AGENDA ITEM #9.4

REPORT TO CITY COUNCIL

Report Prepared by: Tim Houle

Date: January 5, 2016

Subject: Draft Reissued State Disposal System Permit (SDS)

Report: The Minnesota Pollution Control Agency (MPCA) has issued a draft State Disposal System (SDS) Permit for the City of Pequot Lakes. Every 5 years, SDS Permits are renewed. The City's present permit expires at the end of October 2016. In cooperation with the MPCA, it was decided instead of applying for a Construction Modification Permit for the proposed row irrigation system and then applying for a renewal of the SDS Permit, the City would just apply for one Permit for both situations. This draft Permit is out for public comment until January 19, 2016. After any comments are received, the MPCA needs to address them, and if there are minor comments, they would then issue a new SDS Permit. After this, the City can open bids and award a construction contract for the row irrigation system.

Between the writing of this memo and the City Council meeting, Mike Loven, the City's contracted operators, and Tim Houle will be meeting to review this draft Permit and see if the City needs to submit any comments during the public comment period.

Council Action Requested: If after Staff review, there are no comments, no City Council action is needed. If after Staff review, there are comments, we will verbally summarize these with the City Council before submitting to the MPCA.

Minnesota Pollution Control Agency

Brainerd Office | 7678 College Road | Suite 105 | Baxter, MN 56425 | 218-828-2492

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December 18, 2015

The Honorable Dave Sjoblad
Mayor, City of Pequot Lakes
4638 County Road 11
Pequot Lakes, MN 56472

RE: Draft Reissued State Disposal System Permit No. MN0021661
Pequot Lakes Wastewater Treatment Facility
SW ¼, Section 14, Township 136 North, Range 29 West, Sibley Township,
Crow Wing County, Minnesota

Dear Mayor Sjoblad:

Minnesota Pollution Control Agency (MPCA) staff recently completed a review of your State Disposal System (SDS) permit application. Enclosed is a draft of the reissued permit and public notice for your facility. Please carefully review these documents.

If you have any questions regarding any of the terms and conditions of the draft permit, please contact me at 218-316-3851 or by email at robin.novotny@state.mn.us.

Sincerely,

Nicole Blasing

This document has been electronically signed.

Nicole Blasing
Supervisor
SSTS Section
Municipal Division

NB/RLN:lmg

Enclosures: Draft Permit

cc: Mike Loven, Pequot Lakes Public Works Supervisor (w/enclosures)
Nancy Malecha, Pequot Lakes City Administrator (w/enclosure)
John Monnier, Pine River Area Sanitary District (w/enclosure)
Andy Schwartz, Pine River Area Sanitary District (w/enclosure)
Tim M. Houle, Widseth Smith Nolting (w/enclosure)

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

Public Notice of Intent to Reissue

Wastewater
MN0021661

General information

Public comment period begins: December 18, 2015

Public comment period ends: 4:30 p.m. on January 19, 2016

Current permit issued (if applicable): November 17, 2011

Current permit expiration date (if applicable): October 31, 2016

Name and address of Permittee:
City of Pequot Lakes
4638 County Road 11
Pequot Lakes, MN 56472

Facility name and location:
Pequot Lakes WWTF
4798 Derksen Road
Pequot Lakes, MN 56472
Sibley Township, Cass County
Township 136 North, Range 29 West,
Section 14 and 23

MPCA contact person:
Robin Novotny
Municipal Division
Minnesota Pollution Control Agency
7678 College Road, Suite 105
Baxter, MN 56425
Phone: 218-316-3851
Email: robin.novotny@state.mn.us
File manager phone: 651-757-2728 or 844-828-0942

A draft permit and Statement of Basis is available for review on the Minnesota Pollution Control Agency (MPCA) Public Notices webpage at http://www.pca.state.mn.us/publicnotices or at the MPCA office address listed under the MPCA contact person. The MPCA will mail or email a copy of the draft permit upon request. Comments, petitions, and other requests must be received at the MPCA in writing on or before the public comment period end date and time identified above.

Watershed: Crow Wing River

Description of Pequot Lakes Wastewater Treatment Facility

The Pequot Lakes Wastewater Treatment Facility (Facility) is located at SW ¼, Section 14, Township 136 North, Range 29 West, Pequot Lakes, Crow Wing County, Minnesota. This is a Class D Facility.

The application and plans indicate that the existing treatment system consists of approximately 3,630 feet of 6-inch force main, a two-cell aerated pond system, and three spray irrigation sites totaling 100 acres that will be replaced with 56.6 acres of row irrigation during the permit term.

The Facility is designed to treat an average wet-weather flow of 121,795 gallons per day (gpd) with a five-day carbonaceous biochemical oxygen demand ($CBOD_5$) strength of approximately 250 milligrams per liter (mg/L). The two aerated pond cells have a maximum high water level of 13 feet with 2 feet of biosolids storage. The size of each pond at the mean operating depth of 7.5 feet is 4.32 acres with a total storage volume of about 30,983,000 gallons providing a combined detention time of 254 days at design flow. The treated wastewater will be applied to the 56.6 acre row irrigation system has been completed. The maximum allowed flow to the row irrigation site is 45 million gallons per year.

There are no designed bypass or overflow points known to exist in the disposal system. There is no discharge point to surface waters from this facility.

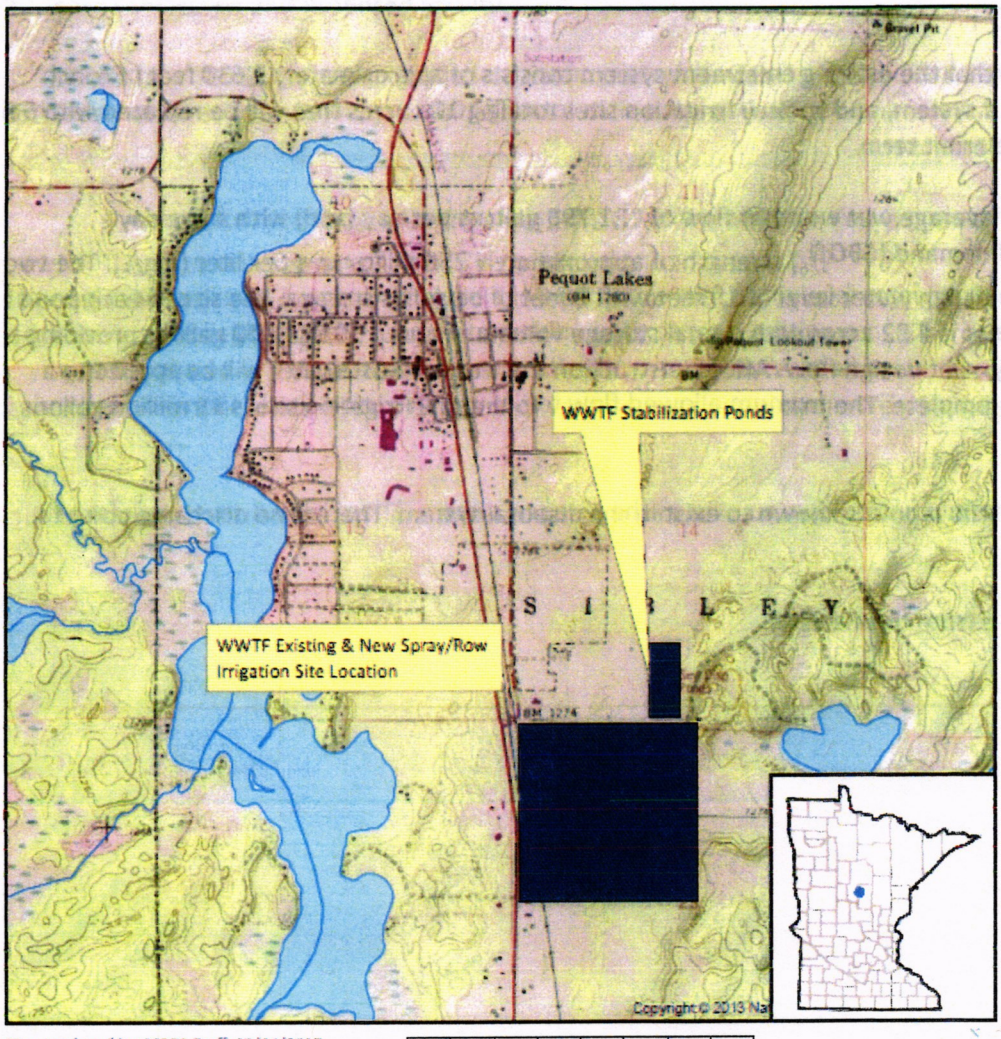
There is no surface water discharge from this Facility.

The preliminary determination to Reissue this State Disposal System permit is tentative.

2. Location map of permitted facility

Topographic Map of Permitted Facility

MN0021661: Pequot Lakes Wastewater Treatment Facility
T136N, R29W, Section 14 & 23
Sibley Township, Crow Wing County, Minnesota

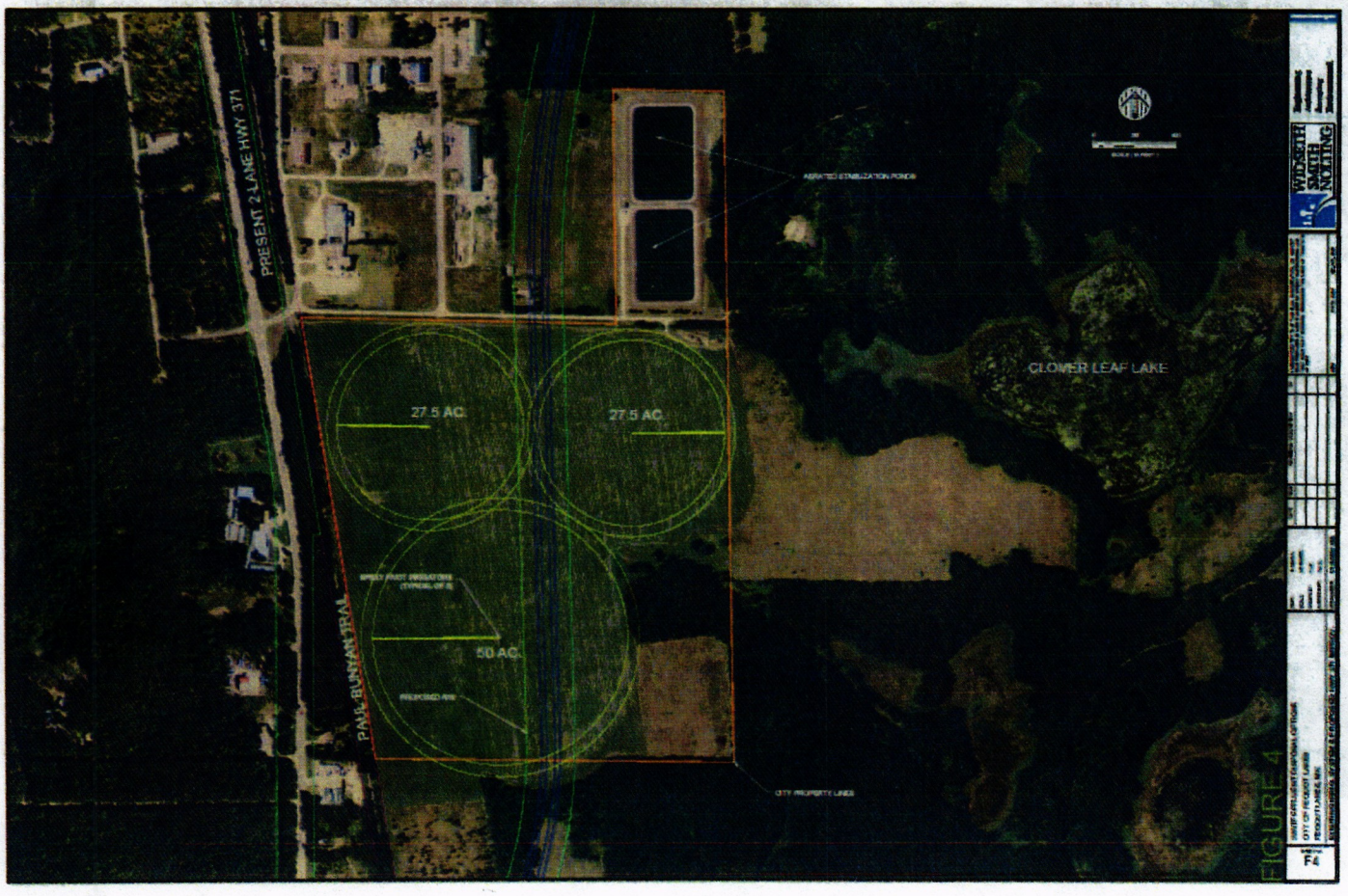


Map produced by: MPCA Staff, 12/14/2015
Scale: 1:24,000

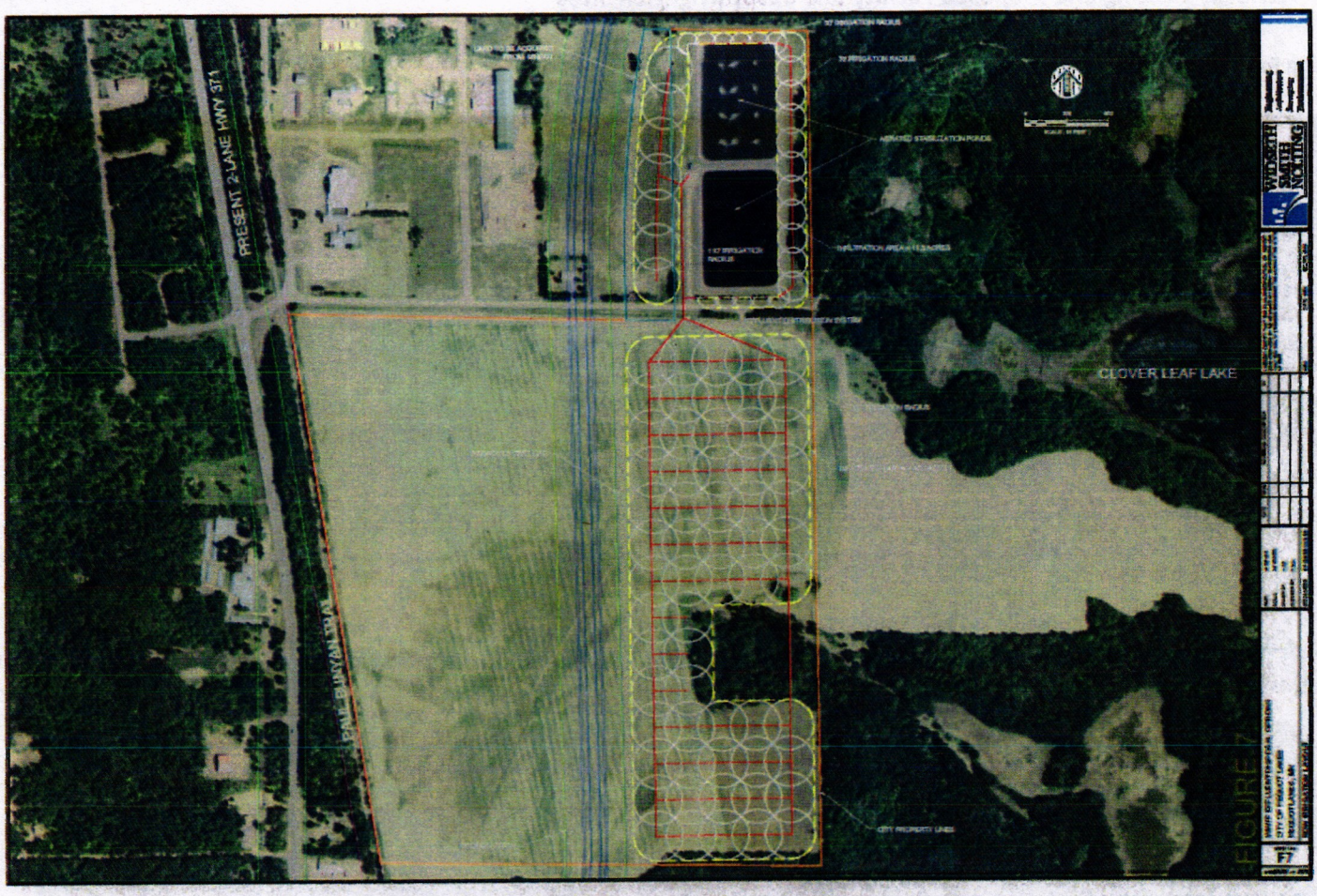
0 0.25 0.5 1 Miles

3. Aerial of Existing and Proposed Facility and Spray Irrigation Sites

Existing Facility Layout



Proposed Facility Layout



Summary of stations and station locations

Station	Type of station	Local name	PLS location
LA 301	Application Site, Spray with Soils Tests	South Spray Site - 50 acres	SW ¼ Sec 14 & NW ¼ Sec 23, T136N, R29W
LA 302	Application Site, Spray with Soils Tests	West Spray Site - 25 acres	SW ¼ Sec 14 & NW ¼ Sec 23, T136N, R29W
LA 303	Application Site, Spray with Soils Tests	East Spray Site - 25 acres	SW ¼ Sec 14 & NW ¼ Sec 23, T136N, R29W
LA 304	Application Site, Spray with Soils Tests	South Derksen Road Spray Site – 45.3 acres	SW ¼ Sec 14 & NW ¼ Sec 23, T136N, R29W
LA 305	Application Site, Spray with Soils Tests	North Derksen Road Spray Site – 11.3 acres	SW ¼ Sec 14 & NW ¼ Sec 23, T136N, R29W
GW 004	Well, Downgradient	GW Monitoring - SW Pond	SW 1/4, Sec 14, T136N, R29W
GW 005	Well, Downgradient	GW Monitoring - NW Pond	SW 1/4, Sec 14, T136N, R29W
GW 006	Well, Upgradient	GW Monitoring - SE Pond	SW 1/4, Sec 14, T136N, R29W
GW 010	Well, Upgradient	GW Monitoring - NE Pond	SW 1/4, Sec 14, T136N, R29W
WS 001	Influent Waste	Influent Waste Stream	SW 1/4, Sec 14, T136N, R29W
WS 002	Intermediate: WW to Land	Effluent Prior to Spray Site	SW 1/4, Sec 14, T136N, R29W
WS 003	Intermediate: WW to Land	South Spray Site - 50 acres	SW ¼ Sec 14 & NW ¼ Sec 23, T136N, R29W
WS 004	Intermediate: WW to Land	West Spray Site - 25 acres	SW ¼ Sec 14 & NW ¼ Sec 23, T136N, R29W
WS 005	Intermediate: WW to Land	East Spray Site - 25 acres	SW ¼ Sec 14 & NW ¼ Sec 23, T136N, R29W
WS 006	Intermediate: WW to Land	South Derksen Road Spray Site – 45.3 acres	SW ¼ Sec 14 & NW ¼ Sec 23, T136N, R29W
WS 007	Intermediate: WW to Land	North Derksen Road Spray Site – 11.3 acres	SW ¼ Sec 14 & NW ¼ Sec 23, T136N, R29W

4. Permit requirements

GW 004	**Well, Downgradient**	
		Groundwater Well: 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 GW004 shall be taken at ground water monitoring well #4. [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)]
GW 005	**Well, Downgradient**	
		Groundwater Well: 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 GW005 shall be taken at ground water monitoring well #5. [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)]
GW 006	**Well, Upgradient**	
		Groundwater Well: 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 GW006 shall be taken at ground water monitoring well #6. [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)]
GW 010	**Well, Upgradient**	
		Groundwater Well: 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 GW010 shall be taken at ground water monitoring well #10. [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)]

LA 301	**Application Site, Spray with Soils Tests**	
		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 LA301 shall be taken at the 50 acre South Spray Site. [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)]
LA 302	**Application Site, Spray with Soils Tests**	
		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 LA302 shall be taken at the 50 acre West Spray Site. [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)]
LA 303	**Application Site, Spray with Soils Tests**	
		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 LA304 shall be taken at the 45.3 acre South Derksen Road Spray Site. [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)]
LA 304	**Application Site, Spray with Soils Tests**	
		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 LA301 shall be taken at the 45.3 acre South Derksen Road Spray Site. [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)]
LA 305	**Application Site, Spray with Soils Tests**	
		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 LA305 shall be taken at the 11.3 acre North Derksen Road Spray Site. [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)]
WS 001	**Influent Waste**	
		Waste Stream: Stabilization Pond Influent 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	Influent grab and composite samples for station WS001 shall be collected in the sewer system prior to the primary cell. [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)]
WS 002	**Intermediate: WW to Land**	
		Waste Stream: Spray Irrigation Pond Effluent 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 WS002 shall be taken at a point representative of the discharge from the stabilization ponds but prior to the spray irrigation sites. [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)]
WS 003	**Intermediate: WW to Land**	

		Waste Stream: Spray Irrigation to Spray Site 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 WS003 shall be representative of the effluent sprayed to the 50 acre South Spray Site. [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)]
WS 004	**Intermediate: WW to Land**	
		Waste Stream: Spray Irrigation to Spray Site 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 WS004 shall be representative of the effluent sprayed to the 25 acre West Spray Site. [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)]
WS 005	**Intermediate: WW to Land**	
		Waste Stream: Spray Irrigation to Spray Site 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 WS005 shall be representative of the effluent sprayed to the 25 acres East Spray Site. [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)]
WS 006	**Intermediate: WW to Land**	
		Waste Stream: Spray Irrigation to Spray Site 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 WS006 shall be representative of the effluent sprayed to the 45.3 acre South Derksen Road Spray Site. [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)]

WS 007	**Intermediate: WW to Land**	
		Waste Stream: Spray Irrigation to Spray Site 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 WS007 shall be representative of the effluent sprayed to the 11.3 acre North Derksen Road Spray Site. [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)]
MN0021661	**Pequot Lakes WWTP**	
		Groundwater Station General Requirements
	5.17.1	Analysis Requirements. [Minn. R. 7001]
	5.17.2	pH, Specific Conductance and Temperature analyses shall be conducted within 15 minutes of Sample collection. [Minn. R. 7001]
	5.17.3	Monitoring Wells. [Minn. R. 7001]
	5.17.4	The Permittee shall install, maintain and abandon groundwater monitoring wells according to the Minnesota Water Well Construction Code, Minnesota Rules, ch. 4725. Damaged or improperly constructed monitoring wells shall be repaired or properly abandoned and replaced. Information on licensed water well contractors is available from the Minnesota Department of Health. [Minn. R. 4725]
	5.17.5	The Permittee shall submit a detailed monitoring well log for each monitoring well at the facility and a detailed US Geological Survey topographical map identifying the location of each well. [Minn. R. 7001]
	5.17.6	Each monitoring well shall be clearly numbered on the outside of the well with either indelible paint or an inscribed number. [Minn. R. 7001]
	5.17.7	The monitoring wells shall be sampled in accordance with "Minnesota Pollution Control Agency, Water Quality Division: Sampling Procedures for Ground Water Monitoring Wells, July 1997, Reviewed and re-approved September 2006" or any updates to this document. A copy of this publication is available on the MPCA website at: http://www.pca.state.mn.us. [Minn. R. 7001]
	5.17.8	Grab samples shall be collected at all ground water monitoring points (lysimeters or wells) after stabilization tests are conducted. [Minn. R. 7001]
	5.17.9	Prior to well purging and sampling, depths to groundwater shall be measured to the nearest 0.01 foot below the top of the well casing, and groundwater elevations shall be reported to the nearest 0.01 foot above mean sea level. [Minn. R. 7001]
	5.17.10	Temperature, specific conductance and pH shall be reported as the final field measurements from well stabilization. [Minn. R. 7001]
		Land Application Station General Requirements
	5.18.11	Analysis Requirements. [Minn. R. 7001]
	5.18.12	pH, Specific Conductance and Temperature analyses shall be conducted within 15 minutes of Sample collection. [Minn. R. 7001]
	5.18.13	Soil Samples. [Minn. R. 7001]
	5.18.14	Soil samples shall be taken in the spring before the first irrigation and before the first application of commercial or other supplemental fertilizer for that year. [Minn. R. 7001]

	5.18.15	Soil samples shall be a composite of a mixture of 15 to 20 equally proportioned subsamples taken from a 0- to 8-inch core. At least one composite sample shall be collected for each 40 acres on the permitted land application site. [Minn. R. 7001]
	5.18.16	Application Rates. [Minn. R. 7001]
	5.18.17	Nitrogen and sodium land application rate limits apply to the sum of all sources of nitrogen or sodium applied to a permitted application site. [Minn. R. 7001]
	5.18.18	If nitrogen or sodium are applied to a permitted land application site from other sources including commercial fertilizer, manure, silage, sewage or wastewater treatment solids and sludges, then these other nitrogen or sodium sources shall be included in the sum of nitrogen or sodium applied to determine compliance with application rate limits at that site. [Minn. R. 7001]
	5.18.19	The nitrogen application rate shall be calculated as the sum of the total annual mass Kjeldahl nitrogen and nitrate-plus-nitrite nitrogen applied to the site, divided by the acreage of the site. [Minn. R. 7001]
		Waste Stream Station General Requirements
	5.19.20	Analysis Requirements. [Minn. R. 7001]
	5.19.21	pH, Specific Conductance and Temperature analyses shall be conducted within 15 minutes of Sample collection. [Minn. R. 7001]
	5.19.22	Representative Samples. [Minn. R. 7001]
	5.19.23	Grab and composite samples shall be collected at a point representative of total influent flow to the system. [Minn. R. 7001]
	5.19.24	Nitrogen Limits and Monitoring Requirements. [Minn. R. 7001]
	5.19.25	"Total Nitrogen" is to be reported as the summation of the Total Kjeldahl Nitrogen and Total Nitrite plus Nitrate Nitrogen values. [Minn. R. 7001]
		Construction Schedule
	5.20.26	Definitions. [Minn. R. 7001]
	5.20.27	"Initiation of operation" means the date that MPCA determines all components of the wastewater treatment system are complete and functioning and the project begins operating for the purposes for which it was planned, designed, and built. [Minn. R. 7001]
	5.20.28	"Completion of construction" means all the construction is complete except for minor weather-related components and conforms to the approved plans and specifications and change orders. [Minn. R. 7001]
	5.20.29	"Notice to proceed" means a written notice given by the Permittee to the contractor that affixes the contract effective date and the date that the contractor begins performing the work specified in the contract documents. [Minn. R. 7001]
	5.20.30	Schedule. [Minn. R. 7001]
	5.20.31	Submit Notice to Proceed. The Permittee shall submit a copy of the Notice to Proceed to the MPCA within 14 days of its execution. [Minn. R. 7001]
	5.20.32	Submit Verification of Certified Operator and O&M Manual. The Permittee shall notify the MPCA in writing at least 60 days before the planned initiation of operation of the new or upgraded facility that it has employed a wastewater treatment facility operator, certified for the classification of the treatment system (according to Minn. R., Chapter 9400), that is directly responsible for the operation of the system. The Permittee shall also submit an operation and maintenance (O&M) manual or a maintenance plan; or a certificate of completion of an operation and maintenance manual. [Minn. R. 7001]
	5.20.33	Submit Notice of Intent to Initiate Operation. The Permittee shall notify the MPCA in writing at least 14 days before the planned initiation of operation date. Following MPCA staff concurrence that the facility is adequately prepared, MPCA staff will notify the Permittee that it may initiate operation of the new or upgraded facility. [Minn. R.

		7001]
	5.20.34	Submit Initiation of Operation Date. The Permittee shall notify the MPCA in writing within 14 days after the actual initiation of operation date. The Permittee shall comply with all permit requirements and attain final limits within 90 days of the Initiation of Operation date. [Minn. R. 7001]
	5.20.35	Submit Notice to Complete Construction. The Permittee shall notify the MPCA in writing at least 14 days before the planned completion of construction date. The MPCA may complete a final inspection. [Minn. R. 7001]
	5.20.36	Submit Final Technical Documents. The Permittee shall submit the following to the MPCA within one year after the initiation of operation date: a. An MPCA-approved certification form that is signed by a professional engineer registered in the state of Minnesota stating that the project meets the performance standards. b. A revised operation and maintenance manual or a maintenance plan; or a certificate of completion of an operation and maintenance manual on a form prescribed by the MPCA. At a minimum, this plan shall include a detailed discussion of operation and controls, maintenance, sampling and analysis, problem mitigation, VOC management, personnel records and reporting, and safety. This plan shall be maintained and updated regularly and made available to the MPCA staff upon request. c. One copy of "as-built" plans and specifications, also known as record drawings, shall be submitted in a format approved by the MPCA. The factsheet titled: "Wastewater Treatment Facility Construction Record Documents, As-built Submittal Requirements" contains specific information regarding the required format of the submittal. The document is located on the MPCA web page at: http://www.pca.state.mn.us/index.php/view-document.html?gid=15492. [Minn. R. 7001]
		Aerated Pond System
	5.21.37	The Permittee shall inspect the aerated pond system weekly, and shall take measurements of the pond water depth, estimate the coverage of aquatic plants, floating mats and ice cover on the surface of the ponds, and note odors, the condition of the dikes and the presence of muskrats. [Minn. R. 7001.0150, 3(F)]
	5.21.38	The Permittee shall maintain records of these weekly inspections for the last three (3) years, and submit the results on a Discharge Monitoring Report (DMR) Supplemental Form. [Minn. R. 7001.0150, 3(F)]
		Spray Irrigation
	5.22.39	Authorization. [Minn. R. 7001]
	5.22.40	This chapter authorizes the Permittee to apply treated wastewater, as described in the 'Facility Description' section of this permit, to land application sites using a spray irrigation system. 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. 7001.0150, 3(E)]
	5.22.41	Wastewater Land Application System Management. [Minn. R. 7001]
	5.22.42	The wastewater flow to a land application site shall not have physical or chemical characteristics that prevent the proper operation of the land disposal system. The wastewater shall be free of material that interferes with the operation of nozzles, orifices or flow measurement devices. [Minn. R. 7001.0150, 3(F)]
	5.22.43	Wastewater shall be applied so as not to harm vegetation and so that prolonged saturated soil conditions do not develop due to the application. Wastewater shall not be applied during precipitation periods. [Minn. R. 7001.0150, 3(F)]
	5.22.44	A cover crop of shall be maintained on the sprayfield during the entire application

		season unless otherwise approved by the MPCA. [Minn. R. 7001.0150, 3(F)]
	5.22.45	Wastewater shall not be applied after the cover crop has become dormant as a result of frost or below freezing temperatures. [Minn. R. 7001.0150, 3(F)]
	5.22.46	The Permittee shall prevent the surface runoff of wastewater, and precipitation runoff mixed with wastewater, from the land application site(s). The Permittee shall provide runoff collection and re-application systems as appropriate to prevent the discharge of surface runoff. [Minn. R. 7001.0150, 3(F)]
	5.22.47	If odor or aerosol drift resulting from operation of the wastewater disposal system creates a nuisance condition, the Permittee shall immediately take appropriate action to control or abate the odor or aerosol drift. The Permittee shall notify the MPCA of a nuisance condition within five (5) days of discovery. [Minn. R. 7001.0150, 3(F)]
	5.22.48	Tile inlets shall be capped during spray irrigation events. [Minn. R. 7001.0150, 3(F)]
	5.22.49	Best management practices shall be utilized for all crops. The Permittee shall utilize the facility's Operation and Maintenance Manual, the Sprayfield Management Plan, and the most recent recommendations of the Minnesota Extension Service, University of Minnesota, for managing nitrogen for crop production on irrigated soils. Soil test results shall also be utilized for fertilizer recommendations. [Minn. R. 7001.0150, 3(F)]
	5.22.50	If any changes are made to the facilities permitted spray irrigation site the Permittee is required to notify the MPCA and update the facilities sprayfield management plan. This plan shall be kept on-site and made available upon MPCA request. [Minn. R. 7001.0150, 3(F)]
	5.22.51	Spray Irrigation Outside of Acceptable Land Application Periods. [Minn. R. 7001]
	5.22.52	If conditions require spray irrigation outside of the effective period designated in the limits and monitoring section of this permit or if an emergency condition exists, the Permittee shall submit to the MPCA the "Spray Irrigation/Rapid Infiltration Basin Discharge Not Authorized Within Permit" form found on the MPCA's website at: http://www.pca.state.mn.us/index.php/water/water-types-and-programs/wastewater/index.html. The form shall be submitted to the MPCA at least two weeks prior to needing to spray irrigate. [Minn. R. 7001.0150, 3(F)]
	5.22.53	Reporting. [Minn. R. 7001]
	5.22.54	The Permittee shall submit a land application of wastewater annual report : Due by January 21 of each year following permit issuance. [Minn. R. 7001.0150, 3(F)]
	5.22.55	The Land Application of Wastewater Annual Report shall include the following information: a. A description of the treatment system, including any changes made during the year. b. A description of system operation during the past year, including the following: i. nutrient and hydraulic loading; ii. irrigation scheduling and intensity; iii. crop harvesting; and iv. problems encountered and any remedial actions. c. A description of system maintenance during the past year, including the following: i. crop types and yields; and ii. irrigation equipment. d. A summarization of monitoring results obtained during the past year from the soil monitoring requirements. e. An analysis of the information submitted, and recommendations for changes, including the following: i. analysis of the year's operation; and ii. proposed changes for the coming year's operation. [Minn. R. 7001.0150, 3(F)]
		Spray Irrigation: Soils
	5.23.56	Sampling Location. [Minn. R. 7001]
	5.23.57	Samples for station LA301 shall be taken at the South Spray Site which is 50 acres.

		Samples for station LA302 shall be taken at the West Spray Site which is 25 acres. Samples for station LA303 shall be taken at the East Spray Site which is 25 acres. Samples for station LA304 shall be taken at the South Derksen Road Site which is 45.3 acres. Samples for station LA 305 shall be taken at the North Derksen Road Site which is 11.3 acres. [Minn. R. 7001.0150, 2(B)]
	5.23.58	Soil Samples. [Minn. R. 7001]
	5.23.59	Soil samples shall be taken in the spring before the first irrigation and before the first application of commercial or other supplemental fertilizer for that year. [Minn. R. 7001.0150, 2(B)]
	5.23.60	Soil samples shall be a composite of a mixture of 15 to 20 equally proportioned subsamples taken from a 0- to 8-inch core. At least one composite sample shall be collected for each 40 acres on the permitted land application site. [Minn. R. 7001.0150, 2(B)]
	5.23.61	Application Rates. [Minn. R. 7001]
	5.23.62	Nitrogen and sodium land application rate limits apply to the sum of all sources of nitrogen or sodium applied to a permitted application site. [Minn. R. 7001.0150, 3(F)]
	5.23.63	If nitrogen or sodium are applied to a permitted land application site from other sources including commercial fertilizer, manure, silage, sewage or wastewater treatment solids and sludges, then these other nitrogen or sodium sources shall be included in the sum of nitrogen or sodium applied to determine compliance with application rate limits at that site. [Minn. R. 7001.0150, 3(F)]
	5.23.64	The nitrogen application rate shall be calculated as the sum of the total annual mass Kjeldahl nitrogen and nitrate-plus-nitrite nitrogen applied to the site, divided by the acreage of the site. [Minn. R. 7001.0150, 3(F)]
		Pond System
	5.24.65	Bypass Structures. [Minn. R. 7001]
	5.24.66	All structures capable of bypassing the treatment system shall be manually controlled and kept locked at all times. [Minn. R. 7001.0150, 3(F)]
	5.24.67	Sanitary Sewer Extension Permit. [Minn. R. 7001]
	5.24.68	The Permittee may be required to obtain a Sanitary Sewer Extension Permit from the MPCA for any addition, extension or replacement to the sanitary sewer. If a sewer extension permit is required, construction may not begin until plans and specifications have been submitted and a written permit is granted except as allowed in Minn. Stat. 115.07, Subd. 3(b). [Minn. R. 7001.0150, 3(F)]
	5.24.69	Operator Certification. [Minn. R. 7001]
	5.24.70	The Permittee shall provide a Class D state certified operator who is in direct responsible charge of the operation, maintenance and testing functions required to ensure compliance with the terms and conditions of this permit. [Minn. R. 9400.0400, 1(A)]
	5.24.71	If the Permittee chooses to meet operator certification requirements through a contractual agreement, the Permittee shall provide a copy of the contract to the MPCA, WQ Submittals Center. The contract shall include the certified operator's name, certificate number, company name if appropriate, the period covered by the contract and provisions for renewal; the duties and responsibilities of the certified operator; the duties and responsibilities of the permittee; and provisions for notifying the MPCA 30 days in advance of termination if the contract is terminated prior to the expiration date. [Minn. R. 9400.0400, 1(A)]
	5.24.72	The Permittee shall notify the MPCA within 30 days of a change in operator certification or contract status. [Minn. R. 7001.0150, 3(F)]
	5.24.73	The Permittee shall maintain daily precipitation records. [Minn. R. 7001.0150, 3(F)]
		Pretreatment: Undelegated Requirements

	5.25.74	Pretreatment - Definitions. [Minn. R. 7049]
	5.25.75	An "Individual Control Mechanism" is a document, such as an agreement or permit, that imposes limitations or requirements on an individual industrial user of the POTW. [Minn. R. 7049]
	5.25.76	"Significant Industrial User" (SIU) means any industrial user that: a. discharges 25,000 gallons per day or more of process wastewater; b. contributes a load of five (5) % or more of the capacity of the POTW; or c. is designated as significant by the Permittee or the MPCA on the basis that the SIU has a reasonable potential to adversely impact the POTW, or the quality of its effluent or residuals. [Minn. R. 7049]
	5.25.77	Pretreatment - Permittee Responsibility to Control Users. [Minn. R. 7049]
	5.25.78	It is the Permittee's responsibility to regulate the discharge from users of its wastewater treatment facility. The Permittee shall prevent any pass through of pollutants or any inhibition or disruption of the Permittee's facility, its treatment processes, or its sludge processes or disposal that contribute to the violation of the conditions of this permit or any federal or state law or regulation limiting the release of pollutants from the POTW. [Minn. R. 7049]
	5.25.79	The Permittee shall prohibit the discharge of the following to its wastewater treatment facility: a. pollutants which create a fire or explosion hazard, including any discharge with a flash point less than 60 degrees C (140 degrees F); b. pollutants which would cause corrosive structural damage to the POTW, including any waste stream with a pH of less than 5.0; c. solid or viscous pollutants which would obstruct flow; d. heat that would inhibit biological activity, including any discharge that would cause the temperature of the waste stream at the POTW treatment plant headwork's to exceed 40 degrees C (104 degrees F); e. pollutants which produce toxic gases, vapors, or fumes that may endanger the health or safety of workers; or f. any pollutant, including oxygen demanding pollutants such as biochemical oxygen demand, released at a flow rate or pollutant concentration that will cause interference or pass through. [Minn. R. 7049]
	5.25.80	The Permittee shall prohibit new discharges of non-contact cooling waters unless there is no cost effective alternative. Existing discharges of non-contact cooling water to the Permittee's wastewater treatment facility shall be eliminated, where elimination is cost-effective, or where an infiltration/inflow analysis and sewer system evaluation survey indicates the need for such removal. [Minn. R. 7049]
	5.25.81	If the Permittee accepts trucked-in wastes, the Permittee shall evaluate the trucked in wastes prior to acceptance in the same manner as it monitors sewered wastes. The Permittee shall accept trucked-in wastes only at specifically designated points. [Minn. R. 7049]
	5.25.82	Pollutant of concern means a pollutant that is or may be discharged by an industrial user that is, or reasonably should be of concern on the basis that it may cause the permittee to violate any permit limits on the release of pollutants. The following pollutants shall be evaluated to determine if they should be pollutants of concern: pollutants limited in this permit, pollutants for which monitoring is required in this permit, pollutants that are likely to cause inhibition of the Permittee's POTW, pollutants which may interfere with sludge disposal, pollutants for which the Permittee's treatment facility has limited capacity. [Minn. R. 7049]
	5.25.83	Control of Significant Industrial Users. [Minn. R. 7049]
	5.25.84	The Permittee shall impose pretreatment requirements on SIUs which will ensure compliance with all applicable effluent limitations and other requirements set forth in

		this permit or any federal or state law or regulation limiting the release of pollutants from the POTW. These requirements shall be applied to SIUs by means of an individual control mechanism. [Minn. R. 7049]
	5.25.85	The Permittee shall not knowingly enter into an individual control mechanism with any user that would allow the user to contribute an amount or strength of wastewater that would cause violation of any limitation or requirement in the permit, or any applicable federal, state or local law or regulation. [Minn. R. 7049]
	5.25.86	Monitoring of Significant Industrial Users. [Minn. R. 7049]
	5.25.87	The Permittee shall obtain from SIUs specific information on the quality and quantity of the SIU's discharges to the Permittee's POTW. Except where specifically requested by the Permittee and approved by the MPCA, this information shall be obtained by means of representative monitoring conducted by the Permittee or by the SIU under requirements imposed by the Permittee in the SIU's individual control mechanism. Monitoring performed to comply with this requirement shall include all pollutants for which the SIU is significant and shall be done at a frequency commensurate with the significance of the SIU. [Minn. R. 7049]
	5.25.88	Reporting and Notification. [Minn. R. 7049]
	5.25.89	The Permittee shall submit a pretreatment annual report : Due by 31 days after the end of each calendar year following permit issuance if a SIU discharges to the POTW during a given calendar year. [Minn. R. 7049]
	5.25.90	The Pretreatment Annual Report shall be submitted on forms provided by the agency or shall provide equivalent information. The Permittee shall submit the pre-treatment report to the following address: MPCA Attn: WQ Submittals Center 520 Lafayette Road North St. Paul, Minnesota 55155-4194. [Minn. R. 7049]
	5.25.91	The Permittee shall notify the MPCA in writing of any: a. SIU of the Permittee's POTW which has not been previously disclosed to the MPCA; b. anticipated or actual changes in the volume or quality of discharge by an industrial user that could result in the industrial user becoming an SIU as defined in this chapter; or c. anticipated or actual changes in the volume or quality of discharges by a SIU that would require changes to the SIU's required local limits. This notification shall be submitted within 30 days of identifying the IU as a SIU. Where changes are proposed, they shall be submitted prior to changes being made. [Minn. R. 7049]
	5.25.92	Upon notifying the MPCA of a SIU or change in a SIU discharge as required above, the Permittee shall submit the following information on forms provided by the agency or in a comparable format: a. the identity of the SIU and a description of the SIU's operation and process; b. a characterization of the SIU's discharge; c. the required local limits that will be imposed on the SIU; d. a technical justification of the required local limits; and e. a plan for monitoring the SIU which is consistent with monitoring requirements in this chapter. [Minn. R. 7049]
	5.25.93	In addition, the Permittee shall, upon request, submit the following to the MPCA for approval:

		a. additional information on the SIU, its processes and discharge; b. a copy of the individual control mechanism used to control the SIU; c. the Permittee's legal authority to be used for regulating the SIU; and d. the Permittee's procedures for enforcing the requirements imposed on the SIU. [Minn. R. 7049]
	5.25.94	The permittee shall notify MPCA of any of its industrial users that may be subject to national categorical pretreatment standards. [Minn. R. 7049]
	5.25.95	This permit may be modified in accordance with Minnesota Rules, ch. 7001 to require development of a pretreatment program approvable under the Federal General Pretreatment Regulation (40 CFR 403). [Minn. R. 7049]
		Total Facility Requirements (SDS)
	5.26.96	No Discharge. There shall be no point source discharge to surface water from the permitted activity. [Minn. R. 7001.]
	5.26.97	Definitions. Refer to the 'Permit Users Manual' found on the MPCA website (www.pca.state.mn.us) for standard definitions. [Minn. R. 7001.]
	5.26.98	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]
	5.26.99	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)]
	5.26.100	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)]
	5.26.101	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]
	5.26.102	Property Rights. This permit does not convey a property right or an exclusive privilege. [Minn. R. 7001.0150, subp. 3(C)]
	5.26.103	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)]
	5.26.104	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)]
	5.26.105	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)]
	5.26.106	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)]
	5.26.107	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]
	5.26.108	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]
	5.26.109	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)]
	5.26.110	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)]
	5.26.111	Sampling. [Minn. R. 7001]
	5.26.112	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. [Minn. R. 7001.0150, 2(B)]
	5.26.113	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)]
	5.26.114	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]
	5.26.115	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. [Minn. R. 7001.0150, 2(B), Minn. R. 7041.3200]
	5.26.116	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)]
	5.26.117	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)]
	5.26.118	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. 7001.150, 2(B)]
	5.26.119	Submitting Reports. DMRs and Supplementals shall be submitted to: MPCA, Attn: Discharge Monitoring Reports, 520 Lafayette Road North, St Paul Minnesota 551554194. DMRs, DMR supplemental forms and related attachments may be electronically submitted via the MPCA Online Services Portal after authorization is approved. When electronically submitted, the paper DMR submittal requirement is waived. DMRs and DMR Supplemental Forms shall be postmarked or electronically submitted by the 21st day of the month following the sampling period or as otherwise specified in this permit. Electronic DMR submittal shall be complete on or before 11:59 PM of the 21st day of the month following the sampling period or as otherwise specified in this permit. A DMR shall be submitted for each required station even if no discharge occurred during the reporting period. Other reports required by this permit shall be postmarked by the date specified in the permit to: MPCA, Attn: WQ Submittals Center, 520 Lafayette Road North, St Paul Minnesota 551554194. [Minn. R. 7001.0150, 2(B), Minn. R. 7001.150, 3(H)]
	5.26.120	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)]
	5.26.121	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]
	5.26.122	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. 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: 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. b. If all values are below the level of detection, report the averages as "<" the corresponding level of detection. 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)]
	5.26.123	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)]
	5.26.124	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]
	5.26.125	Noncompliance and Enforcement. [Minn. R. 7001]
	5.26.126	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)]
	5.26.127	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]
	5.26.128	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. [Minn. R. 7001]
	5.26.129	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:

		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; and e. steps taken to reduce any adverse impact resulting from the event. [Minn. R. 7001.150, 3(K)]
	5.26.130	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: 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; and f. that the Permittee implemented the remedial measures required by Minn. R. 7001.0150, subp. 3, item J. [Minn. R. 7001.1090]
	5.26.131	Release. [Minn. R. 7001]
	5.26.132	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. [Minn. Stat. ch. 115.061]
	5.26.133	Discovery of a release. Upon discovery of a release, the Permittee shall: a. Take all reasonable steps to immediately end the release. 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). 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]
	5.26.134	Sampling of a release. Upon discovery of a release, the Permittee shall: 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. 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]
	5.26.135	Bypass. [Minn. R. 7001]
	5.26.136	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. The notice of the need for an anticipated bypass shall include the following information: a. the proposed date and estimated duration of the bypass; b. the alternatives to bypassing; and 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. [Minn. R. 7001.1090, 1(J)]
	5.26.137	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. In the event of an unanticipated bypass, the permittee shall: 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. R. 7001.1090, 1(K), Minn. Stat. ch. 115.061]
	5.26.138	Operation and Maintenance. [Minn. R. 7001]
	5.26.139	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)]
	5.26.140	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)]
	5.26.141	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]
	5.26.142	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. 7001.150, 2(B)]
	5.26.143	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. 7001.150, 2(B)]
	5.26.144	Changes to the Facility or Permit. [Minn. R. 7001]
	5.26.145	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. 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]
	5.26.146	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. 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]
	5.26.147	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)]
	5.26.148	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. 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 increased or new use. This written request shall include at least the following information for the proposed additive: a. The process for which the additive will be used; 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; c. a complete product use and instruction label; d. the commercial and chemical names and Chemical Abstract Survey (CAS) number for all ingredients in the additive (If the MSDS 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 e. The proposed method of application, application frequency, concentration, and daily average and maximum rates of use. 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]
	5.26.149	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]
	5.26.150	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.l.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. [Minn. R. 7001]
	5.26.151	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)]
	5.26.152	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. 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. 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]
	5.26.153	Permit Reissuance. If the Permittee desires to continue permit coverage beyond the date of permit expiration, the Permittee shall submit an application for reissuance at least 180 days before 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. 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): 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]
	5.26.154	The Permittee shall submit an application for permit reissuance : Due by 180 days prior to permit expiration. [Minn. R. 7001.0160]
		Facility Specific Requirements
	5.27.155	Stations LA301, LA302 and LA303 will be used prior to Initiation of operation of the new spray irrigation system (Phase 1 monitoring). Stations LA304 and LA305 will be used after Initiation of operation of the new spray irrigation system (Phase 2 monitoring). [Minn. R. 7001]
	5.27.156	Stations WS003, WS004 and WS005 will be used prior to Initiation of operation of the new spray irrigation system (Phase 1 monitoring). Stations WS006 and WS007 will be used after Initiation of operation of the new spray irrigation system (Phase 2 monitoring). [Minn. R. 7001]

5. Submittal action summary

GW 004	**Well, Downgradient**	
		Groundwater Well: 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)]
GW 005	**Well, Downgradient**	
		Groundwater Well: 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)]
GW 006	**Well, Upgradient**	
		Groundwater Well: 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)]
GW 010	**Well, Upgradient**	
		Groundwater Well: 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)]
LA 301	**Application Site, Spray with Soils Tests**	
		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)]
LA 302	**Application Site, Spray with Soils Tests**	
		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)]
LA 303	**Application Site, Spray with Soils Tests**	
		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)]
LA 304	**Application Site, Spray with Soils Tests**	
		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)]
LA 305	**Application Site, Spray with Soils Tests**	
		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)]
WS 001	**Influent Waste**	
		Waste Stream: Stabilization Pond Influent 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)]
WS 002	**Intermediate: WW to Land**	
		Waste Stream: Spray Irrigation Pond Effluent 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)]

WS 003	**Intermediate: WW to Land**	
		Waste Stream: Spray Irrigation to Spray Site 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)]
WS 004	**Intermediate: WW to Land**	
		Waste Stream: Spray Irrigation to Spray Site 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)]
WS 005	**Intermediate: WW to Land**	
		Waste Stream: Spray Irrigation to Spray Site 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)]
WS 006	**Intermediate: WW to Land**	
		Waste Stream: Spray Irrigation to Spray Site 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)]
WS 007	**Intermediate: WW to Land**	
		Waste Stream: Spray Irrigation to Spray Site 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)]
MN0021661	**Pequot Lakes WWTP**	
		Spray Irrigation
	6.17.1	The Permittee shall submit a land application of wastewater annual report : Due by January 21 of each year following permit issuance. [Minn. R. 7001.0150, 3(F)]

		Pretreatment: Undelegated Requirements
	6.18.2	The Permittee shall submit a pretreatment annual report : Due by 31 days after the end of each calendar year following permit issuance if a SIU discharges to the POTW during a given calendar year. [Minn. R. 7049]
		Total Facility Requirements (SDS)
	6.19.3	The Permittee shall submit an application for permit reissuance : Due by 180 days prior to permit expiration. [Minn. R. 7001.0160]

6. Limits and monitoring

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
GW 004 GW Monitoring - SW Pond	Chloride, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 004 GW Monitoring - SW Pond	Elevation of GW Relative to Mean Sea Level		Monitor only. instantaneous maximum	feet					once per month	Measurement, Instantaneous	Apr, Jul, Oct	
GW 004 GW Monitoring - SW Pond	Nitrite Plus Nitrate, Total (as N)						10 calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 004 GW Monitoring - SW Pond	Nitrogen, Ammonia, Total (as N)						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 004 GW Monitoring - SW Pond	Nitrogen, Kjeldahl, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 004 GW Monitoring - SW Pond	Specific Conductance, Field						Monitor only. instantaneous maximum	millimhos per centimeter	once per month	Grab	Apr, Jul, Oct	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
GW 004 GW Monitoring - SW Pond	Temperature, Water (C)						Monitor only. instantaneous maximum	degrees Celsius	once per month	Grab	Apr, Jul, Oct	
GW 004 GW Monitoring - SW Pond	pH, Field				Monitor only. instantaneous minimum		Monitor only. instantaneous maximum	standard units	once per month	Grab	Apr, Jul, Oct	
GW 005 GW Monitoring - NW Pond	Chloride, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 005 GW Monitoring - NW Pond	Elevation of GW Relative to Mean Sea Level		Monitor only. instantaneous maximum	feet					once per month	Measurement, Instantaneous	Apr, Jul, Oct	
GW 005 GW Monitoring - NW Pond	Nitrite Plus Nitrate, Total (as N)						10 calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 005 GW Monitoring - NW Pond	Nitrogen, Ammonia, Total (as N)						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 005 GW Monitoring -	Nitrogen, Kjeldahl, Total						Monitor only.	milligrams per liter	once per month	Grab	Apr, Jul, Oct	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
NW Pond							calendar month maximum					
GW 005 GW Monitoring - NW Pond	Specific Conductance, Field						Monitor only. instantaneous maximum	millimhos per centimeter	once per month	Grab	Apr, Jul, Oct	
GW 005 GW Monitoring - NW Pond	Temperature, Water (C)						Monitor only. instantaneous maximum	degrees Celsius	once per month	Grab	Apr, Jul, Oct	
GW 005 GW Monitoring - NW Pond	pH, Field				Monitor only. instantaneous minimum		Monitor only. instantaneous maximum	standard units	once per month	Grab	Apr, Jul, Oct	
GW 006 GW Monitoring - SE Pond	Chloride, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 006 GW Monitoring - SE Pond	Elevation of GW Relative to Mean Sea Level		Monitor only. instantaneous maximum	feet					once per month	Measurement, Instantaneous	Apr, Jul, Oct	
GW 006 GW Monitoring - SE Pond	Nitrite Plus Nitrate, Total (as N)						10 calendar month	milligrams per liter	once per month	Grab	Apr, Jul, Oct	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
							maximum					
GW 006 GW Monitoring - SE Pond	Nitrogen, Ammonia, Total (as N)						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 006 GW Monitoring - SE Pond	Nitrogen, Kjeldahl, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 006 GW Monitoring - SE Pond	Specific Conductance, Field						Monitor only. instantaneous maximum	millimhos per centimeter	once per month	Grab	Apr, Jul, Oct	
GW 006 GW Monitoring - SE Pond	Temperature, Water (C)						Monitor only. instantaneous maximum	degrees Celsius	once per month	Grab	Apr, Jul, Oct	
GW 006 GW Monitoring - SE Pond	pH, Field				Monitor only. instantaneous minimum		Monitor only. instantaneous maximum	standard units	once per month	Grab	Apr, Jul, Oct	
GW 010 GW Monitoring - NE Pond	Chloride, Total						Monitor only. calendar month	milligrams per liter	once per month	Grab	Apr, Jul, Oct	

		Discharge limitations							Monitoring requirements			
Subject item	Parameter	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	Notes
							maximum					
GW 010 GW Monitoring - NE Pond	Elevation of GW Relative to Mean Sea Level		Monitor only. instantaneous maximum	feet					once per month	Measurement, Instantaneous	Apr, Jul, Oct	
GW 010 GW Monitoring - NE Pond	Nitrite Plus Nitrate, Total (as N)						10 calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 010 GW Monitoring - NE Pond	Nitrogen, Ammonia, Total (as N)						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 010 GW Monitoring - NE Pond	Nitrogen, Kjeldahl, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 010 GW Monitoring - NE Pond	Specific Conductance, Field						Monitor only. instantaneous maximum	millimhos per centimeter	once per month	Grab	Apr, Jul, Oct	
GW 010 GW Monitoring - NE Pond	Temperature, Water (C)						Monitor only. instantaneous maximum	degrees Celsius	once per month	Grab	Apr, Jul, Oct	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
GW 010 GW Monitoring - NE Pond	pH, Field				Monitor only. instantaneous minimum		Monitor only. instantaneous maximum	standard units	once per month	Grab	Apr, Jul, Oct	
LA 301 South Spray Site - 50 acres Phase 1	Nitrogen, Total Annual Loading Rate		Monitor only. calendar year to date total intervention	pounds per acre per year					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 301 South Spray Site - 50 acres Phase 1	Organic Matter, Total in Soil						Monitor only. calendar year maximum	percent	once per year	Composite	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 301 South Spray Site - 50 acres Phase 1	Phosphorus, BRAY-1 Ext In Soil		Monitor only. calendar year maximum	pounds per acre					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 301 South Spray Site - 50 acres Phase 1	Potassium, NH4AC, Exch In Soil		Monitor only. calendar year maximum	pounds per acre					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 301 South Spray Site - 50 acres Phase 1	Salts, Water Soluble In Soil						3.0 instantaneous maximum intervention	millimhos per centimeter	once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
LA 301 South Spray Site - 50 acres Phase 1	pH, 1 To 1 Soil To Water						Monitor only. calendar year maximum	standard units	once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 302 West Spray Site - 25 acres Phase 1	Nitrogen, Total Annual Loading Rate		Monitor only. calendar year to date total intervention	pounds per acre per year					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 302 West Spray Site - 25 acres Phase 1	Organic Matter, Total in Soil						Monitor only. calendar year maximum	percent	once per year	Composite	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 302 West Spray Site - 25 acres Phase 1	Phosphorus, BRAY-1 Ext In Soil		Monitor only. calendar year maximum	pounds per acre					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 302 West Spray Site - 25 acres Phase 1	Potassium, NH4AC, Exch In Soil		Monitor only. calendar year maximum	pounds per acre					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 302 West Spray Site - 25 acres Phase 1	Salts, Water Soluble In Soil						3.0 instantaneous maximum intervention	millimhos per centimeter	once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
LA 302 West Spray Site - 25 acres Phase 1	pH, 1 To 1 Soil To Water						Monitor only. calendar year maximum	standard units	once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 303 East Spray Site - 25 acres Phase 1	Nitrogen, Total Annual Loading Rate		Monitor only. calendar year to date total intervention	pounds per acre per year					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 303 East Spray Site - 25 acres Phase 1	Organic Matter, Total in Soil						Monitor only. calendar year maximum	percent	once per year	Composite	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 303 East Spray Site - 25 acres Phase 1	Phosphorus, BRAY-1 Ext In Soil		Monitor only. calendar year maximum	pounds per acre					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 303 East Spray Site - 25 acres Phase 1	Potassium, NH4AC, Exch In Soil		Monitor only. calendar year maximum	pounds per acre					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA 303 East Spray Site - 25 acres Phase 1	Salts, Water Soluble In Soil						3.0 instantaneous maximum intervention	millimhos per centimeter	once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
LA 303 East Spray Site - 25 acres Phase 1	pH, 1 To 1 Soil To Water						Monitor only. calendar year maximum	standard units	once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA304 South Derksen Road - 45.3 acres Phase 2	Nitrogen, Total Annual Loading Rate		Monitor only. calendar year to date total intervention	pounds per acre per year					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA304 South Derksen Road - 45.3 acres Phase 2	Organic Matter, Total in Soil						Monitor only. calendar year maximum	percent	once per year	Composite	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA304 South Derksen Road - 45.3 acres Phase 2	Phosphorus, BRAY-1 Ext In Soil		Monitor only. calendar year maximum	pounds per acre					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA304 South Derksen Road - 45.3 acres Phase 2	Potassium, NH4AC, Exch In Soil		Monitor only. calendar year maximum	pounds per acre					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA304 South Derksen Road - 45.3 acres Phase 2	Salts, Water Soluble In Soil						3.0 instantaneous maximum intervention	millimhos per centimeter	once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
LA304 South Derksen Road - 45.3 acres Phase 2	pH, 1 To 1 Soil To Water						Monitor only. calendar year maximum	standard units	once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA305 North Derksen Road - 11.3 acres Phase 2	Nitrogen, Total Annual Loading Rate		Monitor only. calendar year to date total intervention	pounds per acre per year					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA305 North Derksen Road - 11.3 acres Phase 2	Organic Matter, Total in Soil						Monitor only. calendar year maximum	percent	once per year	Composite	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA305 North Derksen Road - 11.3 acres Phase 2	Phosphorus, BRAY-1 Ext In Soil		Monitor only. calendar year maximum	pounds per acre					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA305 North Derksen Road - 11.3 acres Phase 2	Potassium, NH4AC, Exch In Soil		Monitor only. calendar year maximum	pounds per acre					once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
LA305 North Derksen Road - 11.3 acres Phase 2	Salts, Water Soluble In Soil						3.0 instantaneous maximum intervention	millimhos per centimeter	once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
LA305 North Derksen Road - 11.3 acres Phase 2	pH, 1 To 1 Soil To Water						Monitor only. calendar year maximum	standard units	once per year	Calculation	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 001 Influent Waste Stream	BOD, Carbonaceous 05 Day (20 Deg C)					Monitor only. calendar quarter average		milligrams per liter	once per quarter	4-Hour Flow Composite	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 001 Influent Waste Stream	Flow		Monitor only. calendar month total	million gallons		Monitor only. calendar month average	Monitor only. calendar month maximum	million gallons per day	once per day	Measurement, Continuous	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 001 Influent Waste Stream	Nitrite Plus Nitrate, Total (as N)					Monitor only. calendar month average		milligrams per liter	once per month	Grab	Mar, Sep	
WS 001 Influent Waste Stream	Nitrogen, Kjeldahl, Total					Monitor only. calendar month average		milligrams per liter	once per month	Grab	Mar, Sep	
WS 001 Influent Waste Stream	Nitrogen, Total (as N)					Monitor only. calendar month average		milligrams per liter	once per month	Grab	Mar, Sep	
WS 001 Influent Waste Stream	Precipitation		Monitor only. calendar month	inches					once per day	Measurement	Jan-Dec (Sep-Aug) (Oct-Sep)	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
			total									
WS 001 Influent Waste Stream	Solids, Total Suspended (TSS)					Monitor only. calendar quarter average		milligrams per liter	once per quarter	4-Hour Flow Composite	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 001 Influent Waste Stream	pH				Monitor only. instantaneous minimum		Monitor only. instantaneous maximum	standard units	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 002 Effluent Prior to Spray Site	Chloride, Total					Monitor only. calendar month average		milligrams per liter	once per month	Grab	Apr-Nov	
WS 002 Effluent Prior to Spray Site	Fecal Coliform, MPN or Membrane Filter 44.5C					200 calendar month geometric mean		organisms per 100 milliliter	once per month	Grab	Apr-Nov	
WS 002 Effluent Prior to Spray Site Phase 2	Flow		45 calendar year to date total	million gallons					once per day	Measurement, Continuous	Apr-Nov	
WS 002 Effluent Prior to Spray Site	Flow		Monitor only. calendar month total	million gallons		Monitor only. calendar month average		million gallons per day	once per day	Measurement, Continuous	Apr-Nov	
WS 002 Effluent Prior to Spray Site	Nitrite Plus Nitrate, Total (as N)				Monitor only. calendar month minimu			milligrams per liter	once per month	Grab	Apr-Nov	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
					m							
WS 002 Effluent Prior to Spray Site	Nitrogen, Ammonia, Total (as N)				Monitor only. calendar month minimum			milligrams per liter	once per month	Grab	Apr-Nov	
WS 002 Effluent Prior to Spray Site	Nitrogen, Kjeldahl, Total				Monitor only. calendar month minimum			milligrams per liter	once per month	Grab	Apr-Nov	
WS 002 Effluent Prior to Spray Site	Specific Conductance						Monitor only. calendar month maximum	millimhos per centimeter	once per month	Grab	Apr-Nov	
WS 002 Effluent Prior to Spray Site	pH						Monitor only. instantaneous maximum	standard units	once per month	Grab	Apr-Nov	
WS 003 South Spray Site - 50 acres Phase 1	Area Of Disposal, Used		50 calendar month total	acres					once per day	Measurement	Apr-Nov	
WS 003 South Spray Site - 50 acres Phase 1	Flow		22.5 calendar year to date total	million gallons		Monitor only. calendar month average		million gallons per day	once per day	Measurement, Continuous	Apr-Nov	
WS 004 West Spray Site - 25	Area Of Disposal, Used		25 calendar	acres					once per day	Measurement	Apr-Nov	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
acres Phase 1			month total									
WS 004 West Spray Site - 25 acres Phase 1	Flow		11.25 calendar year to date total	million gallons		Monitor only. calendar month average		million gallons per day	once per day	Measurement, Continuous	Apr-Nov	
WS 005 East Spray Site - 25 acres Phase 1	Area Of Disposal, Used		25 calendar month total	acres					once per day	Measurement	Apr-Nov	
WS 005 East Spray Site - 25 acres Phase 1	Flow		11.25 calendar year to date total	million gallons		Monitor only. calendar month average		million gallons per day	once per day	Measurement, Continuous	Apr-Nov	
WS006 Intermediate: WW to Land South Derksen Road Phase 2	Area Of Disposal, Used		45.3 calendar month total	acres					once per day	Measurement	Apr-Nov	
WS006 Intermediate: WW to Land South Derksen Road Phase 2	Flow		Monitor only. calendar month total	million gallons		Monitor only. calendar month average		million gallons per day	once per day	Measurement, Continuous	Apr-Nov	
WS006 Intermediate: WW to Land South Derksen Road Phase 2	Flow		Monitor only. calendar year to date total	million gallons					once per day	Measurement, Continuous	Apr-Nov	
WS007 Intermediate: WW to Land - North Derksen Road Phase 2	Area Of Disposal, Used		11.3 calendar month total	acres					once per day	Measurement	Apr-Nov	

		Discharge limitations							Monitoring requirements			
Subject item	**Parameter**	**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**	**Notes**
WS007 Intermediate: WW to Land - North Derksen Road Phase 2	Flow		Monitor only. calendar month total	million gallons		Monitor only. calendar month average		million gallons per day	once per day	Measurement, Continuous	Apr-Nov	
WS007 Intermediate: WW to Land - North Derksen Road Phase 2	Flow		Monitor only. calendar year to date total	million gallons					once per day	Measurement, Continuous	Apr-Nov	

Statement of Basis

City of Pequot Lakes Wastewater Treatment Facility

SDS Permit No. MN0021661

December 2015

Description of Permitted Facility

The Pequot Lakes WWTF facility (Facility) is located at SW ¼ of Section 14, Township 136 North, Range 29 West, Pequot Lakes, Crow Wing County, Minnesota. This is a Class D Facility.

The application and plans indicate that the existing treatment system consists of approximately 3,630 feet of 6 inch force main, a two cell aerated pond system, and 3 spray irrigation sites totaling 100 acres.

During this permit term the Facility is changing the size of the spray irrigation sites and the technology used to spray irrigate to 56.6 acres of row irrigation. The Minnesota Department of Transportation is currently expanding Highway 371 to a 4 lane through the City of Pequot Lakes. The construction is scheduled to start in the Spring of 2016.

The Facility is designed to treat an average wet weather flow of 121,795 gallons per day with a five day carbonaceous biochemical oxygen demand ($CBOD_5$) strength of approximately 250 milligrams per liter (mg/L). The two aerated pond cells have a maximum high water level of 13 feet with 2 feet of biosolids storage. The size of each pond at the mean operating depth of 7.5 feet is 4.32 acres with a total storage volume of about 30,983,000 gallons providing a combined detention time of 254 days at design flow. After construction of the new row irrigation system is complete the treated wastewater will be applied to the 56.6 acre spray irrigation site. The maximum allowed flow to 56.6 the spray irrigation site is 45 million gallons per year.

There are no designed bypass or overflow points known to exist in the disposal system. There is no discharge point to surface waters from this Facility.

Groundwater stations GW001, GW005, GW006, and GW010 have been established to monitor groundwater quality conditions. Stations WS006, WS007, LA304, and LA305 will be used after the initiation of operation (Phase 2 monitoring) of the new spray irrigation system. Waste stream stations WS001 is the facility influent station. WS002 have been created to monitor the effluent between the stabilization ponds and prior to the spray irrigation sites. These stations will be required to be monitored during Phase 1 and Phase 2 of the monitoring requirements.

Waste stream stations WS003, WS004, and WS005 are used to monitor acres and flow for LA301, LA302 and LA303 land application stations are used to monitor the soil testing requirements. These stations will be used prior to initiation of operation (Phase 1 monitoring) of the new spray irrigation facility.

WS006 and WS007 have been established for area of disposal used and to monitor the flow to each land application site. LA304 and LA 305 have been established to monitor the soil testing requirements in the permit. Stations WS006, WS007, LA304, and LA305 will be used after the initiation of operation (Phase 2 monitoring) of the new spray irrigation system.

Chemical Additives

There are no chemical additives used at this facility.

Trout Streams

No trout streams are located within one mile of the Facility.

Waste Streams

This permit contains seven waste streams stations which have been assigned monitoring and reporting requirements. The following tables illustrate the associated limit and monitoring requirements for these seven waste streams:

Table 1: WS001 Influent Waste Stream

Parameter	Limit	Units	Limit Type	Effective Period	Frequency
5 day Biochemical Carbonaceous Oxygen Demand (CBOD5)	Monitor Only	mg/L	Calendar Quarter Average	Jan-Dec	1 x quarter
Flow	Monitor Only	mgd	Calendar Month Average	Jan-Dec	1 x day
Flow	Monitor Only	mgd	Calendar Month Maximum	Jan-Dec	1 x day
Flow	Monitor Only	MG	Calendar Month Total	Jan-Dec	1 x day
pH	Monitor Only	SU	Calendar Quarter Maximum	Jan-Dec	1 x quarter
Total Suspended Solids (TSS)	Monitor Only	mg/L	Calendar Quarter Average	Jan-Dec	1 x quarter
Precipitation	Monitor Only	Inches	Calendar Month Total	Jan-Dec	1 x day

Influent waste monitoring required during the Phase 1 and Phase 2.

Table 2: WS002 Intermediate: WW to Land Effluent Prior to the Spray Sites

Parameter	Limit	Units	Limit Type	Effective Period	Frequency
Chloride, Total	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	1 x month
Fecal Coliform, MPN or Membrane Filter 44.5C	200	#100 ml	Calendar Month Geometric Mean	Apr-Nov	1 x month
Nitrite Plus Nitrate, Total (as N)	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	1 x month
Nitrogen, Ammonia, Total (as N)	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	1 x month
Nitrogen, Kjeldahl, Total	Monitor Only	mg/L	Calendar Month Average	Apr-Nov	1 x month
pH	Monitor Only	SU	Calendar Month Maximum	Apr-Nov	1 x month
Specific Conductance	Monitor Only	umh/cm	Calendar Month Maximum	Apr-Nov	1 x month
*Flow	Monitor Only	MG	Calendar Month Total	Apr-Nov	1 x day
*Flow	Monitor Only	MG	Calendar Year to Date Total	Apr-Nov	1 x day

*Flow is required during Phase 2 only. All other parameters for WS002 are required during Phase 1 and Phase 2.

Table 3: WS003 Intermediate: WW to Land South Spray Site – 50 acres

Parameter	Limit	Units	Limit Type	Effective Period	Frequency
Area of Disposal, Used	50.0	Acres	Calendar Month Total	Apr-Nov	1 x day
Flow	Monitor Only	MG	Calendar Month Total	Apr-Nov	1 x day
Flow	22.5	MG	Calendar Year to Date Total	Apr-Nov	1 x day

WS003 monitoring is required during Phase 1 only. Site will be removed during construction

Table 4: WS004, WS005 Intermediate: WW to Land West and East Spray Site – 25 acres each

Parameter	Limit	Units	Limit Type	Effective Period	Frequency
Area of Disposal, Used	25.0	Acres	Calendar Month Total	Apr-Nov	1 x day
Flow	Monitor Only	MG	Calendar Month Total	Apr-Nov	1 x day
Flow	11.25	MG	Calendar Year to Date Total	Apr-Nov	1 x day

WS004 and WS005 monitoring is required during Phase 1 only. Sites will be removed during construction

Table 5: WS006, Intermediate: WW to Land South Derksen Road Spray Site – 45.3 acres

Parameter	Limit	Units	Limit Type	Effective Period	Frequency
Area of Disposal, Used	45.3	Acres	Calendar Month Total	Apr-Nov	1 x day
Flow	Monitor Only	MG	Calendar Month Total	Apr-Nov	1 x day
Flow	Monitor Only	MG	Calendar Year to Date Total	Apr-Nov	1 x day

WS006 monitoring is required during Phase 2 only. Monitoring will start after initiation of operation.

Table 6: WS007, Intermediate: WW to Land North Derksen Road Spray Site – 11.3 acres

Parameter	Limit	Units	Limit Type	Effective Period	Frequency
Area of Disposal, Used	11.3	Acres	Calendar Month Total	Apr-Nov	1 x day
Flow	Monitor Only	MG	Calendar Month Total	Apr-Nov	1 x day
Flow	Monitor Only	MG	Calendar Year to Date Total	Apr-Nov	1 x day

WS007 monitoring required during Phase 2 only. Monitoring will start after initiation of operation

Table 7: GW004, GW005, GW006, GW010, Ground Water Monitoring Wells

Parameter	Limit	Units	Limit Type	Effective Period	Frequency
Chloride, Total	Monitor Only	mg/L	Instantaneous Maximum	Apr, Jul, Oct	1 x month
Elevation of GW Relative to Mean Sea Level	Monitor Only	Feet	Calendar Month Maximum	Apr, Jul, Oct	1 x month
Nitrogen, Ammonia, Total (as N)	Monitor Only	mg/L	Calendar Month Maximum	Apr, Jul, Oct	1 x month
Nitrogen, Kjeldahl, Total	Monitor Only	mg/L	Calendar Month Maximum	Apr, Jul, Oct	1 x month
Nitrate Plus Nitrate	10	mg/L	Instantaneous Maximum	Apr, Jul, Oct	1 x month
Temperature	Monitor Only	Deg C	Calendar Month Maximum	Apr, Jul, Oct	1 x month
Specific Conductance, Field	Monitor Only	umh/cm	Calendar Month Maximum	Apr, Jul, Oct	1 x month
pH	Monitor Only	SU	Calendar Month Minimum	Apr, Jul, Oct	1 x month
pH	Monitor Only	SU	Calendar Month Maximum	Apr, Jul, Oct	1 x month

GW004, GW005, GW006, and GW010 monitoring is required during Phase 1 and Phase 2.

Table 8: LA301 South Spray Site, LA302 West Spray Site, LA303 East Spray Site, LA304 South Derksen Road Spray Site, LA305 North Derksen Road Spray Site Application Site, Spray with Soils Tests

Parameter	Limit	Units	Limit Type	Effective Period	Frequency
Nitrogen, Total Annual Loading Rate	Monitor Only	lbacyr	Calendar Year Total Intervention	Jan-Dec	1 x year
Organic Matter, Total in Soil	Monitor Only	%	Calendar Year Maximum	Jan-Dec	1 x year
pH, 1 to 1 Soil to Water	Monitor Only	SU	Calendar Year Maximum	Jan-Dec	1 x year
Phosphorus, BRAY-1 Ext in Soil	Monitor Only	lb/acr	Calendar Year Maximum	Jan-Dec	1 x year
Potassium, NH4, Exch in Soil	Monitor Only	lb/acr	Calendar Year Maximum	Jan-Dec	1 x year
Salts, Water Soluble in Soil	3.0	mmh/cm	Instantaneous Maximum Intervention	Jan-Dec	1 x year

LA301, LA302, LA303 monitoring is required during Phase 1. LA304 and LA305 is required during Phase 2.