

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1 5 Post Office Square, Suite 100 BOSTON, MA 02109-3912

VIA EMAIL

October 16, 2023

Vincent Roy, Executive Director Sudbury Water District 199 Raymond Road Sudbury, MA 01776 vroy@sudburywater.com

Re: Authorization to discharge under the 2023 NPDES Potable Water Treatment Facilities

General Permit (PWTFGP) – Authorization No. MAG640054 for the Raymond Road

Water Treatment Facility in Sudbury, MA

Dear Vincent Roy:

Based on the review of your Notice of Intent (NOI) received October 12, 2023, the U.S. Environmental Protection Agency (EPA) hereby authorizes the Sudbury Water District (the Permittee) to discharge from the Raymond Road Water Treatment Facility (the Facility) in accordance with the provisions of the National Pollutant Discharge Elimination System (NPDES) Potable Water Treatment Facilities General Permit (PWTFGP or General Permit). The Facility's General Permit Number is indicated above and should be referenced on all correspondence. The effective date of coverage is December 1, 2023.

Your permitted discharge is to Landham Brook, a Class B waterbody. Attached to this PWTFGP authorization to discharge is a summary of effluent limitations and monitoring requirements applicable to your discharge. Please be aware that sufficiently sensitive test methods must be used for any sample analysis conducted in accordance with this permit. See Part III.A.1 of the General Permit.

The summary presented in this authorization letter does not represent the complete requirements of the PWTFGP. Permittees must comply with all the applicable requirements of this General Permit such as discharge limits and monitoring requirements, state certification conditions, administrative provisions, and other additional requirements including a Best Management Practices (BMP) plan. The complete PWTFGP and other related information can be found at https://www.epa.gov/npdes-permits/potable-water-treatment-facility-general-permit-pwtf-gp-massachusetts-new-hampshire.

Please note that Part V of the PWTFGP includes all monitoring, record-keeping and reporting requirements for the Facility that will become effective on the 1st day of the month following the date of signature on this letter. Facilities are now required to submit monitoring results on a monthly, not quarterly, basis. Unless the Permittee has received an approved Opt-Out Request,

the Permittee shall electronically submit its monthly monitoring data in discharge monitoring reports (DMRs) to EPA and the Massachusetts Department of Environmental Protection (MassDEP) using NetDMR. NetDMR is accessed from the internet at https://cdx.epa.gov. NetDMR reporting is due no later than the 15th day of the month following the completed reporting period. When DMRs are submitted electronically using NetDMR, the submittal of hard copies is not required.

This General Permit and authorization to discharge expires September 30, 2028, except as provided in Part VI.B, or upon submission of a Notice of Termination. EPA appreciates your cooperation in applying for coverage under this General Permit. If you have additional questions, please contact Nathan Chien at chien.nathan@epa.gov or (617) 918-1649.

Sincerely,

Ellen Weitzler, Supervisor Industrial and Municipal Permits Section Water Division, EPA Region 1

cc: Xiaodan Ruan, MassDEP (<u>xiaodan.ruan@state.ma.us</u>)
Ted McAuliffe, Sudbury Water District (tmcauliffe@sudburywater.com)

Part III. General Permit Requirements

A. Effluent Limitations and Monitoring Requirements

1. Continuous and Intermittent Dischargers

Continuous and Intermittent Dischargers are defined as those facilities that discharge more frequently than once per month or twelve times per year.

During the period beginning on the effective date and lasting through the expiration date, the Permittee is authorized to discharge wastewaters from potable water treatment facilities to the receiving water in the Permittee's authorization letter, unless the waters are restricted as noted in Section I.C. The discharge and receiving water shall be limited and monitored as detailed below and further specified in the facility's authorization letter.

The General Permit contains site-specific effluent limitations for total residual chlorine, total aluminum, and Whole Effluent Toxicity. See Appendix H. These conditions were derived in part from facility monitoring data and previously submitted NOIs. EPA will update these effluent limitations as necessary based on any new information received in the permittee's updated NOI. While the limitations may change, the process for deriving these limitations will not.

Effluent Characteristic	Effluent Limitation		Monitoring Requirements ^{1,2,3}			
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type ⁴		
Effluent Flow ⁵	Report MGD	1.0 MGD	Continuous	Recorder		
TSS	30 mg/L	50 mg/L	1/Week	Composite		
pH Range ⁶	6.5 – 8.3 S.U.		1/Week	Grab		
Total Residual Chlorine ^{7,8}	11 μg/L	19 μg/L	1/Week	Grab		
PFAS Analytes ^{17,18}		Report ng/L	2/Year or less	Composite		
Adsorbable Organic Fluorine ^{17,19}		Report ng/L	2/Year or less	Composite		
Whole Effluent Toxicity (WET) Testing ^{20,21}						
LC ₅₀ (Acute WET Testing)		100 ≥ %	1/Year	Composite		
Hardness		Report mg/L	1/Year	Composite		
Ammonia Nitrogen		Report mg/L	1/Year	Composite		
Total Aluminum		Report mg/L	1/Year	Composite		
Total Cadmium		Report mg/L	1/Year	Composite		
Total Copper		Report mg/L	1/Year	Composite		
Total Nickel		Report mg/L	1/Year	Composite		
Total Lead		Report mg/L	1/Year	Composite		
Total Zinc		Report mg/L	1/Year	Composite		
Total Organic Carbon		Report mg/L	1/Year	Composite		

	Reporting Requirements		Monitoring Requirements ^{1,2,3}	
Ambient Characteristic ²²	Average Monthly	Maximum Daily	Measuremen t Frequency	Sample Type ⁴
Ambient Testing for WET ²⁴				
Hardness		Report mg/L	1/Year	Grab
Ammonia Nitrogen		Report mg/L	1/Year	Grab
Total Aluminum		Report mg/L	1/Year	Grab
Total Cadmium		Report mg/L	1/Year	Grab
Total Copper		Report mg/L	1/Year	Grab
Total Nickel		Report mg/L	1/Year	Grab
Total Lead		Report mg/L	1/Year	Grab
Total Zinc		Report mg/L	1/Year	Grab
Total Organic Carbon		Report mg/L	1/Year	Grab
pH ²⁵		Report S.U.	1/Year	Grab
Temperature ²⁵		Report °C	1/Year	Grab

Footnotes:

- 1. All samples shall be collected in a manner to yield representative data. A routine sampling program shall be developed in which samples are taken at the same location, same time, and same days of the week each month unless noted elsewhere. Occasional deviations from the routine sampling program are allowed, but the reason for the deviation shall be documented as an electronic attachment to the applicable discharge monitoring report. The Permittee shall report the results to the Environmental Protection Agency Region 1 (EPA) and the State of any additional testing above that required herein, if testing is in accordance with 40 CFR Part 136. Any change in sampling location from the one specified in the NOI shall be reviewed in writing by EPA and the State.
- 2. In accordance with 40 CFR § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is "sufficiently sensitive" when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term "minimum level" refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
- 3. When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., $< 50 \mu g/L$, if the ML for a

parameter is $50 \mu g/L$). For reporting an average based on a mix of values detected and not detected, assign a value of "0" to all non-detects for that reporting period and report the average of all the results.

4. A "grab" sample is an individual sample collected in a period of less than 15 minutes.

A "composite" sample is a composite of at least four (4) grab samples collected at approximately equal intervals on a flow weighted basis during the time at which the discharge is entering the receiving water over an interval representative of the process (e.g., a backwash cycle).

The timing of grab samples (e.g., for pH and total residual chlorine) shall correspond with the timing of composite sampling for the other parameters.

- 5. The daily maximum flow limit allowed by this General Permit shall be equal 1.0 million gallons per day (MGD).
- 6. The pH shall be within the following range based on State and waterbody classification:

Massachusetts (Class A and B): 6.5 - 8.3 S.U. and the discharge shall not cause a change in pH of the receiving water more than 0.5 S.U. outside of the natural background conditions.

The minimum and maximum pH sample measurement values for the month shall be reported in standard units (S.U.).

- 7. Limits and monitoring for total residual chlorine (TRC) are only required for discharges that have been previously chlorinated or contain residual chlorine.
- 8. TRC analysis must be completed using a test method in 40 CFR Part 136 that achieves a minimum level no greater than 20 μ g/L. For any limits below this minimum level, the compliance level for the limit will be set at 20 μ g/L.
- 9. N/A
- 10. N/A
- 11. N/A
- 12. N/A
- 13. N/A
- 14. N/A
- 15. N/A
- 16. N/A

17. All permittees are required to sample for PFAS analytes (Appendix J) and Adsorbable Organic Fluorine (AOF). Monitoring for PFAS analytes begins six months from the permittee's authorization date during the first full semi-annual period. Semi-annual periods are defined as January-June and July-December. Analysis is required using an analytical method approved in 40 CFR Part 136 or, if no method is approved, EPA Method 1633. Monitoring for AOF begins six months after EPA notifies the permittee that a multi-lab validated or CWA-approved method is available (e.g., EPA Draft Method 1621).

After completing three rounds of PFAS monitoring, the Permittee may request that PFAS monitoring be terminated if (1) none of the samples had detectable concentrations (as defined in the laboratory procedure) of any of the PFAS analytes, (2) the discharge is not from treated groundwater, and (3) the discharge is not directly to or upstream of a drinking water treatment source. EPA and the State will make a facility-specific determination based on the Permittee's monitoring termination request whether to discontinue the monitoring.

After completing three rounds of AOF monitoring, the Permittee may request that AOF monitoring be terminated if none of the samples had reportable concentrations of AOF (as defined in the laboratory procedure). EPA and the State will make a facility-specific determination based on the Permittee's monitoring termination request whether to discontinue the monitoring.

18. Report in nanograms per liter (ng/L). Until there is an analytical method approved in 40 CFR Part 136 for PFAS, monitoring shall be conducted using Draft Method 1633. Report in NetDMR the results of all PFAS analytes required to be tested in Method 1633, as shown in Appendix J.

For those permittees required to sample twice per year, monitoring shall be conducted twice per year as specified in the Permittee's authorization letter.

- 19. Report in nanograms per liter (ng/L). Until there is an analytical method approved in 40 CFR Part 136 for Adsorbable Organic Fluorine, monitoring shall be conducted using Draft Method 1621. Monitoring shall be conducted twice per year as specified in the Permittee's authorization letter
- 20. Whole Effluent Toxicity (WET) acute testing (LC50) is required once per year for all facilities unless the permittee can demonstrate a lack of toxicity (LC50 ≥ 100%) in its effluent from a minimum of five acute testing results. An elimination in testing must first be approved by EPA and the State.

WET acute testing shall be conducted in accordance with test procedures and protocols specified in Appendix A for discharges to fresh waterbodies. The Permittee shall test the daphnid, *Ceriodaphnia dubia*, if their discharge is to a fresh waterbody. Testing shall be conducted once annually during the period from April – September.

- 21. For Part I.A.1., Whole Effluent Toxicity Testing, the Permittee shall conduct the analyses specified in **Appendix A**, Part VI. CHEMICAL ANALYSIS for the effluent sample. If toxicity test(s) using the receiving water as diluent show the receiving water to be toxic or unreliable, the Permittee shall follow procedures outlined in **Appendix A**, Section IV., DILUTION WATER. Minimum levels and test methods are specified in **Appendix A**, Part VI. CHEMICAL ANALYSIS.
- 22. Ambient monitoring shall be conducted in the receiving water at a point immediately upstream/outside of the permitted discharge's zone of influence at a reasonably accessible location. If the discharge is to the headwater of a receiving waterbody and no upstream sampling point exists or no dilution has been granted the discharge, ambient sampling is not required. Ambient sampling is required even during monitoring periods when effluent is not discharged.

23. N/A

- 24. For Part I.A.1., Ambient Testing for WET, the Permittee shall conduct the analyses specified in **Appendix A**, Part VI. CHEMICAL ANALYSIS for the receiving water sample collected as part of the WET testing requirements. Such samples shall be taken from the receiving water at a point immediately upstream/outside of the permitted discharge's zone of influence at a reasonably accessible location, as specified in **Appendix A**. Minimum levels and test methods are specified in **Appendix A**, Part VI. CHEMICAL ANALYSIS.
- 25. A pH and temperature measurement shall be taken of each receiving water sample at the time of collection and the results reported on the appropriate DMR. These pH and temperature measurements are independent from any pH and temperature measurements required by the WET testing protocols.