

Permittee: Village of Bath
Facility: Village of Bath Wastewater Treatment Plant
SPDES Number: NY0021430
USEPA Major/Class 05 Municipal

Date: February 11, 2022
Permit Writer: Abigail Johnson
Water Quality Reviewer: Monica Moss
Permittee Initiated Modification (PIM)

SPDES Permit Fact Sheet

Village of Bath

Village of Bath Wastewater Treatment Plant

NY0021430



Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) permittee-initiated permit modification has been drafted for the Village of Bath Wastewater Treatment Plant. The changes to the permit are summarized below:

- Updated the schedule of compliance for implementation of effluent disinfection (final compliance date of 5/1/2024)
- Clarified footnote 6 for both the Existing and Proposed Facility
- Updated Temperature Action Level – Monitoring Program footnote language for the Proposed Facility to match the Existing Facility language
- Updated Mercury Minimization Plan Requirements
- Reduced the Mercury 12-MRA effluent limitation from 20 ng/L to 12 ng/L for the Existing and Proposed facility
- Reduced the settleable solids effluent limitation from 0.3 ml/L to 0.1 ml/L for the Proposed facility

This factsheet 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 factsheet.

Administrative History

10/1/2020 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 9/30/2025. This permit has formed the basis of this permit.

Mercury¹

The multiple discharge variance (MDV) for mercury provides the framework for NYSDEC to require mercury monitoring and mercury minimization programs (MMPs), through SPDES permitting. [Appendix Link](#)

The facility is located outside the Great Lakes, is a class 05 POTW, has mercury sources and the permit includes requirements for the implementation of MMP Type I.

The permit includes a daily max total mercury effluent limitation of 50 ng/L. The facility has ≥10 effluent mercury data points and the existing effluent quality (EEQ) of 2.8 ng/L was calculated from the lognormal 95th percentile of 11 detectable mercury effluent samples collected from 3/31/2018 to 12/31/2021. A mercury minimization program consisting of the following is also required:

- Additional monitoring
- Control strategy for implementation of the MMP
- Annual status report (maintained onsite)

The facility is located outside the Great Lakes Basin and the EEQ ≤12 ng/L; therefore, the permit includes a 12-month rolling average total mercury effluent limitation equal to 12 ng/L.

As the EEQ is ≤12 ng/L, the sampling frequency in the permit will remain at quarterly. The permit language reflects additional reductions in the MMP requirements.

¹ In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

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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 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	42° 19' 32" N	77° 18' 40" W	Cohocton River	C(T)	PA-3-58 PWL: 0502-0017	05 / 02	194 ²	14	15	18	1.0 Existing	EXISTING FACILITY		
												1.7:1	2.5:1	2.5:1
												PROPOSED FACILITY		
												1.6:1	2.0:1	2.0:1

POLLUTANT SUMMARY TABLE (Existing Facility)

Outfall 001

Outfall #	001	Description of Wastewater: Treated Sanitary and Industrial Process Water													
		Type of Treatment: Existing Facility – Screening, grit removal, Modified Ludzack-Ettinger (MLE) process													
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 for WQBEL		
General Notes: Existing discharge data from 03/31/2018 to 12/31/2021 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Total Mercury	ng/L	Daily Max	50	2.8	11/5	50	ILCA	-	-	0.7	H(FC)	50	GLCA	-	DOW 1.3.10
	ng/L	12 MRA	20	-	0/4	2.8	EEQ	-	-	0.7	H(FC)	12	-	-	DOW 1.3.10
The facility is located outside the Great Lakes Basin and the EEQ is less than equal to 12 ng/L; therefore, the permit includes a 12-month rolling average effluent limitation equal to 12 ng/L and a daily maximum effluent limitation of 50 ng/L. For more discussion, see Mercury section of this factsheet .															

² Ambient hardness data was obtained from the 75th percentile of 8 RIBS samples collected along the Cohocton River (station 5021038, Cohocton River at Cohocton) from 2013. This is slightly higher than the single sample collected as part of the NY-2A application on 1/9/2020 of 115 mg/L and the value of 150 mg/L used in the previous evaluation.

³ Existing Effluent Quality: 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)

POLLUTANT SUMMARY TABLE (Proposed Facility)

Outfall 001

Outfall #	Description of Wastewater: Treated Sanitary and Industrial Process Water														
	Type of Treatment: Proposed Facility – Membrane Bioreactor (MBR) and Expansion to 1.3 MGD														
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 for WQBEL		
General Notes: Existing discharge data from 03/31/2018 to 12/31/2021 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Settleable Solids	mL/L	Daily Max	0.3	0.1* Actual Average	16/59	0.1	TOGS 1.3.3	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	TBEL
									Consistent with TOGS 1.3.3 the effluent limitation is equal to the TBEL of 0.1 mL/L for POTWs providing secondary treatment and filtration. Given that adequate dilution is available the TBEL is reasonably protective of the WQS. *15 ml/L result from 11/2018 was removed from the sample set as this was a result of plant upset and is not representative of normal plant operation.						
Total Mercury	ng/L	Daily Max	50	2.8	11/5	50	ILCA	-	-	0.7	H(FC)	50	GLCA	-	DOW 1.3.10
	ng/L	12 MRA	20	-	0/4	2.8	EEQ	-	-	0.7	H(FC)	12	-	-	DOW 1.3.10
The facility is located outside the Great Lakes Basin and the EEQ is less than equal to 12 ng/L; therefore, the permit includes a 12-month rolling average effluent limitation equal to 12 ng/L and a daily maximum effluent limitation of 50 ng/L. For more discussion, see Mercury section of this factsheet .															

⁴ Existing Effluent Quality: 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)

Appendix: Regulatory and Technical Basis of Permit Authorizations

The Appendix is meant to supplement the factsheet 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 factsheet:

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)

Other Conditions

Mercury

The multiple discharge variance (MDV) for mercury was developed in accordance with 6 NYCRR 702.17(h) “to address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed.” The first MDV was issued in October 2010, and subsequently revised and reissued in 2015; each subsequent iteration of the MDV is designed to build off the previous version, to make reasonable progress towards the water quality standard (WQS) of 0.7 ng/L dissolved mercury. The MDV is necessary because human-caused conditions or sources of mercury prevent attainment of the WQS and cannot be remedied (i.e., mercury is ubiquitous in New York waters at levels above the WQS

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and compliance with a water quality based effluent limitation (WQBEL) for mercury cannot be achieved with demonstrated effluent treatment technologies). The Department has determined that the MDV is consistent with the protection of public health, safety, and welfare. During the effective period of this MDV, any increased risks to human health are mitigated by fish consumption advisories issued periodically by the NYSDOH.

All surface water SPDES permittees are eligible for authorization by the MDV provided they meet the requirements specified in DOW 1.3.10.

There have been a number of changes to DOW 1.3.10, December 2020 (e.g., the criteria for mercury sources, the MMP Decision tree, and the MMPs themselves) which could result in less stringent effluent limitations. There are now criteria to determine if a facility has sources of mercury. Additionally, the types of MMPs have been restructured. MMP Type IV is appropriate for facilities that are not sources of mercury. A similar MMP type was not included in the 2010 or 2015 versions of DOW 1.3.10. DOW 1.3.10, Figure 1, is a decision tree, which includes the criteria used to determine if a facility has source of mercury and which MMP is appropriate for a facility.