UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

VIA EMAIL

December 1, 2023

Mark Piermarini, Assistant Director of Public Works
City of Leominster – Notown Water Treatment Facility
300 Route 2 East
Leominster, MA 01420
mpiermarini@dpw.leominster-ma.gov

Re: Authorization to discharge under the 2023 NPDES Potable Water Treatment Facilities General Permit (PWTFGP) – Authorization No. MAG640016 for the Notown Water Treatment Facility in Leominster, MA

Dear Mark Piermarini:

Based on correspondence received from the City of Leominster (the Permittee) on November 29, 2023, the U.S. Environmental Protection Agency (EPA) is modifying the conditions of the Notown Water Treatment Facility's (the Facility) National Pollutant Discharge Elimination System (NPDES) permit authorization under the Potable Water Treatment Facilities General Permit (PWTFGP or General Permit).

All conditions of the Permittee's previous authorization letter dated October 11, 2023, shall remain in effect except that a revised schedule of compliance shall be in effect to meet the total residual chlorine effluent limitations. Specifically, the Permittee will now have a schedule of compliance of 24 months to meet the total residual chlorine effluent limitations of 13 and 22 µg/L. The modifications to the compliance schedule can be found at the end of this letter in Part IV.D, highlighted in bold.

This modification shall take effect on the date of signature of this letter. If you have additional questions, please contact Nathan Chien at chien.nathan@epa.gov or (617) 918-1649.

Sincerely,

Weitzler, Ellen
Digitally signed by Weitzler, Ellen
Date: 2023.12.01 09:28:15 -05'00'

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

cc: Xiaodan Ruan, MassDEP (xiaodan.ruan@state.ma.us)
Glen Wilson, Veolia Water (glen.wilson@veolia.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]	13 µg/L	22 µg/L	1/Week	Grab
Total Aluminum[9,10]	234 µg/L	430 µg/L	1/Month	Composite
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)	---	Report ≥ %	1/Year	Composite
C-NOEC (Chronic WET Testing)	---	Report ≥ %	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

Effluent Characteristic	Effluent Limitation		Monitoring Requirements[1,2,3]	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[4]
Total Organic Carbon	---	Report mg/L	1/Year	Composite

Ambient Characteristic[22]	Reporting Requirements		Monitoring Requirements[1,2,3]	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[4]
Total Aluminum[10]	---	Report mg/L	1/Quarter	Grab
Dissolved Organic Carbon[23]	---	Report mg/L	1/Quarter	Grab
Total Hardness (as $CaCO_3$)[23]	---	Report mg/L	1/Quarter	Grab
pH[23]	---	Report mg/L	1/Quarter	Grab
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 µg/L, if the ML for a parameter is 50 µg/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 µg/L. For any limits below this minimum level, the compliance level for the limit will be set at 20 µg/L.

9. The Facility is subject to site-specific aluminum limitations and a 24-month compliance schedule as outlined in Part IV.D below. Until the 24-month period ends, the Permittee shall monitor their discharge for total aluminum once per month.

10. Permittees required to monitor for Total Aluminum must monitor both the effluent and the ambient receiving water unaffected by the discharge. The ambient sampling point shall be immediately upstream, outside of the permitted discharge's zone of influence at a safe and reasonably accessible location. For two or more outfalls in close proximity discharging to the same receiving water, monitoring is only required for one ambient sampling location upstream/outside of both outfalls' zone of influence.

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 and chronic testing (C-NOEC) shall be performed by the permittee upon request by EPA and/or the State.

    WET acute and chronic testing shall be conducted in accordance with test procedures and protocols specified in Appendix A and B 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/B**, 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/B**, Section IV., DILUTION WATER. Minimum levels and test methods are specified in **Appendix A/B**, 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. Quarterly monitoring and reporting for dissolved organic carbon (DOC), total hardness as $CaCO_3$, and pH will be used to derive site-specific aluminum criteria. These analytes shall be collected concurrently with ambient total aluminum sampling. Total hardness and pH analysis used for annual WET sampling can be used to satisfy the third quarter reporting requirement.

24. For Part I.A.1., Ambient Testing for WET, the Permittee shall conduct the analyses specified in **Appendix A/B**, 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 or B. Minimum levels and test methods are specified in **Appendix A/B**, 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.

Part IV. Special Conditions

D. Schedules of Compliance

1. The Permittee will have a schedule of compliance of 24 months for the total aluminum effluent limitations of 234 and 430 µg/L ***and for the total residual chlorine effluent limitations of 13 and 22 µg/L***.

   During the compliance schedule, the Permittee shall continue monitoring for total aluminum in their discharge at a frequency of once per month. ***In addition, during the compliance schedule, the Permittee shall comply with interim effluent limitations for total residual chlorine of 110 and 190 µg/L.***

   Within twelve (12) months of the effective date of the authorization to discharge under the General Permit, the Permittee shall submit to EPA and MassDEP a status report relative to the process improvements necessary to achieve the ***total aluminum and total residual chlorine effluent limits***.