Minnesota Pollution Control Agency

State Disposal System

MN0064459

Permittee:	Baldwin Township		
Facility name:	Frontier Trails Homeowners Association		
Township:	Baldwin Township,	**County:**	Sherburne
Issuance date:	February 1, 2016		
Expiration date:	January 31, 2027		

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

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

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

Signature: Nicole Blasing

This document has been electronically signed.

for the Minnesota Pollution Control Agency

Nicole Blasing
Supervisor, North Central Regional Unit
Brainerd Office
Municipal Division

Submit eDMRs
Submit via the MPCA Online Services Portal at
https://netweb.pca.state.mn.us/private/

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

Questions on this permit?
For eDMR and other permit reporting issues, contact:
Sheri Woitalewicz, 507-476-4271

For specific permit requirements please refer to:
Jeremy Sanoski, 218-316-3888

Wastewater Permit Program general questions, contact:
MPCA, 651-282-6143 or 1-800-657-3938.

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1. Permitted facility description

The Frontier Trails Homeowners Association facility (facility) is located at 950 feet east of County Road 1, north of 314th Street and south of 316th Street on out lot C, Baldwin Township, Minnesota 55371, Sherburne County.

Major components of the facility include:

- Anaerobic Contactor
- Collection system (pumped septic tank effluent)
- Effluent Disposal - Subsurface Trench/Bed
- Individual or Community SSTS
- Primary treatment - septic tank
- Recirculating Media Filter (sand/gravel)
- Recirculating Media Filter (textile media)

The application and plans indicate that the facility consists of a 112.23-acre single family residential unit cluster development located in Baldwin Township, Sherburne County. The development consists of 41 single family lots. The treatment system for this development is divided into two treatment systems. System 1 provides treatment for 21 homes and system 2 provides treatment for 20 homes.

Both systems consist of individual home septic tanks each with a 600-gallon dosing tank, a septic tank effluent pressure (STEP) collection system, one 4,200-gallon flow equalization tank, one 7,500-gallon recirculating sand filter/Advantex AX100 dosing tank with multiple pumps, one 864 square foot recirculating sand filter and one Advantex AX100 filter, one 7,500-gallon and one 4,200-gallon dosing tank.

All existing components will be utilized for the upgraded system. The existing drain fields for system 1 and 2 will be abandoned and two new drain fields will be built. Effluent from system 2 will be pumped to system 1 and into a new MBBR (Moving bed biofilm reactor) with carbon addition for denitrification followed by polishing aeration and solids removal prior to dosing one of the two new drain fields. Each new drain field has two cells for a total disposal area of 11,232 square feet.

Stations WS001 and WS004 are influent stations for each of the separate systems, these two stations will be used during Phase 1 and Phase 2. Phase 2 monitoring will be effective 90 days after initiation of operation of the upgraded facility. WS002 and WS005 are sludge and scum monitoring in the existing tanks, this monitoring is only required during Phase 1 and not required during Phase 2. WS003 and WS006 are the effluent to drainfield monitoring stations for the two existing drain fields. Both existing drainfields will be abandoned during construction, this monitoring is required during Phase 1 of the Permit. WS007 is a new monitoring station which will be located after the final distribution tank and prior to the new drain fields. This monitoring station will include the new total nitrogen end of pipe limit.

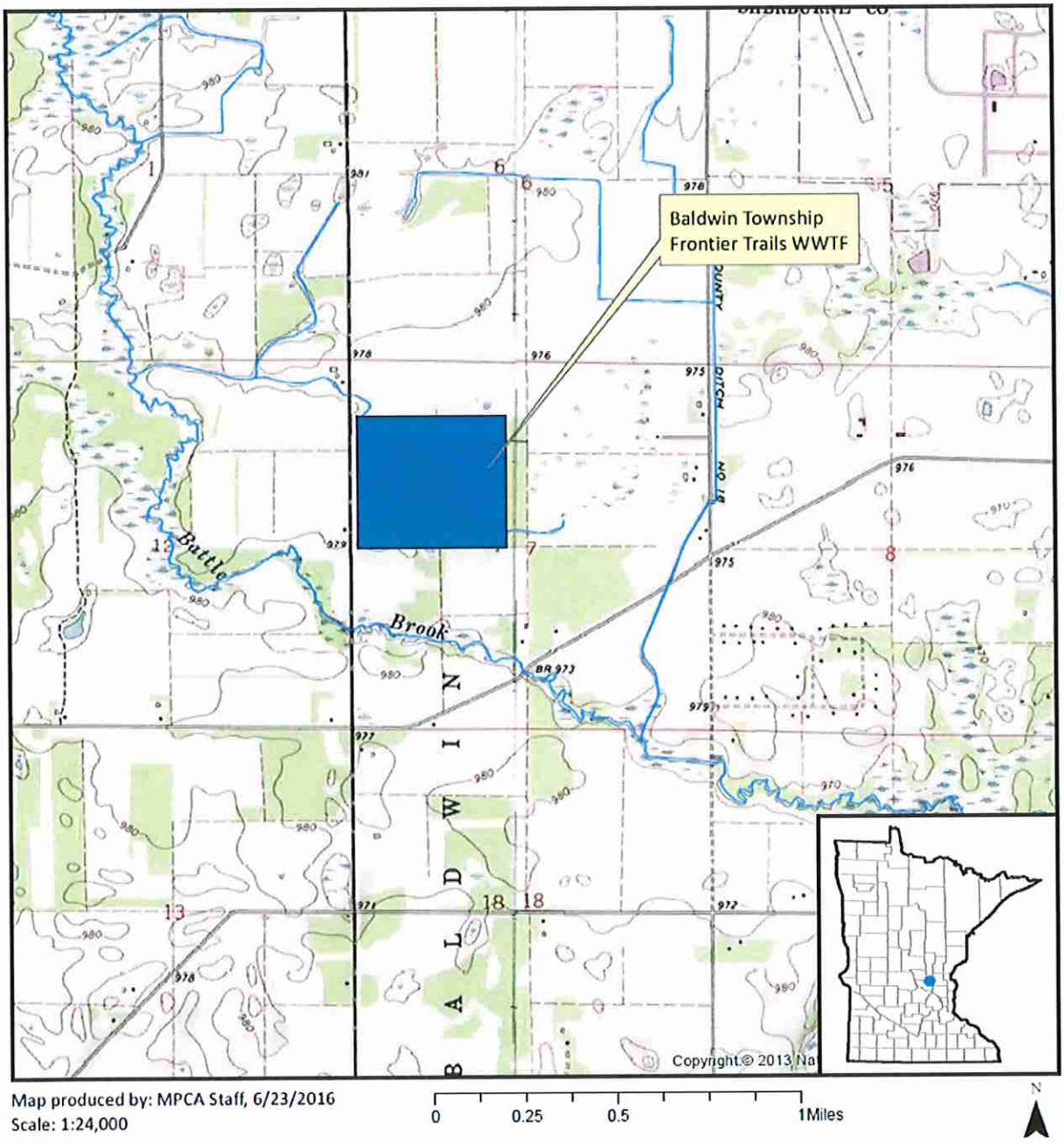
The total system has an average wet weather design flow of 13,640 gallons per day. The total system is designed to treat an average influent Five Day Carbonaceous Biochemical Oxygen Demand concentration of 265 milligrams per Liter (mg/L) and a Total Suspended Solids concentration of 300 mg/L.

The system is further described in plans and specifications on file with the MPCA in an engineering report prepared by Bogart, Pederson & Associates, Inc.

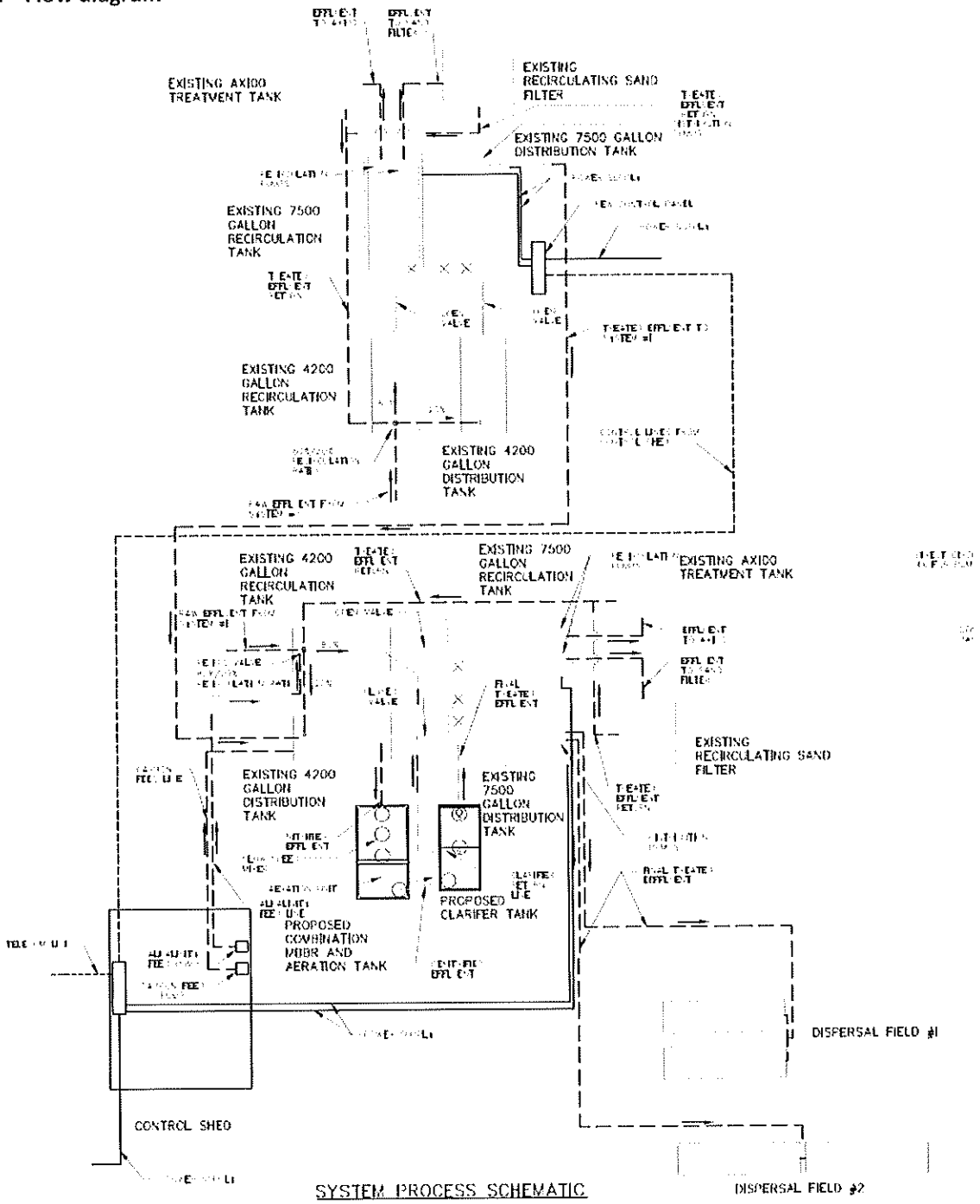
2. Location map of permitted facility

Topographic Map of Permitted Facility

MN0064459: Baldwin Township Frontier Trails WWTF
T35N, R26W, Section 7
BaldwinTownship, Sherburne County, Minnesota



3. Flow diagram



4. Summary of stations and station locations

Station	Type of station	Local name	PLS location
GW 001	Well, Upgradient	200 ft. West of System #2	T35N, R26W, S7, SE Quarter of the NW Quarter
GW 002	Well, Downgradient	500 ft. S of System #2	T35N, R26W, S7, SE Quarter of the NW Quarter
GW 003	Well, Downgradient	500 ft. S of System #1	T35N, R26W, S7, SE Quarter of the NW Quarter
GW 004	Piezometer, Other	200 ft W of System #1	T35N, R26W, S7, SE Quarter of the NW Quarter
WS 001	Influent Waste	Influent Waste System #1	T35N, R26W, S7, NE Quarter of the NW Quarter
WS 002	Internal Waste Stream	EQ Tank - System #1	T35N, R26W, S7, NE Quarter of the NW Quarter
WS 003	Intermediate: WW to Land	Dosing Tank - System #1	T35N, R26W, S7, NE Quarter of the NW Quarter
WS 004	Influent Waste	Influent Waste System #2	T35N, R26W, S7, NE Quarter of the NW Quarter
WS 005	Internal Waste Stream	EQ Tanks - System #2	T35N, R26W, S7, NE Quarter of the NW Quarter
WS 006	Intermediate: WW to Land	Dosing Tanks - System #2	T35N, R26W, S7, NE Quarter of the NW Quarter
WS 007	Intermediate: WW to Land	End of Pipe New Drainfield	T35N, R26W, S7, NE Quarter of the NW Quarter
WS007	Intermediate: WW to Land	End of Pipe New Drainfield	T35N, R26W, S7, NE Quarter of the NW Quarter

5. Permit requirements

GW 001	**Well, Upgradient**	
		Groundwater Well: Large Subsurface Sewage Treatment System 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)], Phases: Phase 1
	5.1.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.1.3	Samples for Station GW001 shall be taken at the groundwater monitoring well located 200 feet west of system #2. [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)]
		Facility Specific Requirements
	5.2.5	Monitoring for Station GW001 is required only during Phase 1 of the permit. [Minn. R. 7001]
GW 002	**Well, Downgradient**	
		Groundwater Well: Large Subsurface Sewage Treatment System 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)], Phases: Phase 1
	5.3.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.3.3	Samples for Station GW002 shall be taken at the groundwater monitoring well located 500 feet south of system #2. [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)]
		Facility Specific Requirements
	5.4.5	Monitoring for Station GW002 is required during Phase 1 of the permit. [Minn. R. 7001]
GW 003	**Well, Downgradient**	
		Groundwater Well: Large Subsurface Sewage Treatment System Well 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)], Phases: Phase 1
	5.5.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.5.3	Samples for Station GW003 shall be taken at the groundwater monitoring well located 500 feet south of system #2. [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)]
		Facility Specific Requirements
	5.6.5	Monitoring for Station GW003 is required during Phase 1 of the permit. [Minn. R. 7001]
GW 004	**Piezometer, Other**	
		Groundwater Well: Large Subsurface Sewage Treatment System Piezometer 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)], Phases: Phase 1
	5.7.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.7.3	Samples for Station GW004 shall be taken at the piezometer located 200 feet west of system #1. [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)]
		Facility Specific Requirements
	5.8.5	Monitoring for Station GW004 is required during Phase 1 of the permit. [Minn. R. 7001]
WS 001	**Influent Waste**	
		Waste Stream: Large Subsurface Sewage Treatment System Influent 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 WS001 shall be taken at a point representative of the influent flow to treatment system #1. [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)]
		Facility Specific Requirements
	5.10.5	Monitoring for Station WS001 is required during Phase 1 and Phase 2 of the permit. Monitoring for phase 2 will start 90 days after initiation of operation of the upgraded facility. The monitoring point for both Phase 1 and Phase 2 will be the same point. [Minn. R. 7001]
WS 002	**Internal Waste Stream**	
		Waste Stream: Drainfield Septic Tank Requirements
	5.11.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)], Phases: Phase 1
	5.11.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]

	5.11.3	Samples for Station WS002 shall be taken at the EQ tanks connected to treatment system #1. [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)]
		Facility Specific Requirements
	5.12.5	Monitoring for Station WS002 is required during Phase 1 of the permit. [Minn. R. 7001]
WS 003	**Intermediate: WW to Land**	
		Waste Stream: Large Subsurface Sewage Treatment System Pretreatment Effluent Requirements
	5.13.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)], Phases: Phase 1
	5.13.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.13.3	Samples for Station WS003 shall be taken at the dosing tank and prior to the drip irrigation zone connected to system #1. [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)]
		Facility Specific Requirements
	5.14.5	Monitoring for Station WS003 is required during Phase 1 of the permit. [Minn. R. 7001]
WS 004	**Influent Waste**	
		Waste Stream: Large Subsurface Sewage Treatment System Influent Monitoring Requirements
	5.15.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	5.15.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.15.3	Samples for Station WS004 shall be taken at a point representative of the influent flow to treatment system #2. The monitoring is required during both Phase 1 and Phase 2. [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)]
		Facility Specific Requirements
	5.16.5	Monitoring for Station WS004 is required during Phase 1 and Phase 2 of the permit. Phase 2 will start 90 days after initiation of operation of the upgraded facility. The monitoring point will remain at the same point for both Phase 1 and Phase 2. [Minn. R. 7001]

WS 005	Internal Waste Stream	
		Waste Stream: Drainfield Septic Tank Requirements
	5.17.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)], Phases: Phase 1
	5.17.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.17.3	Samples for Station WS005 shall be taken at the EQ tanks for treatment system #2. [Minn. R. 7001.0150, Subp. 2(B)]
	5.17.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
		Facility Specific Requirements
	5.18.5	Monitoring for Station WS005 is required during Phase 1 of the permit. [Minn. R. 7001]
WS 006	Intermediate: WW to Land	
		Waste Stream: Large Subsurface Sewage Treatment System Pretreatment Effluent Requirements
	5.19.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)], Phases: Phase 1
	5.19.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.19.3	Samples for Station WS006 shall be taken at the dosing tank prior to the discharge in the drip irrigation zone of system #2. [Minn. R. 7001.0150, Subp. 2(B)]
	5.19.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
		Facility Specific Requirements
	5.20.5	Monitoring for Station WS006 is required during Phase 1 of the permit. [Minn. R. 7001]
WS007	Intermediate: WW to Land	
		Waste Stream: Large Subsurface Sewage Treatment System End-of-Pipe Requirements
	5.21.1	The Permittee shall submit a monthly DMR : Due by 21 days after the end of each calendar month following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)], Phases: Phase 2
	5.21.2	Sampling Location. [Minn. R. 7001.0150, Subp. 2(B)]
	5.21.3	Samples for Station WS007 shall be taken at the existing dosing tank of system #1. This station will be monitored during Phase 2. Phase 2 monitoring will begin 90 days after initiation of operations of the upgraded facility. [Minn. R. 7001.0150, Subp. 2(B)]
	5.21.4	The Permittee shall submit monitoring results in accordance with the limits and monitoring requirements for this station. If conditions are such that no sample can be acquired, the Permittee shall report "No Flow" or "No Discharge" on Discharge

		Monitoring Report (DMR) and shall add a Comments attachment to the DMR detailing why the sample was not collected. [Minn. R. 7001.0150, Subp. 2(B)]
		Facility Specific Requirements
	5.22.5	Monitoring for Station WS007 is required during Phase 2 of the permit. This station will be monitored 90 days after initiation of operation of the upgraded facility. [Minn. R. 7001]
MN0064459	**Frontier Trails Homeowners Association**	
		Groundwater Station General Requirements
	5.23.1	Analysis Requirements. [Minn. R. 7001]
	5.23.2	pH analyses shall be conducted within 15 minutes of Sample collection. [Minn. R. 7001]
	5.23.3	Monitoring Wells. [Minn. R. 7001]
	5.23.4	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]
	5.23.5	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]
	5.23.6	Each monitoring well shall be clearly numbered on the outside of the well with either indelible paint or an inscribed number. [Minn. R. 7001]
	5.23.7	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]
	5.23.8	Grab samples shall be collected at all ground water monitoring points (lysimeters or wells) after stabilization tests are conducted. [Minn. R. 7001]
	5.23.9	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]
	5.23.10	Temperature, specific conductance and pH shall be reported as the final field measurements from well stabilization. [Minn. R. 7001]
	5.23.11	The Permittee shall begin sampling as required in the limits and monitoring section of this permit at least two weeks prior to wastewater or waste application to this site, during periods of application, and continuing for two weeks after the waste application ends. [Minn. R. 7001]
		Waste Stream Station General Requirements
	5.24.12	Analysis Requirements. [Minn. R. 7001]
	5.24.13	pH analyses shall be conducted within 15 minutes of Sample collection. [Minn. R. 7001]
	5.24.14	Representative Samples. [Minn. R. 7001]
	5.24.15	Samples shall be collected at a point representative of the total influent flow to both systems 1 and 2. [Minn. R. 7001]
	5.24.16	Nitrogen Limits and Monitoring Requirements. [Minn. R. 7001]
	5.24.17	"Total Nitrogen" is to be reported as the summation of the Total Kjeldahl Nitrogen and Total Nitrite plus Nitrate Nitrogen values. [Minn. R. 7001]

		Compliance Construction Schedule
	5.25.18	Definitions. [Minn. R. 7001]
	5.25.19	"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. [State Definitions]
	5.25.20	"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. [State Definitions]
	5.25.21	"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. [State Definitions]
	5.25.22	Schedule. [Minn. R. 7001]
	5.25.23	Submit Notice to Proceed. The Permittee must submit a copy of the Notice to Proceed to the MPCA within 14 days of its execution. [Minn. R. 7001]
	5.25.24	Submit Verification of Certified Operator and O&M Manual. The Permittee must 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 must also submit an operation and maintenance (O&M) manual or a maintenance plan; or a certificate of completion of operation and maintenance manual. [Minn. R. 7001]
	5.25.25	Submit Notice of Intent to Initiate Operation. The Permittee must 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]
	5.25.26	Submit Initiation of Operation Date. The Permittee must notify the MPCA in writing within 14 days after the actual initiation of operation date. The Permittee must comply with all permit requirements and attain final limits within 90 days of the Initiation of Operation date. [Minn. R. 7001]
	5.25.27	Submit Notice to Complete Construction. The Permittee must 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]
	5.25.28	Submit Final Technical Documents. The Permittee must 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 must include a detailed discussion of operation and controls, maintenance, sampling and analysis, problem mitigation, VOC management, personnel records and reporting, and safety. This plan must be maintained and updated regularly and made available to the MPCA staff upon request. c. A system effectiveness evaluation that summarizes the effectiveness of the treatment facility (including any applicable ground water monitoring system) as detailed in the plan and specification approval letter or through communication with the MPCA staff.

		d. One copy of "as-built" plans and specifications, also known as record drawings, must 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]
		Large Subsurface Treatment System (LSTS)
	5.26.29	Unauthorized Discharge. [Minn. R. 7001]
	5.26.30	There shall be no unauthorized discharge to the ground surface or surface water from these facilities. [Minn. R. 7001.0030]
	5.26.31	Prohibitions. [Minn. R. 7001]
	5.26.32	The Permittee shall prevent the discharge of any wastes other than sewage into any component of the facility, including septic tanks, advanced treatment systems, and soil treatment systems that could result in damage to the treatment facility or inhibit treatment unless the discharge of such other substances is specifically approved in writing by the MPCA. [Minn. R. 7001]
	5.26.33	Sanitary Sewer Extension Permit. [Minn. R. 7001]
	5.26.34	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. 7001.0020, D]
	5.26.35	Operator Certification. [Minn. R. 7001]
	5.26.36	The Permittee shall provide a Class C 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. In addition, the certified operator shall maintain a current Service Provider Certification. [Minn. R. 9400]
	5.26.37	The Permittee shall provide the appropriate number of operators with a Type IV certification to be responsible for the land application of biosolids or semisolids from commercial or industrial operations. [Minn. R. 7041]
	5.26.38	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, service provider certification 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]
	5.26.39	The Permittee shall notify the MPCA within 30 days of a change in operator certification or contract status. [Minn. R. 9400]
	5.26.40	Special Requirements. [Minn. R. 7001]
	5.26.41	Special Condition - Update O & M Manual. [Minn. R. 7001]
	5.26.42	The Permittee is required to have on-site and available an updated Operation and Maintenance manual. This manual shall be available to MPCA staff upon request. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.43	Facility Maintenance. [Minn. R. 7001]
	5.26.44	The facility shall be adequately protected to prevent damage. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.45	Collection System. [Minn. R. 7001]

	5.26.46	The collection system shall be properly maintained to minimize inflow, infiltration, exfiltration, and obstructions. A record of all inspections and maintenance operations shall be kept by the Permittee for a minimum of three years. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.47	Tank Maintenance. [Minn. R. 7001]
	5.26.48	All tanks (primary, secondary, holding, dosing, individual, etc.) associated with this system shall be operated, pumped and maintained to ensure proper system operation and solids management. After every pumping event, all tanks shall be inspected for potential failure (such as cracks, roots, damaged baffles, etc.). Identified problems shall be corrected immediately. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.49	The owner of a septic tank or tanks or the owner's agent shall arrange for the removal and proper disposal of septage from all tanks or compartments in which the top of the sludge layer is less than 12 inches below the bottom of the outlet baffle or whenever the bottom of the scum layer is less than three inches above the outlet baffle. All accumulations of sludge, scum, and liquids shall be removed through the maintenance hole. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.50	The Permittee shall properly clean the effluent screens as often as needed to maintain an adequate flow rate from the septic tank(s). The Permittee shall keep a record at the facility that indicates the dates that the effluent screens are inspected, removed and cleaned. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.51	Tanks that are not specifically covered under the Limits & Monitoring section of this permit shall be inspected at least every three years and pumped as necessary unless more restrictive local requirements have been established. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.52	Soil Treatment System Maintenance. [Minn. R. 7001]
	5.26.53	The soil treatment system(s) shall be adequately fenced. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.54	A dense vegetative cover shall be maintained over the soil treatment system(s) at all times during the growing season to prevent the growth of unwanted vegetation such as trees, deep rooted nuisance plants, aquatic vegetation and to prevent erosion. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.55	Routine maintenance shall be conducted to discourage the presence of rodents and other burrowing animals and deer on the soil treatment system and to allow inspection of observation ports installed in the soil treatment system(s) inspection pipes. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.56	Soil Treatment System Inspection. [Minn. R. 7001]
	5.26.57	Ponding depth inspections to determine the condition of each soil treatment system (trench, bed, at-grade, mound, or drip dispersal) /drainfield standpipe shall be conducted every other month during the time the soil treatment system is in use. The inspection of each soil treatment system shall include the identification of wet or saturated areas, depth of effluent ponding in the soil treatment observation ports, evidence of effluent at the surface, frozen components, and measurements in piezometers (if installed). Visual observations shall be recorded and inspection records shall be maintained by the owner for a minimum of three years following each inspection. The results of the inspection are not required to be submitted to the MPCA but shall be made available upon request by MPCA staff. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.58	Indications of excessive hydraulic and organic loading to the wastewater treatment facility flow rate include ineffective septic tanks or advanced treatment systems, prolonged saturated soil conditions, vegetative drowning or excessive ground water mounding (observed from piezometers) and exceeding daily permitted flow rates as indicated by flow meters, event counters and running time clocks. [Minn. R. 7001.0150, Subp. 3(F)]
	5.26.59	Reserve Soil Treatment System. [Minn. R. 7001]

	5.26.60	The reserve area for the soil treatment system/drainfield shall be properly protected to prevent the use of, and damage to, the area. The reserve area shall be posted and identified for the public with at least one sign designating its future purpose and the boundaries shall be visibly staked at all corners. In no case may this area be disturbed for any purpose, including vehicle traffic, storage, bike, hiking or ATV trails, playing fields, etc. [Minn. R. 7001.0150, Subp. 3(F)]
		Biosolids: Domestic Septage (No Analysis Required)
	5.27.61	Authorization. [Minn. R. 7041]
	5.27.62	This permit authorizes the Permittee to store and land apply domestic wastewater treatment septage that is defined as biosolids in accordance with the provisions in this chapter and Minn. R. ch. 7041. The conditions for septage treatment and application described in this chapter apply only to septage from domestic residences as described in the permit application. For the purpose of this permit chapter, solids collected in septic tanks are referred to as biosolids. If any commercial or industrial user is added to this permitted facility, the MPCA shall be notified before adding that user to the facility so that appropriate monitoring, treatment and disposal of the septage can be determined. Based on that determination, the Permittee may be required to apply and pay for a permit modification. [Minn. R. 7041]
	5.27.63	Permittees who prepare bulk biosolids shall obtain approval of the sites on which bulk biosolids are applied before they are applied unless they are Exceptional Quality Biosolids. Site application procedures are set forth in Minn. R. ch. 7041.0800. [Minn. R. 7041.800]
	5.27.64	Compliance Responsibility. [Minn. R. 7041]
	5.27.65	The Permittee is responsible for ensuring that the applicable requirements in this chapter and Minn. R. ch. 7041 are met when biosolids are prepared, distributed, or applied to the land. [Minn. R. 7041]
	5.27.66	Notification Requirements. [Minn. R. 7041]
	5.27.67	The Permittee shall provide information needed to comply with the biosolids requirements of Minn. R. ch. 7041 to others who prepare or use the biosolids. [Minn. R. 7041]
	5.27.68	Pathogen and Vector Attraction Reduction. [Minn. R. 7041]
	5.27.69	Biosolids shall be processed, treated, or be incorporated or injected into the soil to meet pathogen and vector attraction reduction requirements in Minn. R. ch. 7041.1800, subp. 3, items a, b, or c as follows: a. the pH of the septage shall be raised to 12 or higher for 30 minutes by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 30 minutes; b. the septage is injected and no significant amount of the septage is present on the land surface within one hour after it is injected, or c. the septage is incorporated below the surface of the land within six hours after surface application. [Minn. R. 7041.1800, subp. 3]
	5.27.70	The minimum duration between application and harvest, grazing or public access to areas where biosolids have been applied to the land is as follows: a. 14 months for food crops whose harvested parts may touch the soil/biosolids mixture (such as melons, squash, tomatoes, etc.), when biosolids are surface applied, incorporated or injected. b. 20 months or 38 months depending on the application method for food crops whose harvested parts grow in the soil (such as potatoes, carrots, onions, etc.). The 20 month time period is required when biosolids are surface applied or surface applied

		and incorporated after they have been on the soil surface for at least four (4) months. The 38 month time period is required when the biosolids are injected or surface applied and incorporated within four (4) months of application. c. 30 days for feed crops, other food crops (such as field corn, sweet corn, etc.), hay or fiber crops when biosolids are surface applied, incorporated or injected. d. 30 days for grazing of animals when biosolids are surface applied, incorporated or injected. e. One year where there is a high potential for public contact with the site, (such as a reclamation site located in populated areas, a construction site located in a city, turf farms, plant nurseries, etc.) and 30 days where there is low potential for public contact (such as agricultural land, forest, a reclamation site located in an unpopulated area, etc.) when biosolids are surface applied, incorporated, or injected. [Minn. R. 7041]
	5.27.71	Management Practices. [Minn. R. 7041]
	5.27.72	The management practices for the land application of biosolids are described in detail in Minn. R. ch. 7041.1200 and shall be followed unless specified otherwise in a site approval letter or a permit issued by the MPCA. [Minn. R. 7041.1200]
	5.27.73	Overall management requirements: a. Biosolids shall not be applied to the land if it is likely to adversely affect a threatened or endangered species listed under Section 4 of the Endangered Species Act or its designated critical habitat. b. Biosolids shall not be applied to flooded, frozen or snow covered ground so that the biosolids enter wetlands or other waters of the state. c. Biosolids shall be applied at an agronomic rate. The Agronomic application rate for septage applied to agricultural land, forest, or a reclamation site for a cropping year shall be calculated using the following equation unless determined otherwise by the MPCA. AR = N / 0.0026 Where: AR = Application rate in gallons per acre for the cropping year. N = The maximum available nitrogen application rate in pounds per acre per cropping year required by the crop based on realistic yield goals or nitrogen uptake by vegetation grown on the land minus the amount supplied by other sources such as manure or fertilizer. d. Biosolids shall not be applied within 33 feet of a wetland or waters of the state unless specified otherwise by the MPCA in a permit. [Minn. R. 7041]
	5.27.74	Records. [Minn. R. 7041]
	5.27.75	The Permittee shall obtain and keep on record items a. through g. for five years and items h. through j. indefinitely: a. The following certification statement for all septage applied to the land: "I certify, under penalty of law, that the information that will be used to determine compliance with the pathogen and vector attraction reduction requirements in part 7041.1800, subp. 3 ____[insert either item a, b, or c], the management practices in part 7041.1200, and the site restrictions in part 7041.1300, subpart 3, item D, has been prepared under my direction and supervision according to the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."; b. a description of how the pathogen and vector attraction reduction requirements are met. If alkali addition is used, records shall indicate each container of septage

		applied is monitored for compliance with subp. 3, item a; c. a description of how management practices and site restrictions are met; d. a record of soil test data as required by part 7041.0800, site approvals, or permits; e. the maximum available nitrogen application rate based on the realistic yield goal of the crop or vegetation grown on the site during the cropping year; f. the number of acres used; g. any other analysis or information required by the MPCA; h. the legal description of the land application site; i. the amount and date of septage applied in gallons per acre and the cumulative dry tons per acre; and j. the amount of arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc applied each cropping year and cumulatively expressed in pounds per acre. [Minn. R. 7041]
	5.27.76	Reporting Requirements. [Minn. R. 7041]
	5.27.77	The Permittee shall submit a biosolids annual report : Due annually, by the 31st of December on a form provided by or approved by the MPCA. The report shall include the requirements in Minnesota Rules, part 7041.1700. [Minn. R. 7041]
	5.27.78	The permittee shall submit a Biosolids Annual Report by December 31 of each year for biosolids storage and/or transfer activities occurring during the cropping year previous to December 31. The report shall indicate whether or not biosolids were transferred and/or stored. If biosolids were transferred, the report shall describe how much was transferred, where it was transferred to, the name of the facility that accepted the transfer and the contact person at that facility. "Cropping year" means a year beginning on September 1 of the year prior to the growing season and ending August 31 the year the crop is harvested. For example, the 2012 cropping year began September 1, 2011, and ended August 31, 2012. [Minn. R. 7041]
	5.27.79	The Permittee shall submit the Biosolids Annual Report to: MPCA Submittals Center Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, Minnesota 55155-4194. [Minn. R. 7041]
		Total Facility Requirements (SDS)
	5.28.80	No Discharge. There shall be no point source discharge to surface water from the permitted activity. [Minn. R. 7001.]
	5.28.81	Definitions. Refer to the 'Permit Users Manual' found on the MPCA website (www.pca.state.mn.us) for standard definitions. [Minn. R. 7001.]
	5.28.82	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]
	5.28.83	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)]
	5.28.84	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)]
	5.28.85	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]
	5.28.86	Property Rights. This permit does not convey a property right or an exclusive privilege. [Minn. R. 7001.0150, subp. 3(C)]
	5.28.87	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)]
	5.28.88	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)]
	5.28.89	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)]
	5.28.90	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)]
	5.28.91	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]
	5.28.92	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]
	5.28.93	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)]
	5.28.94	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)]
	5.28.95	Sampling. [Minn. R. 7001]
	5.28.96	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)]
	5.28.97	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)]
	5.28.98	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]
	5.28.99	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]
	5.28.100	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)]
	5.28.101	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)]
	5.28.102	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)]
	5.28.103	Submitting Reports. DMRs, DMR supplemental forms and related attachments must be electronically submitted via the MPCA Online Services Portal after authorization is approved. DMRs and DMR Supplemental Forms shall be 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, Subp. 2(B), Minn. R. 7001..0150, Subp. 3(H)]
	5.28.104	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)]
	5.28.105	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]
	5.28.106	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)]
	5.28.107	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)]
	5.28.108	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]
	5.28.109	Noncompliance and Enforcement. [Minn. R. 7001]
	5.28.110	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)]
	5.28.111	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]
	5.28.112	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]
	5.28.113	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)]
	5.28.114	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]
	5.28.115	Release. [Minn. R. 7001]
	5.28.116	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]
	5.28.117	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]
	5.28.118	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]
	5.28.119	Bypass. [Minn. R. 7001]
	5.28.120	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)]
	5.28.121	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]
	5.28.122	Operation and Maintenance. [Minn. R. 7001]
	5.28.123	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)]
	5.28.124	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)]
	5.28.125	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]
	5.28.126	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)]
	5.28.127	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)]
	5.28.128	Changes to the Facility or Permit. [Minn. R. 7001]
	5.28.129	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]
	5.28.130	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]
	5.28.131	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)]
	5.28.132	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]
	5.28.133	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]
	5.28.134	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]
	5.28.135	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)]
	5.28.136	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]
	5.28.137	Permit Reissuance. If the Permittee desires to continue permit coverage beyond the date of permit expiration, the Permittee shall submit an application for permit reissuance : Due by 180 days prior to permit expiration. If the Permittee does not intend to continue the activities authorized by this permit after the expiration date of this permit, the Permittee shall notify the MPCA in writing at least 180 days before permit expiration. 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]

6. Submittal action summary

GW 001	Well, Upgradient	
		Groundwater Well: Large Subsurface Sewage Treatment System 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)], Phases: Phase 1
GW 002	Well, Downgradient	
		Groundwater Well: Large Subsurface Sewage Treatment System 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)], Phases: Phase 1
GW 003	Well, Downgradient	
		Groundwater Well: Large Subsurface Sewage Treatment System 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)], Phases: Phase 1
GW 004	Piezometer, Other	
		Groundwater Well: Large Subsurface Sewage Treatment System Piezometer 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)], Phases: Phase 1
WS 001	Influent Waste	
		Waste Stream: Large Subsurface Sewage Treatment System Influent 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)]
WS 002	Internal Waste Stream	
		Waste Stream: Drainfield Septic Tank Requirements

	6.6.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)], Phases: Phase 1
WS 003	Intermediate: WW to Land	
		Waste Stream: Large Subsurface Sewage Treatment System Pretreatment Effluent Requirements
	6.7.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)], Phases: Phase 1
WS 004	Influent Waste	
		Waste Stream: Large Subsurface Sewage Treatment System Influent 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)]
WS 005	Internal Waste Stream	
		Waste Stream: Drainfield Septic Tank Requirements
	6.9.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)], Phases: Phase 1
WS 006	Intermediate: WW to Land	
		Waste Stream: Large Subsurface Sewage Treatment System Pretreatment Effluent Requirements
	6.10.1	The Permittee shall submit a quarterly DMR : Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)], Phases: Phase 1
WS007	Intermediate: WW to Land	
		Waste Stream: Large Subsurface Sewage Treatment System End-of-Pipe 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)], Phases: Phase 2

MN0064459	Frontier Trails Homeowners Association	
		Biosolids: Domestic Septage (No Analysis Required)
	6.12.1	The Permittee shall submit a biosolids annual report : Due annually, by the 31st of December on a form provided by or approved by the MPCA. The report shall include the requirements in Minnesota Rules, part 7041.1700. [Minn. R. 7041]
		Total Facility Requirements (SDS)
	6.13.2	Permit Reissuance. If the Permittee desires to continue permit coverage beyond the date of permit expiration, the Permittee shall submit an application for permit reissuance : Due by 180 days prior to permit expiration. If the Permittee does not intend to continue the activities authorized by this permit after the expiration date of this permit, the Permittee shall notify the MPCA in writing at least 180 days before permit expiration. 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]

7. 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 001 200 ft. West of System #2 Phase 1	Chloride, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 001 200 ft. West of System #2 Phase 1	Elevation of GW Relative to Mean Sea Level		Monitor only. instantaneous maximum	feet					once per month	Measurement, Instantaneous	Apr, Jul, Oct	
GW 001 200 ft. West of System #2 Phase 1	Nitrite Plus Nitrate, Total (as N)						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 001 200 ft. West of System #2 Phase 1	Nitrogen, Ammonia, Total (as N)						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 001 200 ft. West of System #2 Phase 1	Nitrogen, Kjeldahl, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 001 200 ft. West of System #2 Phase 1	pH				Monitor only. instantaneous minimum		Monitor only. instantaneous maximum	standard units	once per month	Grab	Apr, Jul, Oct	
GW 001 200 ft. West of System #2 Phase 1	Specific Conductance						Monitor only. calendar month maximum	micromhos per cm	once per month	Grab	Apr, Jul, Oct	
GW 001 200 ft. West of System #2 Phase 1	Temperature, Water (C)						Monitor only. calendar month 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 002 500 ft. S of System #2 Phase 1	Chloride, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 002 500 ft. S of System #2 Phase 1	Elevation of GW Relative to Mean Sea Level		Monitor only. instantaneous maximum	feet					once per month	Measurement, Instantaneous	Apr, Jul, Oct	
GW 002 500 ft. S of System #2 Phase 1	Nitrite Plus Nitrate, Total (as N)						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 002 500 ft. S of System #2 Phase 1	Nitrogen, Ammonia, Total (as N)						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 002 500 ft. S of System #2 Phase 1	Nitrogen, Kjeldahl, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 002 500 ft. S of System #2 Phase 1	pH				Monitor only. instantaneous minimum		Monitor only. instantaneous maximum	standard units	once per month	Grab	Apr, Jul, Oct	
GW 002 500 ft. S of System #2 Phase 1	Specific Conductance						Monitor only. calendar month maximum	micromhos per cm	once per month	Grab	Apr, Jul, Oct	
GW 002 500 ft. S of System #2 Phase 1	Temperature, Water (C)						Monitor only. calendar month maximum	degrees Celsius	once per month	Grab	Apr, Jul, Oct	
GW 003 500 ft. S of System #1 Phase 1	Chloride, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 003 500 ft. S of System #1 Phase 1	Elevation of GW Relative to Mean Sea Level		Monitor only. instantaneous maximum	feet					once per month	Measurement, Instantaneous	Apr, Jul, Oct	
GW 003 500 ft. S of System #1 Phase 1	Nitrite Plus Nitrate, Total (as N)						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 003 500 ft. S of System #1 Phase 1	Nitrogen, Ammonia, Total (as N)						Monitor only. calendar month maximum	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
GW 003 500 ft. S of System #1 Phase 1	Nitrogen, Kjeldahl, Total						Monitor only. calendar month maximum	milligrams per liter	once per month	Grab	Apr, Jul, Oct	
GW 003 500 ft. S of System #1 Phase 1	pH				Monitor only. instantaneous minimum		Monitor only. instantaneous maximum	standard units	once per month	Grab	Apr, Jul, Oct	
GW 003 500 ft. S of System #1 Phase 1	Specific Conductance						Monitor only. calendar month maximum	micromhos per cm	once per month	Grab	Apr, Jul, Oct	
GW 003 500 ft. S of System #1 Phase 1	Temperature, Water (C)						Monitor only. calendar month maximum	degrees Celsius	once per month	Grab	Apr, Jul, Oct	
GW 004 200 ft W of System #1 Phase 1	Elevation of GW Relative to Mean Sea Level		Monitor only. instantaneous maximum	feet					once per month	Measurement	Apr, Jul, Oct	
WS 001 Influent Waste System #1	BOD, Carbonaceous 05 Day (20 Deg C)					Monitor only. calendar month average		milligrams per liter	twice per month	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 001 Influent Waste System #1	Flow		Monitor only. calendar month total	million gallons		0.00682 calendar month average	0.01023 daily maximum	million gallons per day	once per day	Measurement, Continuous	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 001 Influent Waste System #1	pH				Monitor only. calendar month minimum		Monitor only. calendar month maximum	standard units	twice per month	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 001 Influent Waste System #1	Precipitation		Monitor only. calendar month total	inches					once per day	Measurement	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 001 Influent	Solids, Total Suspended (TSS)					Monitor only. calendar		milligrams per liter	twice per month	Grab	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
Waste System #1						month average						
WS 002 EQ Tank - System #1 Phase 1	Remaining Scum Capacity		Monitor only. calendar quarter maximum	inches					once per quarter	Measurement	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 002 EQ Tank - System #1 Phase 1	Remaining Sludge Capacity		Monitor only. calendar quarter maximum	inches					once per quarter	Measurement	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 002 EQ Tank - System #1 Phase 1	Scum Depth, Maximum of Sample		Monitor only. calendar quarter maximum	inches					once per quarter	Measurement	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 002 EQ Tank - System #1 Phase 1	Sludge Depth, Maximum of Sample		Monitor only. calendar quarter maximum	inches					once per quarter	Measurement	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 003 Dosing Tank - System #1 Phase 1	BOD, Carbonaceous 05 Day (20 Deg C)						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 003 Dosing Tank - System #1 Phase 1	Chloride, Total						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 003 Dosing Tank - System #1 Phase 1	Nitrite Plus Nitrate, Total (as N)						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 003 Dosing Tank - System #1 Phase 1	Nitrogen, Ammonia, Total (as N)						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 003 Dosing Tank - System #1 Phase 1	Nitrogen, Kjeldahl, Total						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	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
WS 003 Dosing Tank - System #1 Phase 1	Nitrogen, Total (as N)						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 003 Dosing Tank - System #1 Phase 1	Solids, Total Suspended (TSS)						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 004 Influent Waste System #2	BOD, Carbonaceous 05 Day (20 Deg C)					Monitor only. calendar month average		milligrams per liter	twice per month	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 004 Influent Waste System #2	Flow		Monitor only. calendar month total	million gallons		0.00682 calendar month average	0.01023 daily maximum	million gallons per day	once per day	Measurement, Continuous	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 004 Influent Waste System #2	pH				Monitor only. calendar month minimum		Monitor only. calendar month maximum	standard units	twice per month	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 004 Influent Waste System #2	Solids, Total Suspended (TSS)					Monitor only. calendar month average		milligrams per liter	twice per month	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 005 EQ Tanks - System #2 Phase 1	Remaining Scum Capacity		Monitor only. calendar quarter maximum	inches					once per quarter	Measurement	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 005 EQ Tanks - System #2 Phase 1	Remaining Sludge Capacity		Monitor only. calendar quarter maximum	inches					once per quarter	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
WS 005 EQ Tanks - System #2 Phase 1	Scum Depth, Maximum of Sample		Monitor only. calendar quarter maximum	inches					once per quarter	Measurement	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 005 EQ Tanks - System #2 Phase 1	Sludge Depth, Maximum of Sample		Monitor only. calendar quarter maximum	inches					once per quarter	Measurement	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 006 Dosing Tanks - System #2 Phase 1	BOD, Carbonaceous 05 Day (20 Deg C)						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 006 Dosing Tanks - System #2 Phase 1	Chloride, Total						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 006 Dosing Tanks - System #2 Phase 1	Nitrite Plus Nitrate, Total (as N)						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 006 Dosing Tanks - System #2 Phase 1	Nitrogen, Ammonia, Total (as N)						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 006 Dosing Tanks - System #2 Phase 1	Nitrogen, Kjeldahl, Total						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 006 Dosing Tanks - System #2 Phase 1	Nitrogen, Total (as N)						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS 006 Dosing Tanks - System #2 Phase 1	Solids, Total Suspended (TSS)						Monitor only. calendar quarter maximum	milligrams per liter	once per quarter	Grab	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
WS007 End of Pipe New Drainfield Phase 2	BOD, Carbonaceous 05 Day (20 Deg C)					Monitor only. calendar month average		milligrams per liter	twice per month	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS007 End of Pipe New Drainfield Phase 2	Chloride, Total					Monitor only. calendar month average		milligrams per liter	twice per month	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS007 End of Pipe New Drainfield Phase 2	Nitrite Plus Nitrate, Total (as N)					Monitor only. calendar month average		milligrams per liter	twice per month	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS007 End of Pipe New Drainfield Phase 2	Nitrogen, Kjeldahl, Total					Monitor only. calendar month average		milligrams per liter	twice per month	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS007 End of Pipe New Drainfield Phase 2	Nitrogen, Total (as N)					10.0 calendar month average		milligrams per liter	twice per month	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	
WS007 End of Pipe New Drainfield Phase 2	Solids, Total Suspended (TSS)					Monitor only. calendar month average		milligrams per liter	twice per month	Grab	Jan-Dec (Sep-Aug) (Oct-Sep)	