State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**2084**	NAICS Code:	**312130**	SPDES Number:	**NY0272272**
Discharge Class (CL):	**04**			DEC Number:	**8-4662-00275/00001**
Toxic Class (TX):	**N**			Effective Date (EDP):	**EDP**
Major-Sub Drainage Basin:	**07 - 05**			Expiration Date (ExDP):	**ExDP**
Water Index Number:	**Not Applicable**	Item No.:	**-**	Modification Dates (EDPM):	
Compact Area:	**IJC**				

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State.

PERMITTEE NAME AND ADDRESS					
Name:	**Vinifera Wine Cellars**	Attention:	**Vice President**		
Street:	**9749 Middle Road**				
City:	**Hammondsport**	State:	**NY**	Zip Code:	**14840**
Email:	**mfrank@drfrankwines.com**	Phone:	**(607) 868-7152**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																
Name:	**Vinifera Wine Cellars (Dr. Konstantin Frank Winery)**															
Address / Location:	**9749 Middle Road**											County:	**Steuben**			
City:	**Hammondsport**						State:	**NY**				Zip Code:	**14840**			
Facility Location:		Latitude:	**42**	°	**28**	’	**24**	” N	& Longitude:	**77**	°	**11**	’	**03**	” W	
Primary Outfall No.:	**001**	Latitude:	**42**	°	**28**	’	**24**	” N	& Longitude:	**77**	°	**11**	’	**11**	” W	
Outfall Description:	**Processed Wine Wastewater**	Receiving Water:	**Groundwater**						Class:	**GA**		Standard:	**GA**			

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1 and 750-2. The co-permittees subject to one or more conditions of this permit are listed on page 2.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:
BWP Permit Coordinator (permit.coordinator@dec.ny.gov)
BWP Permit Writer
RWE
EPA Region II (Region2_NPDES@epa.gov)
DEC Water Quality Engineer (bradly.chaffee@dec.ny.gov)

Permit Administrator:	Ashley Kasperowicz
Address:	6274 East Avon-Lima Road, Avon, NY 14414-9519
Signature	Date

DEFINITIONS

TERM	DEFINITION
7-Day Geo Mean	The highest allowable geometric mean of daily discharges over a calendar week.
7-Day Average	The average of all daily discharges for each 7-days in the monitoring period. The sample measurement is the highest of the 7-day averages calculated for the monitoring period.
12-Month Rolling Average (12 MRA)	The current monthly value of a parameter, plus the sum of the monthly values over the previous 11 months for that parameter, divided by the number of months for which samples were collected in the 12-month period.
30-Day Geometric Mean	The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Action Level	Action level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee actions and DEC review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the DEC.
Daily Discharge	The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
Daily Maximum	The highest allowable Daily Discharge.
Daily Minimum	The lowest allowable Daily Discharge.
Effective Date of Permit (EDP or EDPM)	The date this permit is in effect.
Effluent Limitations	Effluent limitation means any restriction on quantities, quality, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into waters of the state.
Expiration Date of Permit (ExDP)	The date this permit is no longer in effect.
Instantaneous Maximum	The maximum level that may not be exceeded at any instant in time.
Instantaneous Minimum	The minimum level that must be maintained at all instants in time.
Monthly Average	The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Outfall	The terminus of a sewer system, or the point of emergence of any waterborne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the State.
Range	The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.
Receiving Water	The classified waters of the state to which the listed outfall discharges.
Sample Frequency / Sample Type / Units	See NYSDEC's "DMR Manual for Completing the Discharge Monitoring Report for the SPDES" for information on sample frequency, type and units.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All Year	Groundwater	Construction Completion[1]	**ExDP**

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Daily Maximum	4,200	GPD			Continuous	Meter		X	1, 2
	Monthly Average	Monitor	GPD			Continuous	Meter		X	1, 2
pH	Daily Minimum	6.5	SU			1/Month	Grab		X	1, 4
	Daily Maximum	8.5	SU							
BOD_5	Daily Maximum	300	mg/L			1/Month	Grab		X	1, 4
Total Suspended Solids (TSS)	Daily Maximum	330	mg/L			1/Month	Grab		X	1, 4
Nitrite, as N	Daily Maximum	Monitor	mg/L			1/Month	Grab		X	1, 4
Nitrate (NO_3), as N	Daily Minimum	Monitor	mg/L			1/Month	Grab		X	1, 4
Total Kjeldahl Nitrogen (TKN), as N	Daily Maximum	Monitor	mg/L			1/Month	Grab		X	1, 3, 4
Total Nitrogen, as N	Daily Maximum	Monitor	mg/L			1/Month	Grab		X	1, 4
Total Phosphorus, as P	Daily Maximum	Monitor	mg/L			1/Month	Grab		X	1, 4
Total Dissolved Solids (TDS)	Daily Maximum	Monitor	mg/L			1/Month	Grab		X	1, 4

Footnotes Continued on Next Page

FOOTNOTES:

1. The limitations on this page shall become effective upon Department acceptance of the Construction Completion Certification.

2. The effluent shall be metered as close as possible to the subsurface disposal area. All flows shall be read and recorded daily at approximately the same time each day.

3. Total Nitrogen (as N) = [Total Kjeldahl Nitrogen (TKN), as N] + [Nitrite (NO_2), as N] + [Nitrate (NO_3), as N].

4. During the first two full calander years of this wastewater treatment system's operation, all parameters with this footnote shall be sampled monthly. After the two full calendar years of operation and acceptable sampling results, the sampling frequency can be reduced to quarterly with a written request from the permittee. Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st).

PROHIBITIONS:

1. Sanitary waste is not permitted to be treated at or discharged from this permitted facility.

2. Waste or wastewater generated at locations other than at this facility are not permitted to be treated at or discharged from this facility.

3. Vehicle washing waters are not permitted to be treated at or discharged from this facility.

OPERATION AND MAINTENANCE PLAN

1. **General Standards:** The permittee shall develop, maintain and implement an Operation and Maintenance Plan.

2. **Compliance Due Date**: In accordance with the Schedule of Submittals, the permittee shall submit an Operation and Maintenance Plan to the Regional Water Engineer for review and approval. The permittee shall begin implementation of the approved Operation and Maintenance Plan within 3 months of DEC approval. The permittee shall review, update and modify the Operation and Maintenance Plan as needed or at a minimum annually.

3. **Components of Operation and Maintenance Plan:** The following components, at a minimum, shall be addressed in the development of the Operation and Maintenance Plan. Note that while these components shall be addressed by the permittee, the permittee may address these, and any additional items using organizational and implementation methods applicable to and tailored to their specific system:

   As-Built Drawings
   Manufacture Information
   Standard Operating Procedures
   Monthly Wastewater Operation Report
   Visual Site Observation Logs
   Septic Tank Inspection Logs
   Absorption Field Inspection Logs
   Operating Procedures
   Safety Procedures
   Design and Inspection Standards
   Record Retention and Reporting Standards
   Overflow/Failure Emergency Response Plan
   System Evaluation and Capacity Assurance Plan
   Contact Information for Key Personnel

4. The Visual Site Observation shall include checking the area of the wastewater treatment system and subsurface disposal area for problems/nuisance conditions (clogged screen, ponding water, odor, etc.). The Visual Site Observation records shall be available for inspection to verify compliance in accordance with 6 NYCRR Part 750-2.5 Routine monitoring, recording, and reporting. All corrective actions made due to the monthly Visual Site Observation shall be documented as part of the wastewater treatment system's routine record keeping.

STORMWATER POLLUTION PREVENTION REQUIREMENTS

Stormwater discharges at this facility are required to obtain coverage under the current Multi-Sector General Permit (MSGP) Sector [U] (GP-0-23-001).

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date[1]
001	CONSTRUCTION COMPLETION / APPROVAL OF DISCHARGE The permittee shall provide a Construction Completion Certification[2] to the DEC (send to the Regional Water Engineer and NetDMR@dec.ny.gov) that the treatment system has been fully completed in accordance with the approved Design Documents. Start-up shall commence only after the Department's receipt of certification from a NYS Professional Engineer that the treatment system was constructed in accordance with the approved Engineering Reports, Plans, and Specifications.	Upon Department Acceptance
Unless noted otherwise, the above actions are one-time requirements.		

b) The permittee shall submit a Report of Non-Compliance Event form with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All notifications shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance.
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance.
3. Any details which tend to explain or mitigate an instance of non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

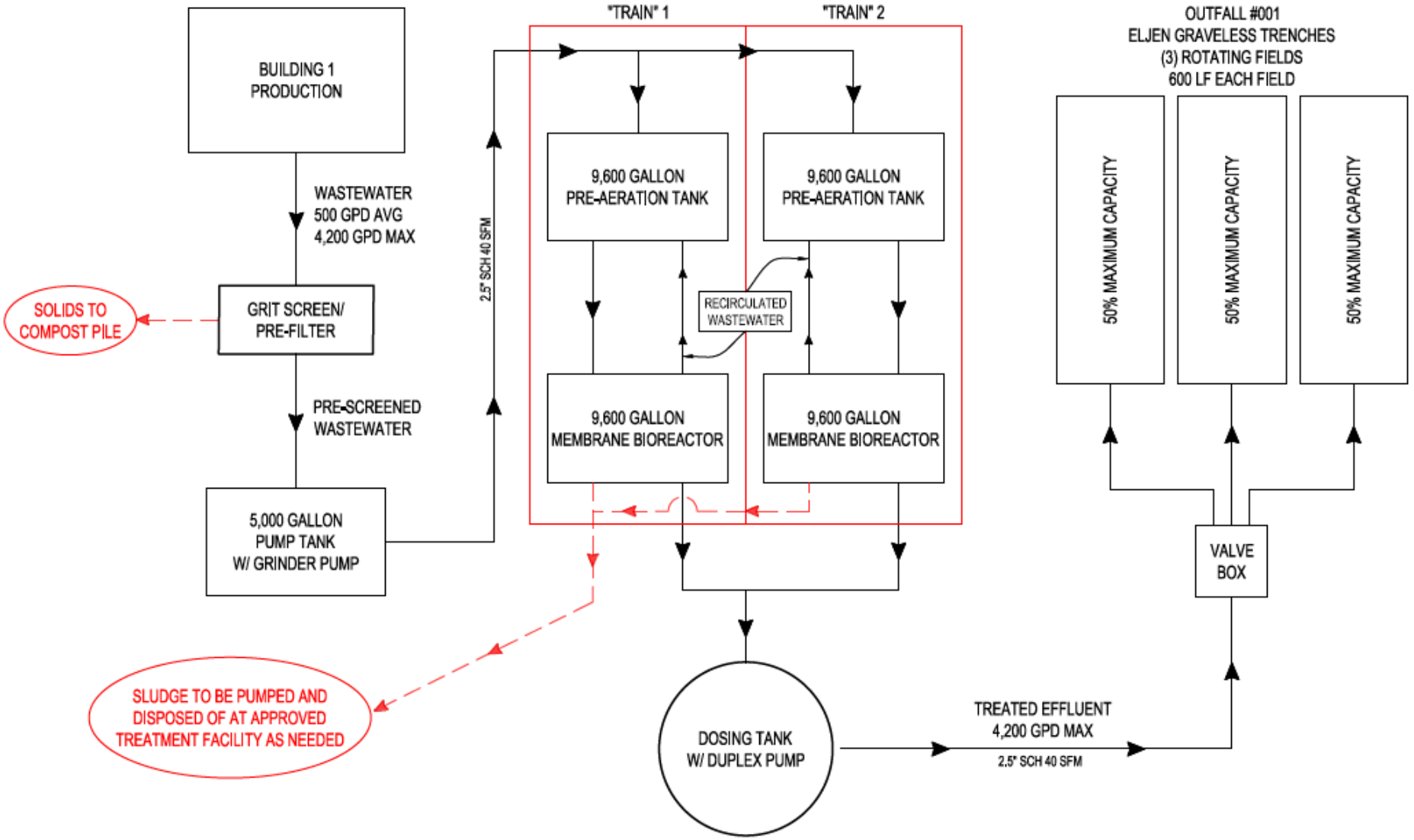
c) The permittee shall submit copies of any document required by the above schedule of compliance to the DEC Regional Water Engineer and to the Bureau of Water Permits.

[1] 6 NYCRR 750-1.14 (a)
[2] 6 NYCRR 750-2.10 (c)

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below:

Effluent: Will be sampled from the dosing tank.



GENERAL REQUIREMENTS

A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference, and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through I as follows:

B. General Conditions

1.	Duty to comply	6 NYCRR 750-2.1(e) & 2.4
2.	Duty to reapply	6 NYCRR 750-1.16(a)
3.	Need to halt or reduce activity not a defense	6 NYCRR 750-2.1(g)
4.	Duty to mitigate	6 NYCRR 750-2.7(f)
5.	Permit actions	6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h)
6.	Property rights	6 NYCRR 750-2.2(b)
7.	Duty to provide information	6 NYCRR 750-2.1(i)
8.	Inspection and entry	6 NYCRR 750-2.1(a) & 2.3

C. Operation and Maintenance

1.	Proper Operation & Maintenance	6 NYCRR 750-2.8
2.	Bypass	6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7
3.	Upset	6 NYCRR 750-1.2(a)(94) & 2.8(c)

D. Monitoring and Records

1.	Monitoring and records	6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d)
2.	Signatory requirements	6 NYCRR 750-1.8 & 2.5(b)

E. Reporting Requirements

1.	Reporting requirements	6 NYCRR 750-2.5, 2.7 & 1.17
2.	Anticipated noncompliance	6 NYCRR 750-2.7(a)
3.	Transfers	6 NYCRR 750-1.17
4.	Monitoring reports	6 NYCRR 750-2.5(e)
5.	Compliance schedules	6 NYCRR 750-1.14(d)
6.	24-hour reporting	6 NYCRR 750-2.7(c) & (d)
7.	Other noncompliance	6 NYCRR 750-2.7(e)
8.	Other information	6 NYCRR 750-2.1(f)

F. Planned Changes

1. In accordance with 6 NYCRR 750-2.7, the permittee shall give notice to the DEC at least 45 days prior to planned physical alterations or additions to the permitted facility when:
   a. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged.
   b. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

GENERAL REQUIREMENTS (continued)

G. Sludge Management

The permittee shall comply with all applicable requirements of 6 NYCRR Part 360 series.

H. SPDES Permit Program Fee

The permittee shall pay to the Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the DEC, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

I. Water Treatment Chemicals (WTCs)

New or increased use and discharge of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The DEC will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized in writing by the DEC.
2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used.
3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form and WTC Annual Report Form* are available from the DEC's website at: http://www.dec.ny.gov/permits/93245.html

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The monitoring information required by this permit shall be retained for a period of at least five years from the date of the sampling for subsequent inspection by the DEC or its designated agent.

B. Additional information required to be submitted by this permit shall be summarized and reported to the Regional Water Engineer and Bureau of Water Permits at the following addresses.

C. Annual SPDES Monitoring Reports: An annual report shall be submitted to the Regional Water Engineer by January 31st each year. The report shall summarize information for January to December of the previous year and shall be submitted electronically, or in hardcopy format, utilizing the SPDES Annual Report Form available on the DEC's website.

Hard copy submission of the Annual Report shall be submitted to the Regional Water Engineer at the address below:

Department of Environmental Conservation
Regional Water Engineer, Region 8
6274 E. Avon-Lima Road, Avon, New York, 14414-9519 Phone: (585) 226-5450

D. Schedule of Additional Submittals:

The permittee shall submit the following information to the Regional Water Engineer and to the Bureau of Water Permits, unless otherwise instructed:

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
001	AS-BUILTS Electronic as-builts shall be submitted shall be submitted for the treatment system.	Construction Completion + 3 months
	STORMWATER – SPDES MULTI-SECTOR GENERAL PERMIT (MSGP) The permittee shall submit a Notice of Intent for their stormwater discharges associated with their industrial activity.	Construction Completion + 3 Months

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
	OPERATION AND MAINTENANCE PLAN The permittee shall submit an Operation and Maintenance Plan.	Construction Completion + 3 Months
	ANNUAL SPDES Monitoring Report The permittee shall submit an Annual SPDES Monitoring Report each year.	January 31st Each Year

Unless noted otherwise, the above actions are one-time requirements.

E. Monitoring and analysis shall be conducted using sufficiently sensitive test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

F. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

G. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

H. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

I. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

SPDES Permit Fact Sheet
Vinifera Wine Cellars
NY0272272

Summary of Permit Changes

A new State Pollutant Discharge Elimination System (SPDES) permit has been drafted for the Vinifera Wine Cellars.

This fact sheet summarizes the information used to determine the effluent limitations (limits) and other conditions contained in the permit. General background information including the regulatory basis for the effluent limitations and other conditions are in the Appendix linked throughout this fact sheet.

Administrative History

4/16/2025 The Department received a complaint regarding a sewage odor and color in an unnamed tributary to Keuka Lake.

4/17/2025 Department staff conducted a site visit and determined the illicit discharge was coming from Vinifera Wine Cellars.

5/21/2025 A Notice of Violation ("NOV") was sent to Vinifera Wine Cellars regarding their failing onsite industrial wastewater treatment system.

6/20/2025 Vinifera Wine Cellars submitted an incomplete NY-2C permit application. A Notice of Incomplete Application (NOIA) was sent on 7/10/2025.

8/8/2025 Vinifera Wine Cellars submitted a complete NY-2C permit application.

8/16/2025 The application was deemed complete on 8/13/2025.

9/30/2025 A revised application was received with the PFAS/PFOS and 1,4-Dioxane sampling results.

The Notice of Complete Application, published in the Environmental Notice Bulletin and newspapers, contains information on the public notice process.

Facility Information

This is an industrial facility (SIC code 2084) that produces wine. Effluent consists of processed wastewater from winemaking. The proposed wastewater treatment system will discharge to groundwater (Outfall 001) and consist of a Membrane Bioreactor with Eljen graveless trenches.

Sludge will be pumped and disposed of off-site as needed.

Site Overview

Enforcement History

On May 21, 2025, the Department sent Vinifera Wine Cellars a NOV identifying the following violations:

- The Facility's discharge of inadequately treated industrial wastewater causing a water quality violation of the Keuka Lake Tributary in violation of ECL § 17-0501, and 6 NYCRR Part 703.2.
- The Facility's discharge of inadequately treated industrial wastewater without a SPDES Permit in violation of ECL §§ 17-0505 and 17-0701.1(a).
- The Facility's discharge of inadequately treated industrial wastewater through an existing outlet into the Keuka Lake Tributary without a SPDES Permit in violation of ECL §§ 17-0507 and 17-0511.

Compliance and enforcement information can be found on the EPA's Enforcement and Compliance History Online (ECHO) website.

Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from the application submitted by the permittee.

Receiving Water Information

The facility proposes to discharge via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	2084	Processed Wine Wastewater	Groundwater, Class GA

See the Outfall and Receiving Water Summary Table and Appendix for additional information.

Critical Receiving Water Data & Mixing Zone

The facility proposes to discharge to groundwater, Class GA, via Eljen gravelless trenches. The effluent limitations for Outfall 001 were developed with no dilution, based on groundwater quality standards found in 6 NYCRR 703.5 and TOGS 1.1.1 (Part I) and groundwater effluent standards contained in 6 NYCRR 703.6 and TOGS 1.1.1 (Part II).

Critical receiving water data are listed in the Pollutant Summary Table at the end of this fact sheet. Appendix Link

Permit Requirements

The technology based effluent limitations (TBELs), water quality-based effluent limitations (WQBELs), Existing Effluent Quality and a discussion of the selected effluent limitation for each pollutant present in the discharge are provided in the Pollutant Summary Table.

Appendix Link

Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)[1] determination.

Stormwater Pollution Prevention Requirements

The facility discharges stormwater associated with industrial activity and requires SPDES permit coverage under 40 CFR 122.26(a)(6).

Stormwater discharges at this facility are required to obtain coverage under the current Multi-Sector General Permit (MSGP) Sector [U] (GP-0-23-001). This requirement is new.

Schedule of Compliance

A Schedule of Compliance has been included[2] for the following items (Appendix Link):

- Construction Completion/Approval of Discharge.

Emerging Contaminant Monitoring

Based on the available data submitted with the application and knowledge of this industry, no additional monitoring for perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS),

[1] As prescribed by 6 NYCRR Part 617
[2] Pursuant to 6 NYCRR 750-1.14

and 1,4-dioxane (1,4-D) is required at this time. Additionally, consistent with TOGS 1.3.13, the industry SIC code(s) of 2084 is not identified as potential primary sources of PFOA, PFOS, and 1,4-D. Please see the Pollutant Summary Table below for more information.

Schedule of Additional Submittals

A Schedule of Additional Submittals has been included for the following (Appendix Link):

- As-builts.
- Notice of Intent (NOI) for MSGP coverage.
- Operation and Maintenance Plan.
- Annual SPDES Monitoring Report.

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/L)	1Q10 (CFS)	7Q10 (CFS)	30Q10 (CFS)	Critical Effluent Flow (GPD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	42° 28' 24" N	77° 11' 11" W	Groundwater	GA	Not Applicable	07/05	NA	No Dilution			4,200	-	-	-

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** Process wastewater from wine production.														
		Type of Treatment: Grit removal/screening, aerobic membrane bioreactors (MBR), with Eljen absorption fields.														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[3]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
General Notes: This is a new permit with limited available data. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent. The technology based effluent limitations (TBELs) were developed based on the proposed treatment system's capabilities.															
Flow Rate	GPD	Daily Max	-	-	-	**4,200**	TOGS 1.2.1	No alterations that will impair the waters for their best usages.					703.2	-	TBEL
		Monthly Avg.	-	-	-	**Monitor**	750-1.13 Monitor							-	
	The flow limit has been set at the design flow of the wastewater treatment facility.														
pH	SU	Minimum	-	-	-	6.0	40 CFR 133.102	-	-		Range	**6.5 - 8.5**	703.3	-	WQBEL
		Maximum	-	-	-	9.0									
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given that adequate dilution is not available, an effluent limitation equal to the WQS is appropriate.														
5-day Biochemical Oxygen Demand (BOD_5)	mg/L	Daily Max	-	-	-	**300**	TBEL	No WQ Standard Exists for Groundwater						-	TBEL
	The TBELs were developed based on the proposed treatment system's capabilities.														

[3] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	001	**Description of Wastewater:** Process wastewater from wine production.													
		Type of Treatment: Grit removal/screening, aerobic membrane bioreactors (MBR), with Eljen absorption fields.													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[3]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Total Suspended Solids (TSS)	mg/L	Daily Max	-	-	-	**330**	TBEL	No WQ Standard Exists for Groundwater						-	TBEL
	The TBELs were developed based on the proposed treatment system's capabilities.														
Nitrite, as N	mg/L	Daily Max	-	-	-	**Monitor**	750-1.13 Monitor	No WQ Standard Exists for Groundwater						-	Monitor
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions.														
Nitrate (NO_3), as N	mg/L	Daily Max	-	-	-	**Monitor**	750-1.13 Monitor	-	-	20	-	-	703.6	-	Monitor
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions.														
Total Kjeldahl Nitrogen (TKN), as N	mg/L	Daily Max	-	-	-	**Monitor**	750-1.13 Monitor	No WQ Standard Exists for Groundwater						-	Monitor
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions.														
Total Nitrogen, as N	mg/L	Daily Max	-	-	-	**Monitor**	750-1.13 Monitor	No WQ Standard Exists for Groundwater						-	Monitor
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions.														
Total Phosphorus	mg/L	Daily Max	-	-	-	**Monitor**	750-1.13 Monitor	No WQ Standards Exists for Groundwater						-	Monitor
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions.														
Total Dissolved Solids (TDS)	mg/L	Daily Max	-	-	-	**Monitor**	750-1.13 Monitor	-	-	500	Narrative	-	703.3	-	Monitor
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions.														

Outfall 001 [EMERGING CONTAMINANTS]

Emerging Contaminants: Outfall # 001																
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[4]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Notes: See Emerging Contaminant Monitoring section above. Effluent samples were analyzed for the 40 PFAS compounds and 1,4-Dioxane.															
Perfluoro-butanoic Acid (PFBA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-pentanoic Acid (PFPeA)	ng/L	Daily Max	-	0.906	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-hexanoic Acid (PFHxA)	ng/L	Daily Max	-	0.735	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-heptanoic Acid (PFHpA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-octanoic Acid (PFOA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	TOGS 1.1.1	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-nonanoic Acid (PFNA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-decanoic Acid (PFDA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-undecanoic Acid (PFUnA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-dodecanoic Acid (PFDoA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														

[4] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Emerging Contaminants: Outfall # 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[4]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Perfluoro-tridecanoic Acid (PFTriA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-tetradecanoic Acid (PFTeA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-butanesulfonic Acid (PFBS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-pentanesulfonic Acid (PFPeS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-hexanesulfonic Acid (PFHxS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-heptanesulfonic Acid (PFHpS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-octanesulfonic Acid (PFOS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	TOGS 1.1.1	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-nonanesulfonic Acid (PFNS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-decanesulfonic Acid (PFDS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-dodecane-sulfonic Acid (PFDoS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-octane-sulfonamide (FOSA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														

Emerging Contaminants: Outfall # 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[4]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
N-ethyl Perfluoro-octanesulfon-amidoacetic Acid (NEtFOSAA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
4:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
6:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
8:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
N-methyl Perfluoro-octanesulfon-amide (NMeFOSA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
N-methyl Perfluoro-octanesulfon-amidoethanol (NMeFOSE)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														

Emerging Contaminants: Outfall # 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[4]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
N-ethyl Perfluoro-octanesulfon-amidoethanol (NEtFOSE)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
9-Chlorohexadeca-fluoro-3-oxanonane-1-sulfonic Acid (9Cl-PF3ONS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Hexafluoro-propylene Oxide Dimer Acid (HFPO-DA or GenX)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid (11Cl-PF3OUdS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Monitoring has been added to support establishment of future standards or TBELs.														
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
3-Perfluoropropyl Propanoic Acid (3:3 FTCA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
2H,2H,3H,3H-Perfluoro-octanoic Acid (5:3 FTCA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														

Emerging Contaminants: Outfall # 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[4]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
3-Perfluoroheptyl Propanoic Acid (7:3 FTCA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-4-methoxy-butanoic Acid (PFMBA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-3-methoxy-propanoic Acid (PFMPA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro(2-ethoxyethane)sulfonic Acid (PFEESA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
1,4-Dioxane	µg/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	TOGS 1.1.1	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														

Appendix: Regulatory and Technical Basis of Permit Authorizations

The Appendix is meant to supplement the fact sheet for multiple types of SPDES permits. Portions of this Appendix may not be applicable to this specific permit.

Regulatory References

The provisions of the permit are based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750 and include monitoring, recording, reporting, and compliance requirements, as well as general conditions applicable to all SPDES permits. Below are the most common citations for the requirements included in SPDES permits:

- Clean Water Act (CWA) 33 section USC 1251 to 1387
- Environmental Conservation Law (ECL) Articles 17 and 70
- Federal Regulations
  - 40 CFR, Chapter I, subchapters D, N, and O
- State environmental regulations
  - 6 NYCRR Part 621
  - 6 NYCRR Part 750
  - 6 NYCRR Parts 700 - 704 – Best use and other requirements applicable to water classes
  - 6 NYCRR Parts 800 – 941 - Classification of individual surface waters
- NYSDEC water program policy, referred to as Technical and Operational Guidance Series (TOGS)
- USEPA Office of Water Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E

The following is a quick guide to the references used within the fact sheet:

SPDES Permit Requirements	Regulatory Reference
Anti-backsliding	6 NYCRR 750-1.10(c)
Best Management Practices (BMPS) for CSOs	6 NYCRR 750-2.8(a)(2)
Environmental Benefits Permit Strategy (EBPS)	6 NYCRR 750-1.18, NYS ECL 17-0817(4), TOGS 1.2.2 (revised January 25,2012)
Exceptions for Type I SSO Outfalls (bypass)	6 NYCRR 750-2.8(b)(2), 40 CFR 122.41
Mercury Multiple Discharge Variance	Division of Water Program Policy 1.3.10 (DOW 1.3.10)
Mixing Zone and Critical Water Information	TOGS 1.3.1 & Amendments
PCB Minimization Program	40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1
Pollutant Minimization Program (PMP)	6 NYCRR 750-1.13(a), 750-1.14(f), TOGS 1.2.1
Schedules of Compliance	6 NYCRR 750-1.14
Sewage Pollution Right to Know (SPRTK)	NYS ECL 17-0826-a, 6 NYCRR 750-2.7
State Administrative Procedure Act (SAPA)	State Administrative Procedure Act Section 401(2), 6 NYCRR 621.11(l)
State Environmental Quality Review (SEQR)	6 NYCRR Part 617
USEPA Effluent Limitation Guidelines (ELGs)	40 CFR Parts 405-471
USEPA National CSO Policy	33 USC Section 1342(q)
Whole Effluent Toxicity (WET) Testing	TOGS 1.3.2
General Provisions of a SPDES Permit Department Request for Additional Information	NYCRR 750-2.1(i)

Outfall and Receiving Water Information

Impaired Waters

The NYS 303(d) List of Impaired/TMDL Waters identifies waters where specific best usages are not fully supported. The state must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses, in order to restore and protect such uses. SPDES permits must include effluent limitations necessary to implement a waste load allocation (WLA) of an EPA-approved TMDL (6 NYCRR 750-1.11(a)(5)(ii)), if applicable. In accordance with 6 NYCRR 750-1.13(a), permittees discharging to waters which are on the list but do not yet have a TMDL developed may be required to perform additional monitoring for the parameters causing the impairment. Accurate monitoring data is needed

to determine the existing capabilities of the wastewater treatment plants and to assure that WLAs are allocated equitably.

Interstate Water Pollution Control Agencies

Some POTWs may be subject to regulations of interstate basin/compact agencies including: Interstate Sanitation Commission (ISC), International Joint Commission (IJC), Delaware River Basin Commission (DRBC), Ohio River Valley Water Sanitation Commission (ORSANCO), and the Susquehanna River Basin Commission (SRBC). Generally, basin commission requirements focus principally on water quality and not treatment technology. However, interstate/compact agency regulations for the ISC, IJC, DRBC and NYC Watershed contain explicit effluent limits which must be addressed during permit drafting. 6 NYCRR 750-2.1(d) requires SPDES permits for discharges that originate within the jurisdiction of an interstate water pollution control agency, to include any applicable effluent standards or water quality standards (WQS) promulgated by that interstate agency.

Existing Effluent Quality

The existing effluent quality is determined from a statistical evaluation of effluent data in accordance with TOGS 1.2.1 and the USEPA Office of Water, Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E (TSD). The existing effluent quality is equal to the 95th (monthly average) and 99th (daily maximum) percentiles of the lognormal distribution of existing effluent data. When there are greater than three non-detects, a delta-lognormal distribution is assumed, and delta-lognormal calculations are used to determine the monthly average and daily maximum pollutant concentrations. Statistical calculations are not performed for parameters where there are less than ten data points. If additional data is needed, a monitoring requirement may be specified either through routine monitoring or a short-term high intensity monitoring program. The Pollutant Summary Table identifies the number of sample data points available.

Permit Requirements

Basis for Effluent Limitations

Sections 101, 301, 304, 308, 401, 402, and 405 of the CWA and Titles 5, 7, and 8 of Article 17 ECL, as well as their implementing federal and state regulations, and related guidance, provide the basis for the effluent limitations and other conditions in the permit.

When conducting a full technical review of an existing permit, the previous effluent limitations form the basis for the next permit. Existing effluent quality is evaluated against the existing effluent limitations to determine if these should be continued, revised, or deleted. Generally, existing limitations are continued unless there are changed conditions at the facility, the facility demonstrates an ability to meet more stringent limitations, or in response to updated regulatory requirements. Pollutant monitoring data is also reviewed to determine the presence of additional contaminants that should be included in the permit based on a reasonable potential analysis to cause or contribute to a water quality standards violation.

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law[5] and USEPA interpretation[6] anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

[5] American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)
[6] U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

Antidegradation Policy

New York State implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, "Water Quality Antidegradation Policy" (September 9, 1985); and, (2) TOGS 1.3.9, "Implementation of the NYSDEC Antidegradation Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985) (undated)." The permit for the facility contains effluent limitations which ensure that the existing best usage of the receiving waters will be maintained. To further support the antidegradation policy, SPDES applications have been reviewed in accordance with the State Environmental Quality Review Act (SEQR) as prescribed by 6 NYCRR Part 617.

Effluent Limitations

In developing a permit, the DEC determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

A TBEL requires a minimum level of treatment for industrial point sources based on currently available treatment technologies or Best Management Practices (BMPs). CWA sections 301(b) and 402, ECL sections 17-0509, 17-0809 and 17-0811, and 6 NYCRR 750-1.11 require technology-based controls on effluents. TBELs are set based upon an evaluation of New Source Performance Standards (NSPS), Best Available Technology Economically Achievable (BAT), Best Conventional Pollutant Control Technology (BCT), Best Practicable Technology Currently Available (BPT), and Best Professional Judgment (BPJ).

Best Professional Judgement (BPJ)

For substances that are not explicitly limited by regulations, the permit writer is authorized to use BPJ in developing TBELs. Consistent with section 402(a)(1) of the CWA, and NYS ECL section 17-0811, the DEC is authorized to issue a permit containing "any further limitations necessary to ensure compliance with water quality standards adopted pursuant to state law". BPJ limitations may be set on a case-by-case basis using any reasonable method that takes into consideration the criteria set forth in 40 CFR 125.3. Applicable state regulations include 6 NYCRR 750-1.11. The BPJ limitation considers the existing technology present at the facility, the statistically calculated existing effluent quality for that parameter, and any unique or site-specific factors relating to the facility. Technology limitations generally achievable for various treatment technologies are included in TOGS 1.2.1, Attachment C. These limitations may be used for the listed parameters when the technology employed at the facility is listed.

Technology-based Effluent Limitations (TBELS) for Discharges to Groundwater

TBELS aim to prevent pollution by requiring a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the United States. ECL section 17-0509, and 6 NYCRR 750-1.11 require technology-based controls for POTWs discharging to surface waters, known as secondary treatment. The applicable regulations are specified in 40 CFR 133.102 and 6 NYCRR 750-1.11. These and other requirements are summarized in TOGS 1.3.3 and below:

- Secondary treatment requirements of 40 CFR Part 133 will typically not be included unless the facility discharges to a surface water prior to entering the groundwater or if, in the permit writer's judgement, limitations are necessary to prevent nuisance conditions or enhance plant operation.
- Since nitrogen is a component of all domestic wastewater, permits for facilities discharging 30,000 GPD or greater include effluent limitations for Nitrate of 20 mg/L (as N). Groundwater discharges in Nassau and Suffolk Counties are required to achieve an effluent standard for Total Nitrogen of 10 mg/L (as N).

- Disinfection will typically not be required for discharges to groundwater unless local public health concerns exist due to exposure or contact with effluent. When this occurs, disinfection requirements and effluent limitations for chlorine residual are developed in accordance with TOGS 1.3.3.

Technology-based Effluent Limitations (TBELS) for Industrial Facilities to Groundwater

TBELS aim to prevent pollution by requiring a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the United States. Requirements for discharges from industrial facilities to groundwater are summarized in TOGS 1.2.1. In accordance with TOGS 1.2.1, for facilities discharging to groundwater:

- Discharges will typically be limited to the more stringent of the groundwater effluent standards in 6 NYCRR 703.6 or the applicable treatment technology listed in TOGS 1.2.1 Attachment (C).
- Discharges from industrial facilities which contain nitrogen or nitrogen compounds include effluent limitations for Nitrate of 20 mg/L (as N). Groundwater discharges in Nassau and Suffolk Counties are required to achieve an effluent standard for Total Nitrogen of 10 mg/L (as N).
- Disinfection will typically not be required for discharges to groundwater unless local public health concerns exist due to exposure or contact with effluent.

Water Quality-Based Effluent Limitations (WQBELs) for Discharges to Groundwater

The procedure for developing WQBELs includes identifying the pollutants present in the discharge(s), identifying water quality criteria applicable to these pollutants, determining if WQBELs are necessary (reasonable potential), and calculating the WQBELs. For groundwater discharges, if the expected concentration of the pollutant of concern in the receiving water may exceed the ambient groundwater quality standard or guidance value, then there is reasonable potential that the discharge may cause or contribute to a violation of the water quality, and a WQBEL for the pollutant is required.

WQBELs for groundwater discharges are based on the groundwater effluent limits set forth in 6 NYCRR Part 703 (Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations) except as noted in 6 NYCRR 702.21. TOGS 1.1.1 provides a listing of groundwater effluent limitations for substances having an ambient water quality standard or guidance value. Groundwater effluent limitations are applied at the point of discharge to the groundwater distribution system.

For land treatment systems with no accessible final sampling points, such as constructed wetland treatment systems or buried sand filters, permit limitations for groundwater discharges are typically based on ambient groundwater quality standards or guidance values applied at representative down gradient monitoring well(s). Limitations at the downgradient sampling point are set at the Class GA ambient groundwater standards, rather than at the groundwater effluent limits promulgated under 6 NYCRR 703.6, as compliance is determined based upon the concentrations present in the downgradient groundwater monitoring well at the groundwater interface.

Class GA standards are established for the protection of sources of drinking water designated as Health (Water Source) or H(WS) in TOGS 1.1.1. As such, effluent limitations based on aquatic life criteria and WET testing requirements are not applicable to groundwater discharges.

Minimum Level of Detection

Pursuant to 40 CFR 122.44(i)(1)(iv) and 6 NYCRR 750-2.5(d), SPDES permits must contain monitoring requirements using sufficiently sensitive test procedures approved under 40 CFR Part 136. A method is “sufficiently sensitive” when the method’s minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant parameter; or the lowest ML of the analytical methods approved under 40 CFR Part 136. The ML represents the lowest level that can be measured within specified limitations of precision and accuracy during routine laboratory operations on most effluent matrices. When establishing effluent limitations for a specific parameter (based on technology or water quality requirements), it

is possible that the calculated limitation will fall below the ML established by the approved analytical method(s). In these instances, the calculated limitation is included in the permit with a compliance level set equal to the ML of the most sensitive method.

Monitoring Requirements

CWA section 308, 40 CFR 122.44(i), 6 NYCRR 750-1.13, and 750-2.5 require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and reporting results on Discharge Monitoring Reports (DMRs). The permit contains the monitoring requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility's performance and characterize the nature of the discharge of the monitored flow or pollutant. Variable effluent flows and pollutant levels may be required to be monitored at more frequent intervals than relatively constant effluent flow and pollutant levels (6 NYCRR 750-1.13). For industrial facilities, sampling frequency is based on guidance provided in TOGS 1.2.1. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

For groundwater discharges, monitoring of downstream wells may be included to demonstrate compliance with ambient groundwater quality standards. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required.

Other Conditions

Schedules of Compliance

Schedules of compliance are included in accordance with 40 CFR Part 132 Attachment F, Procedure 9, 40 CFR 122.47 and 6 NYCRR 750-1.14. Schedules of compliance are intended to, in the shortest reasonable time, achieve compliance with applicable effluent standards and limitations, water quality standards, and other applicable requirements. Where the time for compliance is more than nine months, the schedule of compliance must include interim requirements and dates for their achievement. If the time necessary to complete the interim milestones is more than nine months, and not readily divisible into stages for completion, progress reports must be required.

Emerging Contaminants

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial products as well as in manufacturing processes for decades. Based on available research, water quality assessments for 1,4-D will follow existing WQBEL development. PFOA and PFOS do not break down easily; therefore, their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the DEC Division of Water web page: Emerging Contaminants In NY's Waters - NYSDEC.

Schedule(s) of Additional Submittals

Schedules of Additional Submittals are used to summarize the deliverables required by the permit not identified in a separate Schedule of Compliance.

Best Management Practices (BMP) for Industrial Facilities

BMP plans are authorized for inclusion in NPDES permits pursuant to Sections 304(e) and 402 (a)(1) of the Clean Water Act, and 6 NYCRR 750-1.14(f). The regulations pertaining to BMPs are promulgated under 40 CFR Part 125, Subpart K. These regulations specifically address surface water discharges.