Minn. R. 7001.0150, 2(B and C)]
5.57.141	Maintain Records. The Permittee shall keep the records required by this permit for at least three years, including any calculations, original recordings from automatic monitoring instruments, and laboratory sheets. The Permittee shall extend these record retention periods upon request of the MPCA. The Permittee shall maintain records for each sample and measurement. The records shall include the following information: a. the exact place, date, and time of the sample or measurement; b. the date of analysis; c. the name of the person who performed the sample collection, measurement, analysis, or calculation; d. the analytical techniques, procedures and methods used; and e. the results of the analysis. [Minn. R. 7001.0150, 2(C)]
5.57.142	Completing Reports. The Permittee shall submit the results of the required sampling and monitoring activities on the forms provided, specified, or approved by the MPCA. The information shall be recorded in the specified areas on those forms and in the units specified. Required forms may include DMR Supplemental/Sample Value Form Individual values for each sample and measurement shall be recorded on the DMR Supplemental/Sample Value Form which, if required, will be provided by the MPCA. DMR Supplemental/Sample Value Forms shall be submitted with the appropriate DMRs. You may design and use your own supplemental form; however it shall be approved by the MPCA. Note: Required summary information shall also be recorded on the DMR. Summary information that is submitted ONLY on the DMR Supplemental/Sample Value Form does not comply with the reporting requirements. [Minn. R. 7001.1090, 1(D), Minn. R. 7001.0150, 2(B)]

5.57.143	<p>Submitting Reports. The Permittee shall submit eDMR supplemental forms, and other related attachments via MPCA e-services after the MPCA approves their authorization request.</p> <p>The Permittee shall electronically submit eDMRs and eDMR supplemental forms by the 21st day of the month following the sampling period or otherwise as specified in this permit. The Permittee shall complete eDMR submittal on or before 11:59 PM of the 21st day of the month following the sampling period or as otherwise specified in this permit. The Permittee shall submit an eDMR for each required station even if no discharge occurred during the reporting period.</p> <p>The Permittee shall submit other reports required by this permit electronically or by mail. The Permittee shall submit reports by the date specified in this permit. For electronic submittals, the Permittee shall submit on or before 11:59 PM on the date specified in this permit. For mailed submittals, the Permittee shall ensure that submittals via U.S. Postal Service or other hand delivery method contain postmarks by the date specified in this permit. Whole Effluent Testing (WET) and Pretreatment Annual Reports must be mailed to the WQ Submittals Center.</p> <p>Electronically: wq.submittals.mPCA@state.mn.us Include Water Quality Submittals form: www.pca.state.mn.us/sites/default/files/wq-wwprm7-71.docx</p> <p>Or by mail: Attention: WQ Submittals Center Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, MN 55155-4191. [Minn. R. 7001.0150, 2(B), Minn. R. 7001.0150, 3(H)]</p>
5.57.144	<p>Incomplete or Incorrect Reports. The Permittee shall immediately submit an electronically amended report or DMR to the MPCA upon discovery by the Permittee or notification by the MPCA that it has submitted an incomplete or incorrect report or DMR. The amended report or DMR shall contain the missing or corrected data along with a cover letter explaining the circumstances of the incomplete or incorrect report. If it is impossible to electronically amend the report or DMR, the Permittee shall immediately notify the MPCA and the MPCA will provide direction for the amendment submittals. [Minn. R. 7001.0150, 3(G)]</p>
5.57.145	<p>Required Signatures. All DMRs, forms, reports, and other documents submitted to the MPCA shall be signed by the Permittee or the duly authorized representative of the Permittee. Minn. R. 7001.0150, subp. 2, item D. The person or persons that sign the DMRs, forms, reports or other documents shall certify that he or she understands and complies with the certification requirements of Minn. R. 7001.0070 and 7001.0540, including the penalties for submitting false information. Technical documents, such as design drawings and specifications and engineering studies required to be submitted as part of a permit application or by permit conditions, shall be certified by a registered professional engineer. [Minn. R. 7001.0540]</p>

5.57.146	<p>Detection Level. The Permittee shall report monitoring results below the reporting limit (RL) of a particular instrument as "<" the value of the RL. For example, if an instrument has a RL of 0.1 mg/L and a parameter is not detected at a value of 0.1 mg/L or greater, the concentration shall be reported as "<0.1 mg/L." "Non-detected," "undetected," "below detection limit," and "zero" are unacceptable reporting results, and are permit reporting violations.</p> <p>Where sample values are less than the level of detection and the permit requires reporting of an average, the Permittee shall calculate the average as follows:</p> <p>a. If one or more values are greater than the level of detection, substitute zero for all nondetectable values to use in the average calculation.</p> <p>b. If all values are below the level of detection, report the averages as "<" the corresponding level of detection.</p> <p>c. Where one or more sample values are less than the level of detection, and the permit requires reporting of a mass, usually expressed as kg/day, the Permittee shall substitute zero for all nondetectable values. [Minn. R. 7001.0150, 2(B)]</p>
5.57.147	<p>Records. The Permittee shall, when requested by the Agency, submit within a reasonable time the information and reports that are relevant to the control of pollution regarding the construction, modification, or operation of the facility covered by the permit or regarding the conduct of the activity covered by the permit. [Minn. R. 7001.0150, 3(H)]</p>
5.57.148	<p>Confidential Information. Except for data determined to be confidential according to Minn. Stat. ch. 116.075, subd. 2, all reports required by this permit shall be available for public inspection. Effluent data shall not be considered confidential. To request the Agency maintain data as confidential, the Permittee shall follow Minn. R. 7000.1300. [Minn. R. 7000.1300]</p>
5.57.149	<p>Noncompliance and Enforcement. [Minn. R. 7001]</p>
5.57.150	<p>Subject to Enforcement Action and Penalties. Noncompliance with a term or condition of this permit subjects the Permittee to penalties provided by federal and state law set forth in section 309 of the Clean Water Act; United States Code, title 33, section 1319, as amended; and in Minn. Stat. ch. 115.071 and 116.072, including monetary penalties, imprisonment, or both. [Minn. R. 7001.1090, 1(B)]</p>
5.57.151	<p>Criminal Activity. The Permittee may not knowingly make a false statement, representation, or certification in a record or other document submitted to the Agency. A person who falsifies a report or document submitted to the Agency, or tampers with, or knowingly renders inaccurate a monitoring device or method required to be maintained under this permit is subject to criminal and civil penalties provided by federal and state law. [Minn. R. 7001.0150, 3(G), Minn. R. 7001.1090, 1(G and H), Minn. Stat. ch. 609.671, 1]</p>
5.57.152	<p>Noncompliance Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [40 CFR 122.41(c)]</p>

5.57.153	<p>Effluent Violations. If sampling by the Permittee indicates a violation of any discharge limitation specified in this permit, the Permittee shall immediately make every effort to verify the violation by collecting additional samples, if appropriate, investigate the cause of the violation, and take action to prevent future violations. If the permittee discovers that noncompliance with a condition of the permit has occurred which could endanger human health, public drinking water supplies, or the environment, the Permittee shall within 24 hours of the discovery of the noncompliance, orally notify the commissioner and submit a written description of the noncompliance within 5 days of the discovery. The written description shall include items a. through e., as listed below. If the Permittee discovers other non-compliance that does not explicitly endanger human health, public drinking water supplies, or the environment, the non-compliance shall be reported during the next reporting period to the MPCA with its Discharge Monitoring Report (DMR). If no DMR is required within 30 days, the Permittee shall submit a written report within 30 days of the discovery of the noncompliance. This description shall include the following information:</p> <ul style="list-style-type: none">a. a description of the event including volume, duration, monitoring results and receiving waters;b. the cause of the event;c. the steps taken to reduce, eliminate and prevent reoccurrence of the event;d. the exact dates and times of the event; ande. steps taken to reduce any adverse impact resulting from the event. [Minn. R. 7001.0150, 3(K)]
5.57.154	<p>Upset Defense. In the event of temporary noncompliance by the Permittee with an applicable effluent limitation resulting from an upset at the Permittee's facility due to factors beyond the control of the Permittee, the Permittee has an affirmative defense to an enforcement action brought by the Agency as a result of the noncompliance if the Permittee demonstrates by a preponderance of competent evidence:</p> <ul style="list-style-type: none">a. the specific cause of the upset;b. that the upset was unintentional;c. that the upset resulted from factors beyond the reasonable control of the Permittee and did not result from operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or increases in production which are beyond the design capability of the treatment facilities;d. that at the time of the upset the facility was being properly operated;e. that the Permittee properly notified the Commissioner of the upset in accordance with Minn. R. 7001.1090, subp. 1, item I; andf. that the Permittee implemented the remedial measures required by Minn. R. 7001.0150, subp. 3, item J. [Minn. R. 7001.1090]
5.57.155	<p>Release. [Minn. R. 7001]</p>
5.57.156	<p>Unauthorized Releases of Wastewater Prohibited. Except for discharges from outfalls specifically authorized by this permit, overflows, discharges, spills, or other releases of wastewater or materials to the environment, whether intentional or not, are prohibited. However, the MPCA will consider the Permittee's compliance with permit requirements, frequency of release, quantity, type, location, and other relevant factors when determining appropriate action. [40 CFR 122.41, Minn. Stat. ch. 115.061]</p>

5.57.157	<p>Discovery of a release. Upon discovery of a release, the Permittee shall:</p> <p>a. Take all reasonable steps to immediately end the release.</p> <p>b. Notify the Minnesota Department of Public Safety Duty Officer at 1(800)422-0798 or (651)649-5451 (metro area) immediately upon discovery of the release. You may contact the MPCA during business hours at 1(800)657-3864 or (651)296-6300 (metro area).</p> <p>c. Recover as rapidly and as thoroughly as possible all substances and materials released or immediately take other action as may be reasonably possible to minimize or abate pollution to waters of the state or potential impacts to human health caused thereby. If the released materials or substances cannot be immediately or completely recovered, the Permittee shall contact the MPCA. If directed by the MPCA, the Permittee shall consult with other local, state or federal agencies (such as the Minnesota Department of Natural Resources and/or the Wetland Conservation Act authority) for implementation of additional clean-up or remediation activities in wetland or other sensitive areas. [Minn. R. 7001.1090]</p>
5.57.158	<p>Sampling of a release. Upon discovery of a release, the Permittee shall:</p> <p>a. Collect representative samples of the release. The Permittee shall sample the release for parameters of concern immediately following discovery of the release. The Permittee may contact the MPCA during business hours to discuss the sampling parameters and protocol. In addition, Fecal Coliform Bacteria samples shall be collected where it is determined by the Permittee that the release contains or may contain sewage. If the release cannot be immediately stopped, the Permittee shall consult with MPCA regarding additional sampling requirements. Samples shall be collected at least, but not limited to, two times per week for as long as the release continues.</p> <p>b. Submit the sampling results on the Release Sampling Form (http://www.pca.state.mn.us/index.php/view-document.html?gid=18867). The Release Sampling Form shall be submitted to the MPCA with the next DMR or within 30 days whichever is sooner. [Minn. R. 7001.1090]</p>
5.57.159	<p>Bypass. [Minn. R. 7001]</p>
5.57.160	<p>Anticipated bypass. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if the bypass is for essential maintenance to assure efficient operation of the facility. The permittee shall submit prior notice, if possible at least ten days before the date of the bypass to the MPCA.</p> <p>The notice of the need for an anticipated bypass shall include the following information:</p> <p>a. the proposed date and estimated duration of the bypass;</p> <p>b. the alternatives to bypassing; and</p> <p>c. a proposal for effluent sampling during the bypass. Any bypass wastewater shall enter waters of the state from outfalls specifically authorized by this permit. Therefore, samples shall be collected at the frequency and location identified in this permit or two times per week for as long as the bypass continues, whichever is more frequent.</p> <p>[40 CFR 122.41(m)(2 and 3), Minn. R. 7001.1090, 1(J)]</p>

5.57.161	<p>All other bypasses are prohibited. The MPCA may take enforcement action against the Permittee for a bypass, unless the specific conditions described in Minn. R. Ch. 7001.1090 subp. 1, K and 122.41(m)(4)(i) are met.</p> <p>In the event of an unanticipated bypass, the permittee shall:</p> <ul style="list-style-type: none"> a. Take all reasonable steps to immediately end the bypass. b. Notify the Minnesota Department of Public Safety Duty Officer at 1(800)422-0798 or (651)649-5451 (metro area) immediately upon commencement of the bypass. You may contact the MPCA during business hours at 1(800)657-3864 or (651)296-6300 (metro area). c. Immediately take action as may be reasonably possible to minimize or abate pollution to waters of the state or potential impacts to human health caused thereby. If directed by the MPCA, the Permittee shall consult with other local, state or federal agencies for implementation of abatement, clean-up, or remediation activities. d. Only allow bypass wastewater as specified in this section to enter waters of the state from outfalls specifically authorized by this permit. Samples shall be collected at the frequency and location identified in this permit or two times per week for as long as the bypass continues, whichever is more frequent. The permittee shall also follow the reporting requirements for effluent violations as specified in this permit. [40 CFR 122.41(m)(4)(i), Minn. Stat. ch. 115.061]
5.57.162	Operation and Maintenance. [Minn. R. 7001]
5.57.163	The Permittee shall at all times properly operate and maintain the facilities and systems of treatment and control, and the appurtenances related to them which are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall install and maintain appropriate backup or auxiliary facilities if they are necessary to achieve compliance with the conditions of the permit and, for all permits other than hazardous waste facility permits, if these backup or auxiliary facilities are technically and economically feasible Minn. R. 7001.0150. subp. 3, item F. [Minn. R. 7001.0150, 3(F)]
5.57.164	In the event of a reduction or loss of effective treatment of wastewater at the facility, the Permittee shall control production or curtail its discharges to the extent necessary to maintain compliance with the terms and conditions of this permit. The Permittee shall continue this control or curtailment until the wastewater treatment facility has been restored or until an alternative method of treatment is provided. [Minn. R. 7001.1090, 1(C)]
5.57.165	Solids Management. The Permittee shall properly store, transport, and dispose of biosolids, septage, sediments, residual solids, filter backwash, screenings, oil, grease, and other substances so that pollutants do not enter surface waters or ground waters of the state. Solids should be disposed of in accordance with local, state and federal requirements. [40 CFR 503, Minn. R. 7041]
5.57.166	Scheduled Maintenance. The Permittee shall schedule maintenance of the treatment works during non-critical water quality periods to prevent degradation of water quality, except where emergency maintenance is required to prevent a condition that would be detrimental to water quality or human health. [Minn. R. 7001.0150, 3(F), Minn. R. 7001.0150, 2(B)]
5.57.167	Control Tests. In-plant control tests shall be conducted at a frequency adequate to ensure compliance with the conditions of this permit. [Minn. R. 7001.0150, 3(F), Minn. R. 7001.0150, 2(B)]
5.57.168	Changes to the Facility or Permit. [Minn. R. 7001]

5.57.169	<p>Permit Modifications. Except as provided under Minnesota Statutes, section 115.07, subdivisions 1 and 3, no person required by statute or rule to obtain a permit may construct, install, modify, or operate the facility to be permitted, nor shall a person commence an activity for which a permit is required by statute or rule until the agency has issued a written permit for the facility or activity.</p> <p>Permittees that propose to make a change to the facility or discharge that requires a permit modification shall follow Minn. R. 7001.0190. If the Permittee cannot determine whether a permit modification is needed, the Permittee shall contact the MPCA prior to any action. It is recommended that the application for permit modification be submitted to the MPCA at least 180 days prior to the planned change. [Minn. R. 7001.0030]</p>
5.57.170	<p>Plans, specifications and MPCA approval are not necessary when maintenance dictates the need for installation of new equipment, provided the equipment is the same design size and has the same design intent. For instance, a broken pipe, lift station pump, aerator, or blower can be replaced with the same design-sized equipment without MPCA approval.</p> <p>If the proposed construction is not expressly authorized by this permit, it may require a permit modification. If the construction project requires an Environmental Assessment Worksheet under Minn. R. 4410, no construction shall begin until a negative declaration is issued and all approvals are received or implemented. [Minn. R. 7001.0030]</p>
5.57.171	<p>Report Changes. The Permittee shall give advance notice as soon as possible to the MPCA of any substantial changes in operational procedures, activities that may alter the nature or frequency of the discharge, and/or material factors that may affect compliance with the conditions of this permit. [Minn. R. 7001.0150, 3(M)]</p>

5.57.172	<p>Chemical Additives. The Permittee shall receive prior written approval from the MPCA before increasing the use of a chemical additive authorized by this permit, or using a chemical additive not authorized by this permit, in quantities or concentrations that have the potential to change the characteristics, nature, and/or quality of the discharge.</p> <p>The Permittee shall request approval for an increased or new use of a chemical additive at least 60 days, or as soon as possible, before the proposed increase or new use. The Permittee shall include at least the following information for the proposed additive as instructed in the chemical additive approvals section on the MPCA website at https://www.pca.state.mn.us/water/wastewater-additional-guidance-and-information:</p> <p>A. The process for which the additive will be used;</p> <p>B. Safety Data Sheet (SDS) which shall include aquatic toxicity, human health, and environmental fate information for the proposed additive. The aquatic toxicity information shall include at minimum the results of: a) a 48-hour LC50 or EC50 acute study for a North American freshwater planktonic crustacean (either Ceriodaphnia or Daphnia sp.) and b) a 96-hour LC50 acute study for rainbow trout, bluegill, or fathead minnow or another North American freshwater aquatic species other than a planktonic crustacean;</p> <p>C. A complete product use and instruction label;</p> <p>D. The commercial and chemical names and Chemical Abstract Survey (CAS) number for all ingredients in the additive (If the SDS does not include information on chemical composition, including percentages for each ingredient totaling to 100%, the Permittee shall contact the supplier to have this information provided); and</p> <p>E. The proposed method of application, application frequency, concentration, and daily average and maximum rates of use.</p> <p>Upon review of the information submitted regarding the proposed chemical additive, the MPCA may require additional information be submitted for consideration. This permit may be modified to restrict the use or discharge of a chemical additive and include additional influent and effluent monitoring requirements. Approval for the use of an additive shall not justify the exceedance of any effluent limitation nor shall it be used as a defense against pollutant levels in the discharge causing or contributing to the violation of a water quality standard. [Minn. R. 7001.0170]. [Minn. R. 7001.0170]</p>
5.57.173	<p>MPCA Initiated Permit Modification, Suspension, or Revocation. The MPCA may modify or revoke and reissue this permit pursuant to Minn. R. 7001.0170. The MPCA may revoke without reissuance this permit pursuant to Minn. R. 7001.0180. [Minn. R. 7001.0170, Minn. R. 7001.0180]</p>
5.57.174	<p>TMDL Impacts. Facilities that discharge to an impaired surface water, watershed or drainage basin may be required to comply with additional permits or permit requirements, including additional restriction or relaxation of limits and monitoring as authorized by the CWA 303(d)(4)(A) and 40 CFR 122.44.I.2.i., necessary to ensure consistency with the assumptions and requirements of any applicable US EPA approved wasteload allocations resulting from Total Maximum Daily Load (TMDL) studies. [40 CFR 122.44(I)(2)(i)]</p>
5.57.175	<p>Permit Transfer. The permit is not transferable to any person without the express written approval of the Agency after compliance with the requirements of Minn. R. 7001.0190. A person to whom the permit has been transferred shall comply with the conditions of the permit. [Minn. R. 7001.0150, 3(N)]</p>

5.57.176	<p>Facility Closure. The Permittee is responsible for closure and post-closure care of the facility. The Permittee shall notify the MPCA of a significant reduction or cessation of the activities described in this permit at least 180 days before the reduction or cessation. The MPCA may require the Permittee to provide to the MPCA a facility Closure Plan for approval.</p> <p>Facility closure that could result in a potential long-term water quality concern, such as the ongoing discharge of wastewater to surface or ground water, may require a permit modification or reissuance.</p> <p>The MPCA may require the Permittee to establish and maintain financial assurance to ensure performance of certain obligations under this permit, including closure, post-closure care and remedial action at the facility. If financial assurance is required, the amount and type of financial assurance, and proposed modifications to previously MPCA-approved financial assurance, shall be approved by the MPCA. [Minn. Stat. ch. 116.07, 4]</p>
5.57.177	<p>Permit Reissuance. If the Permittee desires to continue permit coverage beyond the date of permit expiration, the Permittee shall submit an application for permit reissuance : Due by 180 days prior to permit expiration. If the Permittee does not intend to continue the activities authorized by this permit after the expiration date of this permit, the Permittee shall notify the MPCA in writing at least 180 days before permit expiration.</p> <p>If the Permittee has submitted a timely application for permit reissuance, the Permittee may continue to conduct the activities authorized by this permit, in compliance with the requirements of this permit, until the MPCA takes final action on the application, unless the MPCA determines any of the following (Minn. R. 7001.0040 and 7001.0160):</p> <ul style="list-style-type: none">a. The Permittee is not in substantial compliance with the requirements of this permit, or with a stipulation agreement or compliance schedule designed to bring the Permittee into compliance with this permit;b. The MPCA, as a result of an action or failure to act by the Permittee, has been unable to take final action on the application on or before the expiration date of the permit;c. The Permittee has submitted an application with major deficiencies or has failed to properly supplement the application in a timely manner after being informed of deficiencies. <p>[Minn. R. 7001.0160]</p>

6. Submittal action summary

SD001	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.1.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD002	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.2.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD003	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.3.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD004	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.4.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD005	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.5.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD006	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.6.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD007	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.7.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD009	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.8.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD010	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements

	6.9.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD011	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.10.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD012	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.11.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD013	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.12.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD015	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.13.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD017	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.14.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD018	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.15.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD020	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.16.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD021	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.17.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD022	Hydrostatic Testing	

		Facility Specific Limit and Monitoring Requirements
	6.18.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD023	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.19.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD024	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.20.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD025	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.21.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD026	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.22.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD027	Hydrostatic Testing	
		Facility Specific Limit and Monitoring Requirements
	6.23.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS001	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.24.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS002	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.25.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS003	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements

	6.26.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS004	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.27.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS005	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.28.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS006	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.29.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS007	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.30.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS008	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.31.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS009	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.32.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS010	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.33.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]

WS011	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.34.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS013	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.35.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS014	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.36.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS015	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.37.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS016	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.38.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS017	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.39.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS018	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.40.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS019	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements

	6.41.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS020	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.42.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS021	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.43.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS022	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.44.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS023	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.45.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS024	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.46.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS025	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.47.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
WS026	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.48.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]

WS027	Intermediate: WW to Land	
		Waste Stream: Effluent to Land Treatment Requirements
	6.49.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
MN0071366	Enbridge Energy, Limited Partnership, Line 3 Replacement Project	
		Total Facility Requirements (NPDES/SDS)
	6.50.1	<p>Permit Reissuance. If the Permittee desires to continue permit coverage beyond the date of permit expiration, the Permittee shall submit an application for permit reissuance : Due by 180 days prior to permit expiration. If the Permittee does not intend to continue the activities authorized by this permit after the expiration date of this permit, the Permittee shall notify the MPCA in writing at least 180 days before permit expiration.</p> <p>If the Permittee has submitted a timely application for permit reissuance, the Permittee may continue to conduct the activities authorized by this permit, in compliance with the requirements of this permit, until the MPCA takes final action on the application, unless the MPCA determines any of the following (Minn. R. 7001.0040 and 7001.0160):</p> <ul style="list-style-type: none"> a. The Permittee is not in substantial compliance with the requirements of this permit, or with a stipulation agreement or compliance schedule designed to bring the Permittee into compliance with this permit; b. The MPCA, as a result of an action or failure to act by the Permittee, has been unable to take final action on the application on or before the expiration date of the permit; c. The Permittee has submitted an application with major deficiencies or has failed to properly supplement the application in a timely manner after being informed of deficiencies. [Minn. R. 7001.0160]

7. Limits and monitoring

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
SD001 Red River (milepost 801.8)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD001 Red River (milepost 801.8)	Flow					1200 daily average	1500 instantaneous maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD001 Red River (milepost 801.8)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD001 Red River (milepost 801.8)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD002 Tamarac River (milepost 828.5)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD002 Tamarac River (milepost 828.5)	Flow					1200 daily average	1500 instantaneous maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD002 Tamarac River (milepost 828.5)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD002 Tamarac River (milepost 828.5)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD003 Middle River (milepost 835.9)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD003 Middle River (milepost 835.9)	Flow					1200 daily average	1500 instantaneous maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD003 Middle River (milepost 835.9)	pH				6.0 daily minimum		9.0 instantaneous maximum	standard units	twice per week	Grab	Jan-Dec	

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
SD003 Middle River (milepost 835.9)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD004 Red Lake River (milepost 864.7)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD004 Red Lake River (milepost 864.7)	Flow					1200 daily average	1500 instantaneous maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD004 Red Lake River (milepost 864.7)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD004 Red Lake River (milepost 864.7)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD005 Clearwater River (milepost 875.4)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD005 Clearwater River (milepost 875.4)	Flow					1200 daily average	1500 instantaneous maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD005 Clearwater River (milepost 875.4)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD005 Clearwater River (milepost 875.4)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD006 Lost River (milepost 904)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD006 Lost River (milepost 904)	Flow					1200 daily average	1500 instantaneous maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD006 Lost River (milepost 904)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
SD006 Lost River (milepost 904)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD007 Clearwater River (milepost 922.2)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD007 Clearwater River (milepost 922.2)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD007 Clearwater River (milepost 922.2)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD007 Clearwater River (milepost 922.2)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Oct-Mar	
SD007 Clearwater River (milepost 922.2)	Solids, Total Suspended (TSS)					15 calendar month average	Monitor only. calendar month maximum	milligrams per liter	twice per week	Grab	Apr-Sep	
SD009 Island Lake (milepost 961.7)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD009 Island Lake (milepost 961.7)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD009 Island Lake (milepost 961.7)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD009 Island Lake (milepost 961.7)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD010 Shell River (milepost 985.4)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD010 Shell River (milepost 985.4)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD010 Shell River (milepost 985.4)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
SD010 Shell River (milepost 985.4)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD011 Crow Wing River (milepost 993.3)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD011 Crow Wing River (milepost 993.3)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD011 Crow Wing River (milepost 993.3)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD011 Crow Wing River (milepost 993.3)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD012 Clear (Eagle) Lake (milepost 1013.4)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD012 Clear (Eagle) Lake (milepost 1013.4)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD012 Clear (Eagle) Lake (milepost 1013.4)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD012 Clear (Eagle) Lake (milepost 1013.4)	Solids, Total Suspended (TSS)					15 calendar month average		milligrams per liter	twice per week	Grab	Apr-Sep	
SD012 Clear (Eagle) Lake (milepost 1013.4)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Oct-Mar	
SD013 Pine River (milepost 1017.4)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD013 Pine River (milepost 1017.4)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD013 Pine River (milepost 1017.4)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
SD013 Pine River (milepost 1017.4)	Solids, Total Suspended (TSS)					15 calendar month average		milligrams per liter	twice per week	Grab	Apr-Sep	
SD013 Pine River (milepost 1017.4)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Oct-Mar	
SD015 Willow River (milepost 1066.5)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD015 Willow River (milepost 1066.5)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD015 Willow River (milepost 1066.5)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD015 Willow River (milepost 1066.5)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per day	Grab	Oct-Mar	
SD015 Willow River (milepost 1066.5)	Solids, Total Suspended (TSS)					15 calendar month average		milligrams per liter	twice per week	Grab	Apr-Sep	
SD017 Mississippi River (milepost 1069.7)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD017 Mississippi River (milepost 1069.7)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD017 Mississippi River (milepost 1069.7)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD017 Mississippi River (milepost 1069.7)	Solids, Total Suspended (TSS)					15 calendar month average		milligrams per liter	twice per week	Grab	Apr-Sep	
SD017 Mississippi River (milepost 1069.7)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Oct-Mar	

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Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
SD018 East Savanna River (milepost 1086)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD018 East Savanna River (milepost 1086)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD018 East Savanna River (milepost 1086)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD018 East Savanna River (milepost 1086)	Solids, Total Suspended (TSS)					15 calendar month average		milligrams per liter	twice per week	Grab	Apr-Sep	
SD018 East Savanna River (milepost 1086)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Oct-Mar	
SD020 Chub Lake (milepost 1120.1)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD020 Chub Lake (milepost 1120.1)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD020 Chub Lake (milepost 1120.1)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD020 Chub Lake (milepost 1120.1)	Solids, Total Suspended (TSS)					15 calendar month average		milligrams per liter	twice per week	Grab	Apr-Sep	
SD020 Chub Lake (milepost 1120.1)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Oct-Mar	
SD021 Snake River (milepost 843.2)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD021 Snake River (milepost 843.2)	Flow					1200 daily average	1500 instantaneous maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	

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Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
SD021 Snake River (milepost 843.2)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD021 Snake River (milepost 843.2)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD022 Lost River (milepost 885.8)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD022 Lost River (milepost 885.8)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD022 Lost River (milepost 885.8)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD022 Lost River (milepost 885.8)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD023 Shell River (milepost 983.7)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD023 Shell River (milepost 983.7)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD023 Shell River (milepost 983.7)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD023 Shell River (milepost 983.7)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD024 Shell River (milepost 991.2)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD024 Shell River (milepost 991.2)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD024 Shell River (milepost 991.2)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
SD024 Shell River (milepost 991.2)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD025 Daggett Brook (milepost 1037.4)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD025 Daggett Brook (milepost 1037.4)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD025 Daggett Brook (milepost 1037.4)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD025 Daggett Brook (milepost 1037.4)	Solids, Total Suspended (TSS)					15 calendar month average		milligrams per liter	twice per week	Grab	Apr-Sep	
SD025 Daggett Brook (milepost 1037.4)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Oct-Mar	
SD026 Lake George (milepost 1036.6)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	
SD026 Lake George (milepost 1036.6)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD026 Lake George (milepost 1036.6)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD026 Lake George (milepost 1036.6)	Solids, Total Suspended (TSS)					15 calendar month average		milligrams per liter	twice per week	Grab	Apr-Sep	
SD026 Lake George (milepost 1036.6)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Oct-Mar	
SD027 St. Louis River (milepost 1094.4)	BOD, Carbonaceous 05 Day (20 Deg C)					25 calendar month average	40 calendar month maximum	milligrams per liter	twice per week	Grab	Jan-Dec	

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Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
SD027 St. Louis River (milepost 1094.4)	Flow					1200 daily average	1500 daily maximum	gallons per minute	once per day	Measurement, Continuous	Jan-Dec	
SD027 St. Louis River (milepost 1094.4)	pH				6.0 daily minimum		9.0 daily maximum	standard units	twice per week	Grab	Jan-Dec	
SD027 St. Louis River (milepost 1094.4)	Solids, Total Suspended (TSS)					30 calendar month average	45 calendar month maximum	milligrams per liter	twice per week	Grab	Oct-Mar	
SD027 St. Louis River (milepost 1094.4)	Solids, Total Suspended (TSS)					15 calendar month average		milligrams per liter	twice per week	Grab	Apr-Sep	
WS001 Wastewater to land - Red River (LA301 milepost 802.1)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS001 Wastewater to land - Red River (LA301 milepost 802.1)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS002 Wastewater to land - Tamarac river (LA302 milepost 828.7)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS002 Wastewater to land - Tamarac river (LA302 milepost 828.7)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS003 Wastewater to land - Middle River (LA303 milepost 836.2)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS003 Wastewater to land - Middle River (LA303 milepost 836.2)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
WS004 Wastewater to land - Snake River (LA304 milepost 843.2)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS004 Wastewater to land - Snake River (LA304 milepost 843.2)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS005 Wastewater to land - Red Lake River (LA305 milepost 864.8)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS005 Wastewater to land - Red Lake River (LA305 milepost 864.8)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS006 Wastewater to land - Clearwater River (LA306 milepost 875.8)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS006 Wastewater to land - Clearwater River (LA306 milepost 875.8)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS007 Wastewater to land - Clearwater River (LA307 milepost 922.1)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS007 Wastewater to land - Clearwater River (LA307 milepost 922.1)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
WS008 Wastewater to land - Mississippi River (LA308 milepost 941.2)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS008 Wastewater to land - Mississippi River (LA308 milepost 941.2)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS009 Wastewater to land - Well 718159 (LA309 milepost 952.5)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS009 Wastewater to land - Well 718159 (LA309 milepost 952.5)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS010 Wastewater to land - Well 763975 (LA310 milepost 964.4)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS010 Wastewater to land - Well 763975 (LA310 milepost 964.4)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS011 Wastewater to land - Well 232423 (LA311 milepost 973.9)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS011 Wastewater to land - Well 232423 (LA311 milepost 973.9)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
WS013 Wastewater to land - Shell River (LA313 milepost 983.5)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS013 Wastewater to land - Shell River (LA313 milepost 983.5)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS014 Wastewater to land - Shell River (LA314 milepost 985.8)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS014 Wastewater to land - Shell River (LA314 milepost 985.8)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS015 Wastewater to land - Well 465115 (LA315 milepost 991.1)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS015 Wastewater to land - Well 465115 (LA315 milepost 991.1)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS016 Wastewater to land - Well 465115 (LA316 milepost 993.1)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS016 Wastewater to land - Well 465115 (LA316 milepost 993.1)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
WS017 Wastewater to land - Mississippi River (LA317 milepost 1069.4)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS017 Wastewater to land - Mississippi River (LA317 milepost 1069.4)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS018 Wastewater to land - Willow River (LA318 milepost 1066.6)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS018 Wastewater to land - Willow River (LA318 milepost 1066.6)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS019 Wastewater to land - East Savanna River (LA319 milepost 1085.7)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS019 Wastewater to land - East Savanna River (LA319 milepost 1085.7)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS020 Wastewater to land -Pine River/Trench Water (LA320 milepost 1017.1)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS020 Wastewater to land -Pine River/Trench Water (LA320 milepost 1017.1)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
WS021 Wastewater to land - Daggett Brook/trench water (LA321 milepost 1037.1)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS021 Wastewater to land - Daggett Brook/trench water (LA321 milepost 1037.1)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS022 Wastewater to land - Daggett Brook (LA322 milepost 1041.1)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS022 Wastewater to land - Daggett Brook (LA322 milepost 1041.1)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS023 Wastewater to land - Trench Water (LA323 milepost 1094.6)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS023 Wastewater to land - Trench Water (LA323 milepost 1094.6)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS024 Wastewater to land - Tamarac River/Red Lake River (LA324 milepost 848.2)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS024 Wastewater to land - Tamarac River/Red Lake River (LA324 milepost 848.2)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	

Subject item	Parameter	Discharge limitations						Monitoring requirements				Notes
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	
WS025 Wastewater to land - Pine River (LA325 milepost 1017.3)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS025 Wastewater to land - Pine River (LA325 milepost 1017.3)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS026 Wastewater to land - Red Lake River/Clearwater River (LA326 milepost 875.4)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS026 Wastewater to land - Red Lake River/Clearwater River (LA326 milepost 875.4)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	
WS027 Wastewater to land - Mississippi River (LA327 milepost 1069.6)	Area Of Disposal, Used		Monitor only. calendar month total	acres					once per week	Measurement	Jan-Dec	
WS027 Wastewater to land - Mississippi River (LA327 milepost 1069.6)	Flow		Monitor only. calendar month total	million gallons					once per week	Measurement	Jan-Dec	

Chemical Additives

Chemical additives are used according to the chemical manufacturer's recommendations. This approval shall not justify any exceedances of permit limits or water quality standards. Chemical additives are approved for use in discharges to upland locations only.

Chemical additives currently approved for use at this Facility consist of the following:

Name	Dosage Frequency	Location and Maximum Addition Rate	Discharge Location
Sodium Hypochlorite 12.5%	Continuous	Prior to greensand media filter, 72 gallons per day (dependent on flow rate and influent concentrations)	LA301-LA326

Appendix A

Infiltration Plan

DRAFT



Infiltration Analysis and Plan

Enbridge Energy, Limited Partnership • Line 3 Replacement Project

February 2020



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ACRONYMS AND ABBREVIATIONS

Application	an application to the Minnesota Pollution Control Agency for a National Pollutant Discharge Elimination System/State Disposal System Individual Permit
BMPs	best management practices
EI	environmental inspector
Enbridge	Enbridge Energy, Limited Partnership
FdL Reservation	Fond du Lac Band of Lake Superior Chippewa Reservation
gpm	gallons per minute
HDD	horizontal directional drill
Individual NPDES/SDS Permit	National Pollutant Discharge Elimination System/State Disposal System Individual Permit
L3R	Line 3 Replacement Project
MDNR	Minnesota Department of Natural Resources
MPCA	Minnesota Pollution Control Agency
NPDES	National Pollutant Discharge Elimination System
Project	Line 3 Replacement Project
ROW	right-of-way
SDS	State Disposal System
SSURGO	Soil Survey Geographic Database

1.0 INTRODUCTION

Enbridge Energy, Limited Partnership (“Enbridge”) has submitted an application (“Application”) to the Minnesota Pollution Control Agency (“MPCA”) for a National Pollutant Discharge Elimination System (“NPDES”)/State Disposal System (“SDS”) Individual Permit (“Individual NPDES/SDS Permit”) to discharge process wastewater generated during construction of the Line 3 Replacement Project (“L3R” or “Project”). Enbridge is requesting authorization to discharge process wastewater generated by the Project associated with the following construction activities:

- Buoyancy water introduced during the horizontal direction drill (“HDD”) and push-pull installation processes
- Hydrostatic Testing
 - HDD (“pre-test”) segments
 - Mainline spread segments

L3R consists of approximately 355 miles of new 36-inch-diameter pipeline traversing the states of North Dakota, Minnesota, and Wisconsin, and terminating at the existing Enbridge Superior terminal facility near Superior, Wisconsin. The section of L3R that is the subject of this Application includes the replacement of approximately 282 miles of the existing 34-inch-diameter Line 3 pipeline with 330 miles of 36-inch-diameter pipeline and associated facilities from the North Dakota/Minnesota border to the Minnesota/Wisconsin border (see Figure 1.0-1). Enbridge’s Designated Route generally follows the existing Line 3 pipeline along the Enbridge Mainline System right-of-way (“ROW”) from the North Dakota/Minnesota border in Kittson County to the Clearbrook Terminal in Clearwater County. Next, L3R turns south from Clearbrook to generally follow an existing third-party crude oil pipeline ROW to Hubbard County. The route then turns east to generally follow other existing electric transmission lines until it rejoins with the Enbridge Mainline System ROW in St. Louis County through the Fond du Lac Band of Lake Superior Chippewa Reservation (“FdL Reservation”) to the Minnesota/Wisconsin border in Carlton County.

This Application applies to Project-related process wastewater discharges within the State of Minnesota and outside of the external boundaries of the FdL Reservation.

Authorization of this Individual NPDES/SDS Permit requires an NPDES/SDS antidegradation assessment under Minnesota Rules parts 7050.0250 through 7050.0335. As part of its antidegradation assessment, Enbridge assessed the alternative of infiltrating process wastewater at upland locations to avoid net increases in loading and other causes of degradation. Enbridge assessed infiltration of all potential process wastewater discharges, including moderate volume discharges, such as those associated with HDD pre-tests or buoyancy water, and high volume discharges associated with mainline spread hydrostatic tests. This infiltration analysis is presented in Section 2.0.

Based on the results of the infiltration analysis, Enbridge identified locations where infiltration is a prudent and feasible alternative to avoid degradation of surface water. For these selected locations, Enbridge developed an Infiltration Plan that describes Enbridge’s proposal to manage process wastewater discharge via infiltration at upland locations. The Infiltration Plan is presented in Section 3.0.



2.0 INFILTRATION ANALYSIS

Enbridge analyzed potential upland discharge locations in the vicinity of Project construction activities that will generate process wastewater to assess their suitability for infiltration and to estimate the discharge rate and the size of the area over which water would spread (the anticipated infiltration area). Section 2.1 describes the infiltration analysis method. Section 2.2 presents the infiltration analysis results and identifies which upland discharge locations were selected for inclusion in the Infiltration Plan (Section 3.0).

2.1 INFILTRATION ANALYSIS METHOD

The purpose of the infiltration analysis was to identify a potential upland discharge study area in the vicinity of each potential process wastewater discharge, and to estimate: 1) the discharge rate; 2) the size of the area over which water would spread before infiltrating (the anticipated infiltration area); and 3) the time that would be needed to infiltrate the discharge water (the infiltration duration). The infiltration analysis was a desktop assessment which used publicly available soils and topography data, as described below.

2.1.1 Identify Potential Upland Discharge Study Areas

For each discharge, Enbridge first identified a potential upland discharge study area. The objective was to identify an area adjacent to the ROW where HDD or mainline spread hydrostatic test activities will occur that has the topography and soils that allow for infiltration of the volume of water to be discharged. Sites also need to be located a sufficient distance from surface waters and existing infrastructure. For some discharge locations, no area with favorable characteristics for infiltration is present adjacent to the ROW. In these cases, the nearest area with favorable characteristics was identified.

The potential upland discharge study area (shown as blue outlined areas in the attached figures) does not represent the area over which water would spread during infiltration. Rather, it is a study area over which site-specific information was evaluated. For each potential upland discharge study area selected for the Infiltration Plan, Enbridge conducted additional assessment, as described in the subsequent subsections.

The acreages of the potential upland discharge study areas are listed in Table 2.2-1, and their locations are documented in the Large Figures in Appendix A for those that have been incorporated into the Infiltration Plan, and the Large Figures in Appendix B for those determined to not be feasible as discussed in Table 2.2-1.

2.1.2 Gather Information About Potential Upland Discharge Study Areas

Enbridge gathered site-specific soils information for each potential upland discharge study area. Soils data obtained from the Soil Survey Geographic Database (“SSURGO”) (Soil Survey Staff, 2018) were used to check various properties related to soil infiltration ability. Data taken from SSURGO included the following:

- Hydrologic Soil Group – The hydrologic soil group designations are based on estimates of runoff potential. Soils are assigned to one of four groups according to the estimated rate of water infiltration. Group A soils have a high infiltration rate, group B soils have a moderate infiltration rate, group C soils have a slow infiltration rate, and group D soils have

a very slow infiltration rate (Soil Survey Staff, 2018). Soil hydrologic group infiltration was used for qualitative screening.

- Saturated Hydraulic Conductivity – Saturated hydraulic conductivity refers to the ease with which pores in saturated soil can transmit water. This estimate is based on soil characteristics observed in the field, particularly structure, porosity, and texture (Soil Survey Staff, 2018). Saturated hydraulic conductivity values were used for the quantitative analyses.

2.1.3 Obtain Potential Discharge Volumes

Enbridge estimated discharge volumes associated with construction activities adjacent to each potential upland discharge study area, as shown in Table 2.2-1. Some potential upland discharge study areas are associated with more than one discharge, for example at locations adjacent to both an HDD crossing, push-pull installation, and/or the end of a mainline spread.

2.1.4 Estimate Discharge Rate, Infiltration Area, and Infiltration Duration

Estimates of the discharge rate, potential infiltration area, and infiltration duration were calculated (or assumed) based on the following:

- Discharge/infiltration water volumes were calculated by Enbridge's engineering staff.
- The saturated hydraulic conductivity reported in SSURGO (Soil Survey Staff, 2018) was assumed to be representative of the soil infiltration properties in the potential upland discharge study area.
- The discharge rate was set to be 660 gallons per minute ("gpm"), which is the rate listed for a 30-foot by 30-foot dewatering structure in Best Management Practice ("BMP") Typical Figure 44 (see Appendix C).
- The infiltration area was estimated by dividing the discharge rate (660 gpm) by the saturated hydraulic conductivity of the soils at the site.
- The estimated infiltration area was compared to the assumed maximum infiltration area of 0.5 acre.
 - If the calculated infiltration area was greater than 0.5 acre, then the infiltration area was set at 0.5 acre and the discharge rate was estimated by multiplying the saturated hydraulic conductivity of the soils at the site by the infiltration area (0.5 acre). This additional calculation provided an estimate of the maximum discharge rate (< 660 gpm) for locations with relatively low saturated hydraulic conductivity soils, while maintaining the 0.5-acre infiltration area.
- The discharge volume calculated by Enbridge's engineering staff was assumed to be the maximum infiltration volume for the associated test (HDD, mainline spread, or buoyancy water).
- The infiltration duration was estimated by dividing the discharge/infiltration volume by the selected discharge rate (660 gpm or < 660 gpm).

2.2 INFILTRATION ANALYSIS RESULTS

Results of the infiltration analysis are presented in Table 2.2-1. Enbridge evaluated the estimated infiltration durations and other factors (e.g., accessibility, required workspace) to identify locations where infiltration is a technically feasible. These locations were carried forward into the Infiltration Plan (Section 3.0), as noted on Table 2.2-1. All moderate volume discharges are included in the Infiltration Plan. Several high volume discharges are also included, including discharges for which the source water would be groundwater because the Minnesota Department of Natural Resources (“MDNR”), has indicated that it will condition the water appropriation permit to prohibit discharge of groundwater to surface water due to differences in water chemistry and potential impacts to aquatic organisms. Large Figures for locations in the Infiltration Plan are presented in Appendix A. Large Figures for locations not carried forward into the Infiltration Plan are presented in Appendix B.

3.0 INFILTRATION PLAN

The Infiltration Plan addresses locations where infiltration of process wastewater is a prudent and feasible alternative to avoid degradation of surface water based on the infiltration analysis described in Section 2.0. These locations are listed on Table 3.0-1.

This plan describes source waters, anticipated infiltration areas, and infiltration procedures, including treatment methods prior to discharge. It also presents the infiltration monitoring plan and a contingency action plan. Finally, it assesses potential impacts on groundwater.

3.1 SOURCE WATERS

The source waters to be used for construction activities are listed in Table 3.0-1. The source waters will be surface waters or groundwater; no municipal water sources are planned. Withdrawal of source water will be permitted under a water appropriation permit from the MDNR.

3.2 ANTICIPATED INFILTRATION AREAS

For the Infiltration Plan, Enbridge started with the potential upland discharge study areas identified in the infiltration analysis (Section 2.0), then gathered additional site specific information in order to identify one or more potential discharge location(s) within each potential upland discharge study area where the dewatering structures will be placed. Information assessed included the following:

- The statewide topographic dataset (U.S. Geological Survey, 2016), was used to estimate the average slope over the potential upland discharge study area.
- Topographic slope data (2-foot Light Detection and Ranging data) was used to identify potential flow paths from the infiltration analysis area to the nearest surface water.
- Access constraints identified by Enbridge; the potential infiltration area must be accessible from the construction workspace and located such that infiltration activities would not impact public infrastructure or surface water.

Table 2.2-1 Infiltration Analysis Results									
Approximate (Milepost)	Assessed Discharge Volume (gallons)	Associated Project feature(s)	Saturated Hydraulic Conductivity ^a (ft/d)	Discharge Rate ^b (gpm)	Estimated Infiltration Area ^c (acres)	Estimated Infiltration Duration ^d	Screening Assessment	MPCA ID	Large Figure
802.1	114,000	Red River HDD and Push-Pull Buoyancy Control	1.4	150 - 160	0.50	11.9 - 12.7 hrs	Suitable potential infiltration area for moderate volume discharge(s).	LA001	Large Figure A1
	7,300,000	Mainline Spread 1A				31.7 – 33.8 days	Due to infiltration duration and additional workspace requirements, not selected for infiltration of large volume discharges. This test is located adjacent to existing Enbridge pipelines. Additional workspace would be required on top of the existing lines for water storage.	N/A	
814.5	7,300,000	Mainline Spread 1A	0.02	2.2	0.50	2,304 days	Due to infiltration duration and additional workspace requirements, not selected for infiltration of large volume discharges.	N/A	Large Figure B1
	10,200,000	Mainline Spread 1B				3,220 days			
828.7	81,000	Tamarac River HDD and Push-Pull Buoyancy Control	9.2	660	0.32	2.0 hrs	Suitable potential infiltration area.	LA002	Large Figure A2
836.2	94,000	Middle River HDD and Push-Pull Buoyancy Control	9.8 - 11	660	0.27 - 0.30	2.4 hrs	Suitable potential infiltration area.	LA003	Large Figure A3
843.2	85,000	Snake River HDD and Push-Pull Buoyancy Control	23 - 32	660	0.09 - 0.13	2.1 hrs	Suitable potential infiltration area.	LA004	Large Figure A4
848.2	10,200,000	Mainline Spread 1B	11.5	660	0.25	10.7 days	Suitable potential infiltration area.	LA024	Large Figure A5
	7,900,000	Mainline Spread 1C				8.3 days			
864.8	170,000	Red Lake River HDD and Push-Pull Buoyancy Control	1.7 - 12	190 - 660	0.24 - 0.50	4.3 – 14.9 hrs	Suitable potential infiltration area for moderate volume discharge(s).	LA005	Large Figure A6
875.4	7,900,000	Mainline Spread 1C	10	660	0.29	8.3 days	Suitable potential infiltration area.	LA026	Large Figure A7
	6,200,000	Mainline Spread 1D				6.5 days			
875.8	150,000	Clearwater River HDD and Push-Pull Buoyancy Control	3.3	380	0.50	6.6 hrs	Suitable potential infiltration area for moderate volume discharge(s).	LA006	Large Figure A8
896.1	6,200,000	Mainline Spread 1D	26	660	0.11	6.5 days	The potential upland discharge location is located NW of the existing CP Rail Systems railroad tracks. The piping/hoses need to transport water from the test header within the construction workspace to the infiltration area would have to be placed over the tracks. Therefore, this was not selected for infiltration of mainline discharges.	N/A	Large Figure B2
	3,800,000	Mainline Spread 2A				4.0 days			
909.1	3,800,000	Mainline Spread 2A	4.3	490	0.50	5.4 days	Due to additional workspace requirements, not selected for infiltration of large volume discharges. In addition, the potential upland discharge area is located approximately 1,490 ft. from the end of the spreads, and piping/hoses would cross a highway. Workspace needed for water storage is not available due to the proximity of the test and the Clearbrook terminal and existing Enbridge lines.	N/A	Large Figure B3
	10,100,000	Mainline Spread 2B				14.3 days			
922.1	151,000	Clearwater River HDD and Push-Pull Buoyancy Control	39 - 42	660	0.07	3.8 hrs	Suitable potential infiltration area.	LA007	Large Figure A9
941.2	119,000	Mississippi River HDD and Push-Pull Buoyancy Control	1.8 - 26	200 - 660	0.11 - 0.50	3.0 – 9.9 hrs	Suitable potential infiltration area for moderate volume discharge(s).	LA008	Large Figure A10
944.1	10,100,000	Mainline Spread 2B	12.4	660	0.23	10.6 days	Enbridge unable to negotiate an agreement with landowner to conduct infiltration on their property.	N/A	Large Figure B4
	2,400,000	Mainline Spread 2C				2.5 days			
952.5	3,800,000	Mainline Spread 2A	17 - 20	660	0.15 - 0.17	4.0 days	Suitable potential infiltration area. In addition, source water for these mainline hydrostatic tests is groundwater. As a condition of the water appropriation permit, the MDNR is requiring that these discharges be infiltrated rather than discharged to surface water.	LA009	Large Figure A11
	10,100,000	Mainline Spread 2B				10.7 days			
	2,400,000	Mainline Spread 2C				2.6 days			
	3,900,000	Mainline Spread 2D				4.2 days			
	2,800,000	Mainline Spread 2E				3.0 days			
964.4	150,000	Hay Creek HDD and Push-Pull Buoyancy Control	25	660	0.12	3.8 hrs	Suitable potential infiltration area.	LA010	Large Figure A12
966.1	3,900,000	Mainline Spread 2D	2.6	290	0.50	9.3 days	Due to additional workspace requirements, not selected for infiltration of large volume discharges.	N/A	Large Figure B5
	2,800,000	Mainline Spread 2E				6.7 days			
973.9	192,000	Straight River HDD and Push-Pull Buoyancy Control	23	660	0.13	4.8 hrs	Suitable potential infiltration area.	LA011	Large Figure A13
975.6	2,800,000	Mainline Spread 2E	3.0	340	0.50	5.7 days	Due to additional workspace requirements, not selected for infiltration of large volume discharges.	N/A	Large Figure B6
	2,900,000	Mainline Spread 3A				5.9 days			
983.5	124,000	Shell River HDD and Push-Pull Buoyancy Control	25	660	0.12	3.1 hrs	Suitable potential infiltration area.	LA013	Large Figure A14
985.8	237,000	Shell River HDD and Push-Pull Buoyancy Control	25	660	0.12	6.0 hrs	Suitable potential infiltration area for moderate volume discharge(s).	LA014	Large Figure A15

Table 2.2-1 Infiltration Analysis Results									
Approximate (Milepost)	Assessed Discharge Volume (gallons)	Associated Project feature(s)	Saturated Hydraulic Conductivity ^a (ft/d)	Discharge Rate ^b (gpm)	Estimated Infiltration Area ^c (acres)	Estimated Infiltration Duration ^d	Screening Assessment	MPCA ID	Large Figure
	2,900,000	Mainline Spread 3A				3.1 days	The topography and property boundaries of this site limit the location and size of the infiltration area such that for large volume discharges there would not be adequate available space to effectively infiltrate. In addition, the adjacent landowners have not granted permission for infiltration to occur on their property.		
	9,100,000	Mainline Spread 3B				9.6 days			
991.1	86,000	Shell River HDD and Push-Pull Buoyancy Control	21 - 26	660	0.11 - 0.14	2.2 hrs	Suitable potential infiltration area.	LA015	Large Figure A16
993.1	88,000	Crow Wing River HDD	26	660	0.11	2.2 hrs	Suitable potential infiltration area.	LA016	Large Figure A17
1017.1	77,000	Pine River HDD and Push-Pull Buoyancy Control	26	660	0.11	1.9 hrs	Suitable potential infiltration area.	LA020	Large Figure A18
1017.3	2,900,000	Mainline Spread 3A	26	660	0.11	3.1 days	Suitable potential infiltration area.	LA025	Large Figure A19
	9,100,000	Mainline Spread 3B				9.6 days			
	6,900,000	Mainline Spread 3C				7.3 days			
1037.1	121,000	Daggett Brook HDD and Push-Pull Buoyancy Control	26	660	0.11	3.1 hrs	Suitable potential infiltration area.	LA021	Large Figure A20
1041.1	111,000	Spring Brook HDD	26.1	660	0.11	2.8 hrs	Suitable potential infiltration area for moderate volume discharge(s).	LA022	Large Figure A21
	6,900,000	Mainline Spread 3C				7.3 days	This site is located on top of a hill near Spring Brook (designated trout stream). Due to topography, there is potential for discharge water to leave the site and enter a culvert near State Highway MN-6 and into Spring Brook. Therefore, this site is not a suitable infiltration location for large volume discharges.		
	8,300,000	Mainline Spread 4A				8.7 days			
1066.6	241,000	Willow River HDD and Push-Pull Buoyancy Control	0.79	90	0.50	1.9 days	Suitable potential infiltration area for moderate volume discharge(s).	LA018	Large Figure A22
1069.4	241,000	Mississippi River HDD and Push-Pull Buoyancy Control	0.79 - 1.7	90 - 190	0.50	21.1 hrs - 1.8 days	Suitable potential infiltration area for moderate volume discharge(s). Due to additional workspace requirements, not selected for infiltration of large volume discharges. Any additional workspace would cause more temporary wetland impacts	LA017	Large Figure A23
1069.6	8,300,000	Mainline Spread 4A	26	660	0.11	8.7 days	Suitable potential infiltration area.	LA027	Large Figure A24
	4,600,000	Mainline Spread 4B				4.8 days			
1085.7	78,000	East Savanna River HDD and Push-Pull Buoyancy Control	2.4 - 6.2	270 - 660	0.47 - 0.50	2.0 - 4.8 hrs	Suitable potential infiltration area for moderate volume discharge(s).	LA019	Large Figure A25
	4,600,000	Mainline Spread 4B				4.8 – 11.8 days	The potential upland discharge location is located approximately 2,050 ft. from the spread ends. Due to additional workspace requirements, not selected for infiltration of large volume discharges.	N/A	
	10,000,000	Mainline Spread 5A				10.5 – 25.7 days			
1094.6	162,000	Push-Pull Buoyancy Control	0.81 – 1.0	90 – 110	0.50	24.5 – 30.0 hrs	Suitable potential infiltration area for moderate volume discharge(s).	LA023	Large Figure A26
1120.3	10,000,000	Mainline Spread 5A	31	660	0.09	10.5 days	The potential upland discharge location is located approximately 3,720 ft. from the spread ends, and piping would have to cross at least two roads, and the infiltration area is located in Chub Lake Park Not suitable for an infiltration location for mainline spread discharges.	N/A	Large Figure B7
	2,600,000	Mainline Spread 5B				2.7 days			
1129.4	2,600,000	Mainline Spread 5B	Due to topography, low soil saturated conductivity, and nearby surface waters, no potential infiltration area was identified					N/A	N/A
^a	From SSURGO (Soil Survey Staff, 2018). Saturated hydraulic conductivity values are converted from cm/s to ft/d.								
^b	The analysis assumed that where feasible, Enbridge would discharge at a rate of 660 gpm, which is the rate associated with a 30-foot by 30-foot dewatering structure in BMP Typical Figure 44 (Appendix C). For locations where discharge at 660 gpm resulted in an estimated infiltration area larger than 0.5 acre, the analysis scaled back the discharge rate to determine the maximum discharge rate for which infiltration can be accomplished within 0.5 acre. Enbridge may utilize multiple dewatering structures where space and site-specific conditions allow to reduce infiltration time.								
^c	The accuracy of the infiltration area estimate is a function of the SSURGO saturated hydraulic conductivity data, and may also be affected by vegetation, precipitation, and other physical factors. In practice, a larger infiltration area could be used if suitable space is available, with BMPs and monitoring as described in Section 3.4 to prevent flow from reaching surface water.								
^d	The infiltration duration estimate is based on the listed discharge rate and estimated infiltration area and assumes that the SSURGO saturated hydraulic conductivity represents the entire unsaturated zone and that it would be constant during the entire discharge period. The saturated hydraulic conductivity of the soil in the unsaturated zone may decrease during the discharge, depending on the depth to the water table and the transmissivity of the water table aquifer. If the saturated hydraulic conductivity decreases during the discharge, the discharge rate might need to be reduced and the infiltration duration would be longer. Alternately, infiltration duration could be shorter if a larger infiltration area is available, and/or a higher discharge rate can safely be used, with BMPs and monitoring as described in Section 3.4 to prevent flow from reaching surface water.								

Table 3.0-1 Infiltration Plan Summary											
Primary Source Water	Infiltration Location				Associated Project Feature(s)	Discharge Rate ^a (gpm)	Maximum Discharge Volume		Upland Discharge Area		Large Figure
	MPCA ID	Approximate Milepost	County	Township, Range, Section			gallons	acre-feet	Average slope ^b	Downslope distance to nearest surface water ^c	
Red River	LA001	802.1	Kittson County	T160N, R50W, S9	Red River HDD and Push-Pull Buoyancy Control	150 - 160	114,000	0.35	1.15	57	Large Figure A1
Tamarac River	LA002	828.7	Marshall County	T157N, R47W, S16	Tamarac River HDD and Push-Pull Buoyancy Control	660	81,000	0.25	1.06	228	Large Figure A2
Middle River	LA003	836.2	Marshall County	T156N, R46W, S18	Middle River HDD and Push-Pull Buoyancy Control	660	94,000	0.29	1.11	460	Large Figure A3
Snake River	LA004	843.2	Marshall County	T155N, R46W, S12	Snake River HDD and Push-Pull Buoyancy Control	660	85,000	0.26	1.10	145	Large Figure A4
Tamarac River	LA024	848.2	Marshall County	T155N, R45W, S33	Mainline Spread 1B	660	10,200,000	31.3	1.42	5,605	Large Figure A5
Red Lake River			Marshall County	T155N, R45W, S33	Mainline Spread 1C	660	7,900,000	24.24	1.42	5,605	
Red Lake River	LA005	864.8	Pennington County	T153N, R43W, S32	Red Lake River HDD and Push-Pull Buoyancy Control	190 - 660	170,000	0.52	2.61	0	Large Figure A6
Red Lake River	LA026	875.4	Red Lake County	T151N, R42W, S4 &S9	Mainline Spread 1C	660	7,900,000	24.24	2.14	590	Large Figure A7
Clearwater River			Red Lake County	T151N, R42W, S4 &S9	Mainline Spread 1D	660	6,200,000	19.03	2.14	590	
Clearwater River	LA006	875.8	Red Lake County	T151N, R42W, S9	Clearwater River HDD and Push-Pull Buoyancy Control	380	150,000	0.46	1.70	0	Large Figure A8
Clearwater River	LA007	922.1	Clearwater County	T147N, R37W, S21	Clearwater River HDD and Push-Pull Buoyancy Control	660	151,000	0.46	1.28	29	Large Figure A9
Mississippi River	LA008	941.2	Clearwater County	T145N, R36W, S35	Mississippi River HDD and Push-Pull Buoyancy Control	200 - 660	119,000	0.37	2.47	0	Large Figure A10
Clearwater River	LA009	952.5	Hubbard County	T143N, R35W, S20	Mainline - Spread 2A/2B	660	10,100,000	31.3	6.37	1,108	Large Figure A11
Well #718159			Hubbard County	T143N, R35W, S20	Mainline - Spread 2C/2D	660	3,900,000	12.02	6.37	1,108	
Well #763975			Hubbard County	T143N, R35W, S20	Mainline - Spread 2E	660	2,800,000	8.59	6.37	1,108	
Well #763975	LA010	964.4	Hubbard County	T141N, R35W, S20	Hay Creek HDD and Push-Pull Buoyancy Control	660	150,000	0.46	3.13	68	Large Figure A12
Well #232423	LA011	973.9	Hubbard County	T140N, R35W, S32	Straight River HDD and Push-Pull Buoyancy Control	660	192,000	0.59	1.37	601	Large Figure A13
Shell River	LA013	983.5	Hubbard County	T139N, R35W, S35	Shell River HDD and Push-Pull Buoyancy Control	660	124,000	0.38	2.41	864	Large Figure A14
Shell River	LA014	985.8	Hubbard County	T139N, R34W, S32	Shell River HDD and Push-Pull Buoyancy Control	660	237,000	0.73	2.86	197	Large Figure A15
Well # 465115	LA015	991.1	Wadena County	T138N, R34W, S1	Shell River HDD and Push-Pull Buoyancy Control	660	86,000	0.26	3.02	364	Large Figure A16
Well # 797182	LA016	993.1	Wadena County	T138N, R33W, S5	Crow Wing River HDD and Push-Pull Buoyancy Control	660	88,000	0.27	2.30	386	Large Figure A17
Pine River	LA020	1017.1	Cass County	T138N, R29W, S8	Pine River HDD and Push-Pull Buoyancy Control	660	77,000	0.24	5.62	604	Large Figure A18
Pine River	LA025	1017.3	Cass County	T138N, R29W, S8	Mainline Spread 3A	660	2,900,000	8.9	6.64	197	Large Figure A19
					Mainline Spread 3B/3C	660	9,100,000	27.93	6.64	197	
Daggett Brook	LA021	1037.1	Cass County	T139N, R26W, S19	Daggett Brook HDD and Push-Pull Buoyancy Control	660	121,000	0.37	4.74	139	Large Figure A20
Daggett Brook	LA022	1041.1	Cass County	T139N, R26W, S15	Spring Brook HDD	660	111,000	0.34	3.40	514	Large Figure A21

Table 3.0-1 Infiltration Plan Summary											
Primary Source Water	Infiltration Location				Associated Project Feature(s)	Discharge Rate ^a (gpm)	Maximum Discharge Volume		Upland Discharge Area		Large Figure
	MPCA ID	Approximate Milepost	County	Township, Range, Section			gallons	acre-feet	Average slope ^b	Downslope distance to nearest surface water ^c	
Willow River	LA018	1066.6	Aitkin County	T51N, R24W, S31	Willow River HDD and Push-Pull Buoyancy Control	90	241,000	0.23	1.02	2	Large Figure A22
Mississippi River	LA017	1069.4	Aitkin County	T51N, R24W, S27	Mississippi River HDD and Push-Pull Buoyancy Control	90 - 190	241,000	0.38	2.24	15	Large Figure A23
Mississippi River	LA027	1069.6	Aitkin County	T51N, R24W, S27	Mainline Spread 4A/4B	660	8,300,000	25.47	4.89	100	Large Figure A24
East Savanna River	LA019	1085.7	St. Louis County	T51N, R21W, S20	East Savanna River HDD and Push-Pull Buoyancy Control	270 - 660	78,000	0.24	1.48	0	Large Figure A25
Trench Water	LA023	1094.6	St. Louis County	T151N, R20W, S27	Push-Pull Buoyancy Control	90 – 110	162,000	0.78	6.96	228	Large Figure A26
^a The analysis assumed that where feasible, Enbridge would discharge at a rate of 660 gpm, which is the rate associated with a 30-foot by 30-foot dewatering structure in BMP Typical Figure 44 (Appendix C). For locations where discharge at 660 gpm resulted in an estimated infiltration area larger than 0.5 acre, the analysis scaled back the discharge rate to determine the maximum discharge rate for which infiltration can be accomplished within 0.5 acre. Enbridge may utilize multiple dewatering structures where space and site-specific conditions allow to reduce infiltration time.											
^b From statewide topographic dataset (U.S. Geological Survey, 2016).											
^c The distance from the downslope edge of the potential upland discharge area to the nearest surface water body or delineated wetland.											

The potential discharge locations are shown in the Large Figures in Appendix A; however, the final location(s) within each upland discharge study area will be selected in the field by Enbridge's environmental inspector ("EI"). Prior to final selection of each discharge location and before the discharge event, the Field Conditions Inspection Sheet (see Appendix D) will be completed by an Environmental Engineer, soils scientist, or a Professional Geologist who has reviewed the site-specific conditions present at the time of construction. The EI will consider procedures in Section 5.0, BMP Typical Figure 44 (see Appendix C), the information provided in the Field Conditions Inspection Sheet (see Appendix D), and the applicable figures in Appendix A when selecting the final discharge location(s).

For each potential discharge location, an "anticipated infiltration area" was mapped (see Large Figures in Appendix A) using topography and the infiltration area calculations provided in Table 2.2-1; however, the actual infiltration area may change pending field conditions at the time of the discharge (e.g., higher soil saturation at time of discharge may expand the infiltration area). The size of the anticipated infiltration area will be equal to the area of the dewatering structure plus the additional area that water flows beyond the dewatering structure before infiltrating. The infiltration procedures described in Section 3.3 will be used to prevent discharge from flowing beyond property where access has been obtained, into areas with sensitive resources, or to surface water.

3.3 INFILTRATION PROCEDURES

This section describes the infiltration procedures that would be used at all infiltration locations, as well as the BMPs that will be implemented at each infiltration site.

3.3.1 Procedures For All Infiltration Locations

Some infiltration procedures would be common to all proposed infiltration locations. Water will be pumped from the pipeline to a dewatering structure located at an upland discharge location as shown in this Infiltration Plan, or as modified in the field by Enbridge's EI, as described in Section 3.2. The dewatering structure will include a straw bale structure that will be lined with geotextile fabric and/or filter bag (refer to Typical Figure 44 in Appendix C) for additional details regarding the dewatering structure. The dewatering structure will be sized appropriately for the rate of discharge. Enbridge may utilize multiple dewatering structures where space and site-specific conditions allow to reduce infiltration time. Water would flow out from the dewatering structure(s) and spread across the infiltration area before infiltrating.

Enbridge will use BMPs to manage the infiltration such that no flow reaches surface waters, and such that channelized flow and erosion do not occur. Potential locations of BMPs are shown on the Infiltration Plan Large Figures in Appendix A. Based on conditions in the field, Enbridge's EI will adjust these locations as necessary. Enbridge will monitor the discharge as described in Section 3.4, and if excessive ponding or unanticipated flow is observed will reduce the discharge rate to prevent water from causing erosion or transporting sediment-laden water to a surface water feature. Section 3.5 provides additional details regarding the procedures Enbridge would use to prevent discharge from reaching surface waters.

3.3.2 Procedures for Infiltration of Process Wastewater Associated with Push-Pull Construction

The push-pull buoyancy control water will be first directed to a frac tank where the solids will be allowed to settle, and the water will be visually inspected and/or tested for parameters of concern per permit requirements. Enbridge will then process the water through a filtration system designed to treat the water to meet permit conditions prior to infiltration. The filtration system consists of a sand filter (could be filled with greensand media) and 0.5-micron bag filter with optional oxidation, dechlorination, and carbon treatments sized for the corresponding discharge volume.

Once the water is treated to meet permit limits, Enbridge will direct the water to an upland discharge area for infiltration using the procedures described in Section 3.3.1.

3.3.3 Procedures for Infiltration of Process Wastewater Associated with HDD Construction

The HDD pre-test and/or buoyancy control water will be directed to an upland infiltration area using the procedures described in Section 3.3.1. For those infiltration areas where a discharge rate below 500 gpm¹ is warranted due to soil conditions as described in Table 2.2-1, Enbridge may either reduce the rate of discharge from the pipe or discharge water first to frac tank(s) to further reduce the discharge rate for the dewatering structure sized appropriately for the site.

Alternatively, Enbridge may temporarily store the pre-test water in frac tanks for reuse as buoyancy control water that is introduced into the pipe during the pullback process. Following the installation of the HDD pipe segment, the buoyancy water will be discharged to a straw bale structure lined with geotextile fabric and/or filter bag in the upland infiltration area (Section 3.3.1).

3.3.4 Procedures for Infiltration of Process Wastewater Associated with Mainline Spread Construction

Mainline hydrostatic test water will first be directed to frac tanks. Frac tanks are needed so that if unanticipated pressure issues occur as the water is draining from the pipe, it does not adversely affect the filtration system. The hydrostatic test water will then be routed through the filtration system that consists of a sand filter and 0.5-micron bag filter with optional carbon pods sized for the corresponding discharge volume. After the filtration system, the discharge will be directed to a straw bale structure lined with geotextile fabric and/or filter bag in the upland infiltration area as described in Section 3.3.1.

3.4 INFILTRATION MONITORING PLAN

This section describes the actions that Enbridge will take to monitor infiltration of discharges associated with this Plan.

Discharge monitoring will occur in accordance with “Infiltration BMP Decision Tree” provided in Appendix C.

¹ Enbridge prefers to maintain the discharge rate from the pipe above 500 gpm to avoid potential issues with the dewatering process; however, for the relatively shorter HDD segments, Enbridge may be able to further reduce the rate during the dewatering process.

Enbridge will monitor the water level within the dewatering structure to avoid overfilling. Enbridge will also monitor the discharge from the dewatering structure and associated infiltration area for excessive ponding, erosion, channelized flow, and potential for off-site discharge of sediment. Enbridge would install temporary erosion and sediment control BMPs as necessary and adjust discharge rates to avoid off-site discharge of sediment or channelization of flow. BMPs may include perimeter controls such as silt fence, straw bales or filter socks (see Figures 6, 8, and 9 of Appendix C) or temporary slope breakers (see Figure 11 of Appendix C). Potential BMP locations are shown on the Large Figures in Appendix A; however, the exact BMP locations and types will be selected in the field based on conditions at the time of discharge.

3.5 CONTINGENCY ACTION PLAN

This section outlines the procedures and contingency action plan for to prevent and respond to discharges of untreated water that occur outside of dewatering structures and not in accordance with this Infiltration Plan.

Prior to discharging, the discharge equipment (i.e., water pipes, hoses, storage tanks, filtration system, dewatering structures) will be inspected to ensure that equipment is in good working order. Inspections will be documented on the Field Conditions Inspection Sheet (Appendix D), and equipment that is not found to be in good working order will be repaired or replaced. Enbridge will continue to monitor equipment throughout the discharge event, and repair or replace equipment as needed.

Enbridge will maintain recovery kits containing materials to adequately contain and recover foreseeable untreated discharges. These kits may include, but are not limited to, straw bales, containment barriers, skimmer pumps, and holding tanks. This equipment will be located near fuel storage areas, near each waterbody crossing, and at other locations as necessary and be readily available.

3.5.1 Untreated Discharge Response

- If an untreated discharge should occur during dewatering operations, STOP the operation until the untreated discharge is controlled and the situation corrected.
- The Contractor's Construction Superintendent or representative will notify the Enbridge Representative and the EI immediately, regardless of volume.
- The source of the untreated discharge shall be identified and contained immediately.
- For larger volumes, the material will be contained and recovered (pumped to a holding tank). The recovered process wastewater will be then be treated and discharged in accordance with this Infiltration Plan (Section 3.3).
- Smaller volumes that infiltrate will be documented on the Field Conditions Inspection Sheet.
- To the maximum extent possible, flowing untreated discharges will be contained using best management practices in Appendix C before reaching surface waters or wetlands.

Enbridge has also developed a Contingency Action Plan to describe actions Enbridge would take during dewatering:

- to address excessive ponding or unanticipated overland flow; and

- in frozen or saturated ground conditions.

To address excessive ponding or unanticipated overland flow, Enbridge has developed a two-part contingency plan.

- First, Enbridge will attempt to reduce ponding and/or unanticipated overland flow by decreasing the discharge rate and, if needed, by deploying additional BMPs (see BMP Decision Tree in Appendix C). Enbridge's EI will direct the contractor to decrease the discharge rate if Enbridge's EI observes conditions during construction that limit infiltration as compared to what was estimated by the infiltration analysis. Such conditions could include saturated or frozen conditions, or site-specific variability in soil characteristics. Enbridge's EI will then monitor the infiltration area under the decreased discharge rate to observe ponding and flow patterns, and further decrease the discharge rate if needed.
- If reduction of the discharge rate does not address ponding or flow conditions, Enbridge will stop the discharge until such time soil conditions improve or implement the alternate discharge method described in the NPDES/SDS Application and approved by the MPCA.

In some circumstances Enbridge may choose to stop discharges to the infiltration area and implement the alternate discharge method described in the NPDES/SDS Application and approved by the MPCA without attempting to reduce discharge rates.

In frozen or saturated ground conditions, where infiltration is not feasible, Enbridge will implement the alternate discharge method described in the NPDES/SDS Application and approved by the MPCA.