

**RESPONSE TO COMMENTS  
NPDES PERMIT NO. MA-NHG580000  
SMALL WASTEWATER TREATMENT FACILITIES GENERAL PERMIT  
MODIFICATION**

The U.S. Environmental Protection Agency's New England Region (EPA) is issuing a Final National Pollutant Discharge Elimination System (NPDES) Permit modification for the Small Wastewater Treatment Facilities General Permit Modification. This permit is being issued under the Federal Clean Water Act (CWA), 33 U.S.C., §§ 1251 *et seq.*

In accordance with the provisions of 40 Code of Federal Regulations (CFR) §124.17, this document presents EPA's responses to comments received on the Draft NPDES General Permit # MA-NHG580000 ("Draft General Permit"). The Response to Comments explains and supports EPA's determinations that form the basis of the Final General Permit. From October 27, 2022 through January 25, 2023, EPA solicited public comments on the Draft General Permit.

EPA received comments from:

- Town of Peterborough, NH, dated January 25, 2023
- Town of Pittsfield, NH, dated January 24, 2023
- Town of Hopedale, MA, dated January 23, 2023
- Town of Marion, MA, dated January 23, 2023
- Buzzards Bay Coalition, dated January 25, 2023
- Charles River Watershed Association, dated January 23, 2023

Although EPA's knowledge of the facility has benefited from the various comments and additional information submitted, the information and arguments presented did not raise any substantial new questions concerning the permit that warranted a reopening of the public comment period. EPA does, however, make certain clarifications and changes in response to comments. These are explained in this document and reflected in the Final General Permit. Below EPA provides a summary of the changes made in the Final General Permit. The analyses underlying these changes are contained in the responses to individual comments that follow.

A copy of the Final General Permit and this response to comments document will be posted on the EPA Region 1 web site: [http://www.epa.gov/region1/npdes/permits\\_listing\\_ma.html](http://www.epa.gov/region1/npdes/permits_listing_ma.html).

A copy of the Final General Permit may be also obtained by writing or calling Michele Duspiva, U.S. EPA, 5 Post Office Square, Suite 100 (Mail Code: 06-4), Boston, MA 02109-3912; Telephone: (617) 918-1539; Email [duspiva.michele@epa.gov](mailto:duspiva.michele@epa.gov).

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**I. Summary of Changes to the Final General Permit**

1. A typographical error in Peterborough’s authorization has been corrected to indicate “N/A” under footnote 10 of Table 1 in Part III.A. See Response 8.
2. Pittsfield’s more stringent monthly average ammonia nitrogen limit has been added to Part IV.E.1 of the Final General Permit, allowing for an 18-month compliance schedule. See Response 14.
3. Pittsfield’s new monthly average lead limit has been added to Part IV.E.1 of the Final General Permit, allowing for an 18-month compliance schedule. See Response 16.
4. The monthly average aluminum limits for Hopedale, North Brookfield, Templeton, Charlton and MCI-Concord have been modified in Attachment E of the Final General Permit. See Response 26.
5. The Marion Water Pollution Control Facility (WPCF) has been removed from the list of eligible facilities in Attachment E of the Final General Permit. See Response 33.

**II. Responses to Comments**

Comments are reproduced below as received; they have not been edited.

**A. Comments from Seth Maclean, Public Works Director, Nate Brown, Utilities Superintendent, Jaime Jarest, Chief Operator, Wastewater Treatment Facility on behalf of the Town of Peterborough, NH, dated January 25, 2023**

### Comment 1

This permit represents a significant increase in the quantity of new compliance requirements from the Town’s current permit. This additional work is costly and will result in increases in laboratory costs, labor, and efforts for permit compliance tracking. The compliance tracking will be important to meet all the time bound deliverables for submittals and reports scattered throughout the permit. This is challenging for a small New Hampshire community which has limited staff and are already stretched to meet the current permit requirements. Just like many other municipalities we are challenged to maintain staffing levels with the national workforce shortage and further in New Hampshire where we have a decreasing number of licensed wastewater operators. This permit will present challenges to adjust budgets for the additional sampling and manpower requirements. Below is a summary of the major changes required by the permit.

**Table 1 - New/adjusted Sampling and Analysis Requirements:**

Item	Annual No. Samples
Effluent Nitrogen Species	36
Effluent PFAS Species	96
TOC for WET	1
TP for WET	5 (biannually)
Ambient Characteristics	13
Influent Characteristics	56
Sludge Characteristics	8
Industrial Sampling for PFAS	Assume 20

We have approximately 1,700 accounts in Peterborough served by our system. Based on a brief estimate of costs for additional sampling and analysis this work will increase the laboratory budget by approximately 20%. In addition to sampling requirements the permit also sets out more stringent water quality-based limits for total residual chlorine (TRC), aluminum, lead, ammonia, and for chronic WET test limits. This additional work will put a strain on the existing WWTF staff to accommodate sample collection, tracking and reporting. We request reductions in the overall testing and sampling requirements in our comments below. Further, the town requests that requirements be delayed one year from the effective date of the permit so that we can readjust our budget to accommodate the additional costs.

### Response 1

EPA recognizes that the General Permit includes a variety of new monitoring requirements and that these may result in moderate cost increases. However, EPA also notes that some monitoring requirements for other pollutants were either removed or reduced for certain dischargers, which results in a moderate decrease in those monitoring costs. For example, the cyanide and arsenic monitoring requirements from Peterborough’s previous individual permit have been removed through the General Permit. Given that many of the eligible WWTFs have permits which expired many years ago, EPA acknowledges that there are various differences in monitoring frequency in the existing permits. Therefore, some facilities will see an increase in frequency for certain parameters and a decrease in frequency for other parameters, with the exception of PFAS monitoring which is new for everyone.

As discussed in more detail in the subsequent responses, EPA notes that these monitoring requirements will ensure that EPA obtains the necessary information for the next permit reissuance. As a general note, EPA has broad authority under the CWA and NPDES regulations to prescribe the collection of data and reporting requirements in NPDES Permits. *See* CWA § 308(a)(A), 33 U.S.C. § 1318(a)(A) (specifying that permittees must provide records, reports, and other information EPA reasonably requires); CWA § 402(a)(2), 33 U.S.C. § 1342(a)(2) (requiring permittees to provide data and other information EPA deems appropriate); 40 CFR § 122.41(h) (permittees shall furnish “any information” needed to determine permit compliance); 40 CFR § 122.44(i) (permittees must supply monitoring data and other measurements as appropriate); *see also, e.g., In re City of Moscow*, 10 E.A.D. 135, 170-71 (EAB 2001) (holding that EPA has “broad authority” to impose information-gathering requirements on permittees); *In re Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. 661, 671-72 (EAB 2001) (holding that CWA confers “broad authority” on permit issuers to require monitoring and information from permittees).

Regarding staffing, EPA acknowledges that the wastewater industry is facing general staffing shortages. It remains the obligation of EPA, however, to impose appropriate conditions in an NPDES permit to implement the objectives of the Clean Water Act.

Finally, EPA does not agree that a delay in these requirements is appropriate but notes that the requirements do not begin until the date indicated in an authorization letter which will be issued several months after the permit modification is finalized. EPA expects this time will be adequate for the Town to adjust its budget as necessary to comply with the requirements of the permit once it become effective.

This comment does not result in any change to the Final General Permit.

## **Comment 2**

Lead: Effluent limit has been reduced from 0.54 ug/L to 0.4 ug/L. The compliance limit is 0.5 ug/L average monthly because the minimum detection limits for the lead laboratory test is 0.5 ug/L. The Town requests a 1 year compliance schedule when the limit changes from the compliance limit at 0.5 ug/L to the permit limit of 0.4 ug/L. This compliance time frame will be used to assess the adjustments needed in operations to meet the lower limit. We are currently unsure if the 0.4 ug/L would be met under the current operation of the facility because the laboratory analysis does not accurately report below 0.5 ug/L.

## **Response 2**

EPA notes that the compliance limit of 0.5 ug/L will remain in effect throughout this permit term and may only be changed through a subsequent permit modification or reissuance. If the limit changes to 0.4 ug/L (or any other more stringent value) in the future, EPA will consider implementing a compliance schedule at that time.

This comment does not result in any change to the Final General Permit.

### **Comment 3**

Total Nitrogen Species (TN, TKN and Nitrate and Nitrite): Testing of total nitrogen species adds additional sampling of WWTF effluent. The Fact Sheet (page 8 and 9 of 36) to the individual permit NPDES No. NH0100650 indicates that EPA is concerned about nitrogen discharges to the Merrimack River Watershed and that the New Hampshire Department of Environmental Services was working on a TMDL for dissolved oxygen and nutrients for the Contoocook River. The Town would appreciate an update on the status of those efforts.

#### **Response 3**

This comment refers to the individual NPDES permit for Peterborough issued in 2015.

Regarding nitrogen discharges in the Merrimack River watershed, EPA continues to collect nitrogen monitoring in all recently issued NPDES permits in the Merrimack River Watershed. The Merrimack River is a large and densely populated watershed including 40 POTW discharges in Massachusetts and New Hampshire. EPA estimates that approximately 15,000 lb/day of nitrogen is discharged by POTWs into the freshwater portion of the watershed and another 2,000 lb/day into the marine portion. Recent nitrogen data collected by CDM Smith in 2014 and 2016 in the estuarine portions of the Merrimack River indicates elevated total nitrogen and chlorophyll 'a' levels. High nutrient concentrations can lead to increased levels of chlorophyll 'a', therefore chlorophyll 'a' can be an indicator of elevated nutrient concentrations. In samples with salinity greater than 10 ppt, total nitrogen ranged from 0.442 to 1.67 mg/L while chlorophyll 'a' ranged from 4 to 42 ppt<sup>1</sup>. EPA also collected samples on the outgoing tide in 2017 in this area and found total nitrogen levels in the range of 0.62 mg/L to 1.3 mg/L and chlorophyll 'a' ranging from 2 to 11 ppt in samples with salinity greater than 10 ppt. EPA is concerned about the impacts that these nitrogen levels may be having on aquatic life in the estuary as most of these results are outside the range typically found in healthy estuaries in Massachusetts<sup>2</sup>. However, more data is necessary to determine whether there is reasonable potential for nitrogen discharges from these facilities to cause or contribute to a violation of the narrative nutrient criteria in the Merrimack River estuary, particularly data that characterizes aquatic life designated uses that may be affected in this area so that the narrative criteria can be interpreted numerically. In the meantime, EPA finds that quantifying the load of total nitrogen from these facilities in the Merrimack River watershed is an important first step to understanding the nitrogen load from point sources and their potential impact on the estuary.

Regarding the Contoocook TMDL, EPA notes that this TMDL has not yet been completed and EPA is not aware of any effort to move it forward at this time.

### **Comment 4**

PFAS Species Effluent Testing: PFAS testing is a new requirement and an increase in the amount of testing at the WWTF. See general comment above. The Town requests that the

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<sup>1</sup> CDM Smith/US Army Corps of Engineers New England District, Merrimack River Watershed Assessment Study Phase III Final Monitoring Data Report August 2017, Appendix C.

<sup>2</sup> Howes, Brian, et al, Site-Specific Nitrogen Thresholds for Southeastern Massachusetts Embayments: Critical Indicators Interim Report, Massachusetts Estuaries Project, December 22, 2003.

frequency of testing be reduced from 2 times per year to 1 time per year. After two years if the results are below detection limits or non-detect we request this testing requirement be eliminated. The Town requests permit language that would allow this change to be approved as a minor permit modification after the collection of 2 years' worth of semiannual sampling.

#### **Response 4**

As described in the 2021 Response to Comments for this General Permit, EPA notes that monitoring for the full permit term (*i.e.*, 5 years) would result in 10 samples of the influent, effluent and sludge for all facilities (with the exception of lagoon facilities with only 1 sludge sample). Given the inherent variability of wastewater at each WWTF and the lack of historic PFAS data, EPA considers this level of sampling to be the minimum to fully characterize the discharge with respect to PFAS. Therefore, EPA does not consider it appropriate to provide any “off ramps” within this initial permit term. However, EPA will evaluate all available data in the next permit reissuance and may reduce or remove PFAS monitoring for some or all of the facilities depending on updated information and water quality criteria.

This comment does not result in any change to the Final General Permit.

#### **Comment 5**

Ambient Characteristics at Time of WET Tests: This permit has several sampling requirements for ambient conditions in the Contoocook River. The Town believes that much of this information will be used for future adjustments to the biannual impairment listing evaluation by the New Hampshire Department of Environmental Services. The data is not necessary for the performance of a WET test and does not inform the results of the testing. This unfairly shifts the burden of sampling and associated labor and costs from the State to the municipality. The Town requests this sampling be removed.

#### **Response 5**

The commenter objects to the ambient monitoring requirements. EPA notes that this includes parameters required as part of the WET tests (*i.e.*, hardness, ammonia, metals and total organic carbon [TOC]) as well as other parameters not required as part of the WET tests (*i.e.*, dissolved organic carbon [DOC], pH, temperature and total phosphorus).

First, EPA notes that the monitoring required in the WET testing protocol is useful in at least two ways. First, these data may be used to determine the source of any toxic impacts. Second, this data may be used by EPA to characterize the discharge as well as the receiving water with respect to the various pollutants (such as cadmium, copper, zinc, ammonia, etc.) in determining whether the discharge has the reasonable potential to cause or contribute to an excursion of water quality standards in future permitting proceedings. While these monitoring requirements have been included in the WET testing protocols for many years, EPA has recently required these results to be reported in each relevant DMR. This reporting does not represent separate monitoring requirements but merely requires the Permittee to report the results from the WET test into the DMR to facilitate access to the data by EPA and by the public through EPA’s Enforcement and Compliance History Online (ECHO) tool.

Second, the ambient monitoring for DOC, pH, temperature and total phosphorus which are not part of the WET tests, may also be used to characterize the discharge in future permitting proceedings. Specifically, as noted in the 2021 Small WWTF General Permit Fact Sheet at 29, EPA's 2018 *National Recommended Water Quality Criteria* for aluminum are calculated based on water chemistry parameters that include DOC, hardness and pH. Since aluminum monitoring is required as part of each WET test, an accompanying new testing and reporting requirement for DOC, in conjunction with each WET test, is warranted in order to assess potential impacts of aluminum in the receiving water. Further, as noted in the 2021 Small WWTF General Permit Fact Sheet at 22, the freshwater ammonia criteria are dependent on pH and temperature so ambient monitoring for these parameters is warranted in order to assess potential impacts of ammonia in the receiving water under updated conditions at the time of the next permit reissuance. Finally, as noted in the 2021 Small WWTF General Permit Fact Sheet at 25-26, ambient phosphorus monitoring is likewise warranted to characterize the receiving water with respect to phosphorus in the next permit reissuance.

As a general note, EPA has broad authority under the CWA and NPDES regulations to prescribe the collection of data and reporting requirements in NPDES Permits. *See* CWA § 308(a)(A), 33 U.S.C. § 1318(a)(A) (specifying that permittees must provide records, reports, and other information EPA reasonably requires); CWA § 402(a)(2), 33 U.S.C. § 1342(a)(2) (requiring permittees to provide data and other information EPA deems appropriate); 40 CFR § 122.41(h) (permittees shall furnish "any information" needed to determine permit compliance); 40 CFR § 122.44(i) (permittees must supply monitoring data and other measurements as appropriate); *see also, e.g., In re City of Moscow*, 10 E.A.D. 135, 170-71 (EAB 2001) (holding that EPA has "broad authority" to impose information-gathering requirements on permittees); *In re Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. 661, 671-72 (EAB 2001) (holding that CWA confers "broad authority" on permit issuers to require monitoring and information from permittees).

#### **Comment 6**

PFAS Species Influent Testing: PFAS testing is a new requirement and an increase in the amount of testing at the WWTF. See general comment above. The Town requests that the frequency of testing be reduced from 2 times per year to 1 time per year. After two years if the results are below detection limits or non-detect we request this testing requirement be eliminated. The Town requests permit language that would allow any changes to the PFAS testing requirements to be approved as a minor permit modification after the collection of 2 years' worth of semiannual sampling.

#### **Response 6**

See Response 4.

#### **Comment 7**

Sludge Characteristics: PFAS testing is a new requirement and an increase in the amount of testing at the WWTF. See general comment above. The Town does not see the need to conduct PFAS testing on its sludge because the waste is disposed of by a third-party contractor. The

Town would be amendable to beginning this testing if it changes to a land use or other beneficial reuse for its sludge. Should this requirement remain, the Town requests that the frequency of testing be reduced from 2 times per year to 1 time per year. After two years if the results are below detection limits or non-detect we request this testing requirement be eliminated. The Town requests permit language that would allow any changes to the PFAS testing requirements to be approved as a minor permit modification after the collection of 2 years' worth of semiannual sampling.

#### **Response 7**

EPA disagrees with the comment that sludge monitoring for PFAS is not necessary when the sludge is being handled by a third-party contractor. Further, EPA disagrees that sludge monitoring for PFAS would only be beneficial if the sludge is land applied or reused. Rather, EPA finds that effluent and sludge monitoring are necessary to fully characterize discharges of PFAS and matching these data with influent data is important to validate that those discharges are consistent with the level entering the facility and to better understand long-term trends and fate of PFAS. For example, it may be determined that significant PFAS in a facility's influent is not found in the effluent or sludge, which could indicate the treatment process is breaking down these chemicals. It is possible that certain treatment processes break down PFAS into more (or less) persistent chemicals in the environment.

Additionally, EPA notes that this approach is consistent with recent EPA guidance.<sup>3</sup>

For these reasons, EPA confirms that influent, effluent, and sludge monitoring are all necessary and will remain in the Final General Permit.

See Response 4 regarding the request to reduce frequency during the permit term.

#### **Comment 8**

Footnote 10 to Table 1: This footnote refers to fecal coliform which is not a permit limit for Peterborough. Recommend the text be replaced with "N/A" like other footnotes that are not applicable to this specific authorization.

#### **Response 8**

EPA agrees that this footnote is not applicable, and the facility-specific draft authorization was a typographical error. The final authorization will be corrected accordingly, and this does not result in any change to the Final General Permit.

#### **Comment 9**

Footnote 21 to Table 1: A portion of this footnote refers to additional phosphorous testing and requires biannual sampling once per month from May through September in the Contoocook River. This testing is a new requirement and an increase in the amount of testing at the WWTF

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<sup>3</sup> Radhika Fox, Assistant Administrator, EPA to Water Division Directors, EPA Regions 1-10, December 6, 2022, Subject: "Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs." Available at: [https://www.epa.gov/system/files/documents/2022-12/NPDES\\_PFAS\\_State%20Memo\\_December\\_2022.pdf](https://www.epa.gov/system/files/documents/2022-12/NPDES_PFAS_State%20Memo_December_2022.pdf)



and appears to be a pass of responsibility for ambient sampling from the State to the municipality. See comment regarding Ambient Characteristics at Time of WET Tests. Further this effort requires development of sampling Quality Assurance Plans which is a document that will require hiring a third party to produce. The Town requests this sampling be removed.

### **Response 9**

See Response 5 regarding the justification for the ambient phosphorus monitoring.

In addition to collecting sufficient data to ensure each discharge will continue to meet WQS in the next permit term (as discussed in Response 5), EPA acknowledges that this data may also be useful to the State in assessing waters for impairments in the future. EPA does not consider this a “pass of responsibility” given that these monitoring requirements would be necessary even if the data were only to be used for the next permit reissuance. If the Permittee needs any assistance in developing the QAPP, they are welcome to contact the State.

### **Comment 10**

Part IV.C.3 PFAS Testing of Industrial Discharges: PFAS testing is a new requirement and an increase in the amount of testing at the WWTF. See general comment above. The Town objects to the inclusion of this requirement in the permit. The Town will already be testing the WWTF influent for PFAS based on the current requirements of the permit. It is unclear why the WWTF would have to separately sample industrial users and we believe this is overly burdensome. The Town requests that the requirement be removed. If this requirement is not removed, the Town requests that the term "Contaminated Sites" be changed to "Known or Suspected PFAS-Contaminated Sites" similar to what was done in a recent final permit for NH0109000.

### **Response 10**

See Response 4.

Regarding the need for both influent at the WWTF and effluent from industrial users, EPA considers both to be necessary to determine sources of PFAS. For example, if the influent shows elevated levels of PFAS, then the industrial user data could be used to identify the specific source of PFAS and to inform future decisions regarding source reduction.

EPA also notes the Permittees may incorporate requirements on industrial users through regulatory mechanisms such as local limits, pretreatment programs, industrial discharge permits, and/or sewer use ordinances. Such requirements may include annual PFAS monitoring. Thus, the Permittees may transfer all or part of the monitoring responsibilities associated with this monitoring requirement to the industrial users, as the Permittees deem appropriate.

Additionally, EPA notes that this approach is consistent with recent EPA guidance.<sup>4</sup>

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<sup>4</sup> Radhika Fox, Assistant Administrator, EPA to Water Division Directors, EPA Regions 1-10, December 6, 2022, Subject: “Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring

Finally, while the comment about contaminated sites is out of scope for this permit modification (*i.e.*, this provision was not subject to comment and/or revision at this time), EPA does clarify that the intention is only to require monitoring for Known or Suspected PFAS-Contaminated Sites as suggested in the comment.

This comment does not result in any change to the Final General Permit.

### **Comment 11**

Part IV.A.4.k Collection System Mapping: The Town is unsure if it can provide the exact information (date of installation, diameter, type of material, distance between manholes, etc.) requested in Item k. The Town request that the language be modified to be consistent with a recently issued final permit NH0109000 as follows:

"To the extent feasible, the pipe diameter, date of installation, type of material, distance between manholes, interconnections with collection systems owned by other entities, and the direction of flow shall be provided. If certain information is determined to be infeasible to obtain, a justification must be included along with the map. If EPA disagrees with the assessment, it may require the map to be updated accordingly."

### **Response 11**

While this comment about collection system mapping is out of scope for this permit modification (*i.e.*, this provision was not subject to comment and/or revision at this time), EPA clarifies that the intention of this permit condition matches the proposed language from this comment. If certain details are infeasible to obtain, a justification along these lines may be provided along with the map even without a change to the current permit language.

This comment does not result in any change to the Final General Permit.

## **B. Comments from Jennie Auster, P.E., Senior Environmental Engineer, Hoyle Tanner commenting on behalf of the Town of Pittsfield, NH, dated January 24, 2023.**

### **Comment 12**

The current total phosphorous limit of 1.5 lb/day has been reduced to 1.0 lb/day with the new draft permit. The frequency of testing is two (2) times per month in the new draft permit. It appears the existing lagoon facility could be compliant with this reduced limit at current flows.

### **Response 12**

EPA acknowledges this comment and appreciates the Town's efforts to ensure continued compliance with this more stringent phosphorus limit.

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Programs." Available at: [https://www.epa.gov/system/files/documents/2022-12/NPDES\\_PFAS\\_State%20Memo\\_December\\_2022.pdf](https://www.epa.gov/system/files/documents/2022-12/NPDES_PFAS_State%20Memo_December_2022.pdf)

### **Comment 13**

The current TRC average monthly limit of 57 ug/l has been reduced to 34 ug/l and the maximum daily TRC of 99 ug/l has been reduced to 59 ug/l in the new draft permit. The Pittsfield WWTF used a dechlorinating agent to minimize the TRC while maintaining adequate bacterial control. Monitoring frequency for TRC has not changed. The forthcoming comprehensive WWTF evaluation will consider alternative technologies to further reduce or eliminate TRC from the effluent.

#### **Response 13**

EPA acknowledges this comment and appreciates the Town's efforts to ensure continued compliance with these more stringent TRC limits.

### **Comment 14**

The new draft permit includes a reduction in effluent Ammonia-Nitrogen from 15.7 mg/l to 4.4 mg/l with an increased monitoring frequency from one (1) time per week to two (2) times per week. To consistently meet the new ammonia limit in the draft permit, the Town will need to upgrade the existing facility from an aerated lagoon facility to an activated sludge process. This is in addition to needing to upgrade the facility to consistently meet the new metals limits. The Town is committed to a planning study in 2023 with a bond vote in 2024 to obtain funding approval to advance with design and construction of a major facility upgrade.

#### **Response 14**

EPA acknowledges this comment and appreciates the Town's efforts to ensure continued compliance with this more stringent ammonia limit.

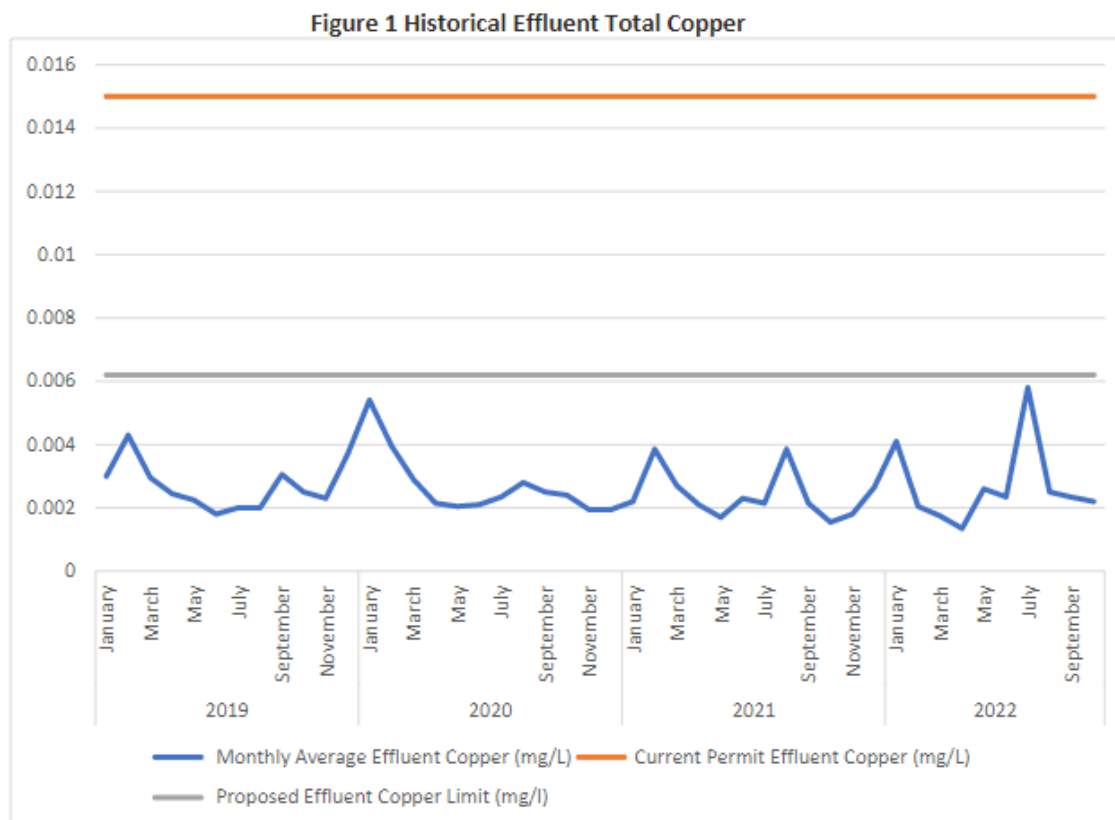
Based on this comment, EPA reviewed the ammonia effluent data during the review period and found that there were 25 monthly average values as presented in Appendix A of the 2022 Statement of Basis. EPA notes that five of these 25 samples exceeded the proposed limit of 4.4 mg/L and the 95<sup>th</sup> percentile value of the effluent dataset was 8.8 mg/L. Therefore, EPA considers it appropriate to include an 18-month compliance schedule for ammonia in accordance with the terms of Part IV.E.1 of the General Permit. This 18-month compliance schedule is appropriate given that it was designed for "any newly established or more stringent water quality-based effluent limits which EPA has determined the Permittee is not expected to be in compliance with upon the effective date of the General Permit." Part IV.E.1 of the Final General Permit has been updated accordingly to include Pittsfield's more stringent monthly average ammonia nitrogen limit.

Should the Town need additional time to comply with this limit, they are welcome to contact EPA's Enforcement and Compliance Assurance Division (ECAD) to discuss the possibility of a compliance schedule through an administrative order.

For a further response regarding the requested schedule of compliance, see Response 18 below.

### Comment 15

The new draft permit includes a reduction in the average monthly total copper limit of 15 ug/l to a new limit of 6.2 ug/l to be measured twice per month. The existing lagoon facility has been compliant with the 15 ug/l limit, but the lower limit may require additional process steps to consistently remove copper from the effluent. Figure 1 shows historical effluent total copper data noting that the maximum effluent TC in the data set was 5.8 ug/l.



### Response 15

EPA acknowledges this comment and appreciates the Town’s efforts to ensure continued compliance with this more stringent copper limit. EPA also notes that the figure presented in the comment appears to demonstrate that the facility is able to consistently achieve the lower copper limit. This level of historic compliance is also confirmed by the copper effluent data presented for Pittsfield in Appendix A of the 2022 Statement of Basis indicating that only 1 monthly average value (8 µg/L) out of 60 monthly average results exceeded the proposed limit of 6.2 µg/L and the 95<sup>th</sup> percentile of the effluent dataset was 4.5 µg/L (*i.e.*, below 6.2 µg/L). Therefore, EPA confirms that a compliance schedule for this more stringent copper limit is not appropriate.

For a further response regarding the requested schedule of compliance, see Response 18 below.

## **Comment 16**

The new draft permit includes an average monthly total lead limit of 0.5 ug/l to be measured twice per month. This is a new effluent parameter for the Pittsfield WWTF. Lead would be removed through solids settling in the lagoons, which is of unknown effectiveness relative to the new limit.

### **Response 16**

EPA acknowledges this comment and appreciates the Town's efforts to ensure compliance with this new lead limit. Based on this comment, EPA reviewed the effluent data during the review period used to support the need for this new limit and found that there were 5 effluent samples (from annual WET tests) as presented in Appendix A of the 2022 Statement of Basis. EPA notes that one of these five samples (0.9 µg/L) exceeded the proposed limit of 0.5 µg/L. Based on the limited dataset (*i.e.*, less than 10 samples) and the exceedance of one result, EPA considers it appropriate to include an 18-month compliance schedule for lead in accordance with the terms of Part IV.E.1 of the General Permit. This 18-month compliance schedule is appropriate given that it was designed for "any newly established or more stringent water quality-based effluent limits which EPA has determined the Permittee is not expected to be in compliance with upon the effective date of the General Permit". Part IV.E.1 of the Final General Permit has been updated accordingly to include Pittsfield's new monthly average lead limit.

Should the Town need additional time to comply with this limit, they are welcome to contact EPA's Enforcement and Compliance Assurance Division (ECAD) to discuss the possibility of a compliance schedule through an administrative order.

For a further response regarding the requested schedule of compliance, see Response 18 below.

## **Comment 17**

The new draft permit includes an average monthly total aluminum limit of 87 ug/l to be measured twice per month. This is a new effluent parameter for the Pittsfield WWTF. Currently, aluminum would be removed through solids settling in the lagoons, which is of unknown effectiveness relative to the new limit.

The draft permit states three (3) years from the effective permit date for compliance with the new total aluminum limit. Per Item IV.E.3.a., the Town requests this to be effective forty-two (42) months following the effective date of the permit, when the Permittee shall submit to EPA and NHDES a status report relative to construction of the facility improvements required to achieve the total aluminum limit.

The draft permit states that "the average monthly effluent limit for total aluminum shall be subject to a schedule of compliance whereby the limits take effect three (3) years after the effective date of the authorization. For the period starting on the effective date of this authorization and ending three (3) years after the effective date, the Permittee shall monitor at the frequency specified in Table 1 and report only the monthly average aluminum concentration on the monthly DMR. After this initial three (3) year period, the Permittee shall comply with the

monthly average total aluminum limit of 87 µg/L. The Permittee shall submit an annual report due by January 15<sup>th</sup> of each of the first three (3) years of the permit that will detail its progress towards meeting the final aluminum effluent limit.”

### **Response 17**

EPA acknowledges this comment and appreciates the Town’s efforts to ensure compliance with this new aluminum limit. EPA also notes that the General permit includes an additional provision related to the aluminum compliance schedule at Part IV.E.3.b, as follows:

“If during the three-year period after the effective date of the permit, the State adopts revised aluminum criteria but EPA has not yet approved them, then the Permittees may request a permit modification, pursuant to 40 CFR § 122.62(a)(3), for a further delay in the effective date of the final aluminum effluent limits. If new criteria are approved by EPA before the effective date of the final aluminum effluent limit, the Permittees may apply for a permit modification, pursuant to 40 CFR § 122.62(a)(3), to revise the time to meet the final aluminum effluent limit and/or for revisions to the permit based on whether there is reasonable potential for the facility’s aluminum discharge to cause or contribute to a violation of the newly approved aluminum criteria.”

EPA notes that this additional provision may allow for an extension of the three-year aluminum compliance schedule if New Hampshire adopts revised aluminum criteria during that time. In any case, should the Town need additional time to comply with this limit, they are also welcome to contact EPA’s Enforcement and Compliance Assurance Division (ECAD) to discuss the possibility of an extension to the compliance schedule through an administrative order.

For a further response regarding the requested schedule of compliance, see Response 18 below.

### **Comment 18**

To this end, the Town of Pittsfield has already taken positive steps to address the short comings of the existing wastewater treatment facility by soliciting for engineering services to begin the planning and design phase for an upgrade of the existing facilities. The Town has no desire to be in violation of their NPDES permit and is committed to making a good faith effort to move forward with implementation of a new upgraded treatment facility to be able to meet the new discharge limitations.

On behalf of the Town, we request that the compliance schedule be revised to allow the Town to complete planning, final design, and construction phases of an upgrade to the existing treatment facilities. We request that the new permit be amended to have the existing permit limits as interim limits until construction is completed and commissioned. The following compliance milestones are requested:

- Within twelve (12) months of the effective date of the permit, the Permittee shall submit to EPA and NHDES a status report relative to the planning and design of the facilities necessary to achieve the permit limit.
- Within twenty-four (24) months of the effective date of the permit, the Permittee shall complete design of the facility improvements required to achieve the new ammonia and metals limits.
- Within thirty (30) months of the effective date of the permit, the Permittee shall initiate construction of the facility improvements required to achieve the new ammonia and metals limits.
- Within forty-two (42) months of the effective date of the permit, the Permittee shall submit to EPA and NHDES a status report relative to construction of the facility improvements required to achieve the new ammonia and metals limits.
- Within fifty-four (54) months of the effective date of the permit, the Permittee shall complete construction of the facility improvements required to achieve the new ammonia and metals limits.

### **Response 18**

EPA acknowledges this comment and appreciates the Town's efforts to ensure continued compliance with these more stringent ammonia and metals limits. EPA has the authority, at its discretion, to include a schedule of compliance leading to compliance with the CWA and applicable regulations in NPDES permits. See 40 C.F.R. § 122.47(a). EPA notes that a compliance schedule in a permit must comply with 40 CFR § 122.47(a) and (a)(1) which indicates that a permitting authority must make a reasonable determination that a schedule of compliance is "appropriate" and that the schedule proposed requires compliance "as soon as possible."

In this case, EPA determined that it is appropriate to include a compliance schedule for ammonia (18 months), lead (18 months) and aluminum (3 years) in accordance with Part IV.E of the General Permit. See Responses 14, 16, and 17, respectively. However, EPA determined it is not appropriate to include a compliance schedule for copper. See Response 15.

Regarding the request in this comment for a longer (54 months) compliance schedule, EPA considers that it would not be appropriate to include a longer compliance schedule as a condition of the General Permit because it may not ensure compliance "as soon as possible." EPA's determination is based, in part, on the fact that Pittsfield is planning to conduct a planning study in 2023 (as noted in Comment 14) that will presumably inform the scope of the required upgrade. Given that this study may impact the appropriateness and feasibility of the deadlines proposed in the commenter's requested compliance schedule, EPA finds it would be most effective for the Permittee to coordinate with EPA's Enforcement and Compliance Assurance Division (ECAD) to include the results

of this planning study in the development of a schedule of compliance through an administrative order, as appropriate.

EPA's determination is also based on the fact that incorporating a compliance schedule in an administrative order allows for more flexibility should it need to be revised, whereas changes cannot be made as easily to a compliance schedule that is integrated into a General Permit without a major modification to the General Permit.

For these reasons, a longer compliance schedule has not been included in the General Permit. Should the Town need additional time to comply with these limits, such as the 54 months indicated in the comment, they are welcome to contact EPA's Enforcement and Compliance Assurance Division (ECAD) to discuss the possibility of a longer compliance schedule through an administrative order.

### **Comment 19**

The Town requests that load based limits only be provided for ammonia, eliminating the concentration limits. This will allow increased operational flexibility without increasing the effluent load to the receiving stream.

#### **Response 19**

As discussed on page 22 of the 2021 Fact Sheet for this Small WWTF General Permit, nitrogen in the form of ammonia can reduce a stream's dissolved oxygen concentration through nitrification and can be toxic to aquatic life. Due to the potential toxic impact<sup>5</sup> of elevated concentrations of ammonia, EPA finds that load-based limits only would not be protective of aquatic life and the concentration-based limits are necessary.

This comment does not result in any change to the Final General Permit.

### **Comment 20**

The draft permit contains increased monitoring and testing of specific parameters. Specifically, the draft permit proposes the following increased testing:

- Doubles the frequency of testing for Ammonia Nitrogen between 6/1 and 10/31 from once per week to twice per week,
- Proposes new monthly testing for Total Nitrogen, TKN, and Nitrate + Nitrite, and
- Proposes new PFAS testing for four (4) PFAS compounds testing (Q3; Q4) on the effluent.

While the Town understands the data is important to the EPA and to the State of NH DES, the limitations of the existing process will no doubt influence the data (negatively) when compared to monitoring results following a complete upgrade of the facility.

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<sup>5</sup> In contrast to other pollutants (*e.g.*, phosphorus) that do not present acutely toxic impacts to aquatic life and, therefore, may be regulated effectively with load-based limits only.



The cumulative effect of the increased sampling and analysis associated with the new draft permit monitoring requirements will significantly increase the Town's laboratory analytics budget and require additional manpower at the facility. The Town of Pittsfield's current budget (FY 2023) for all laboratory analyses performed by Eastern Analytical annually under current permit requirements is \$5,110. The laboratory analysis required for the new draft permit monitoring requirements will increase the annual monitoring/laboratory analysis expense another \$10,000 comprised of \$2,500 for labor and another \$7,500 annually for laboratory services (see attached quote from Eastern Analytical in Attachment A).

The Town requests that the testing for Ammonia Nitrogen between 6/1 and 10/31 remains at once per week to reduce the financial impact of the increased monitoring.

Note: EPA reviewed Attachment A referenced in this comment, but it is not reproduced in this Response to Comments document.

**Response 20**

See Response 1.

**Comment 21**

Operation and maintenance requirements of the collection system are now part of the new draft permit. The Town of Pittsfield has already begun development of a CMOM program in anticipation of the new permit and has submitted their six-month report to NHDES and EPA.

**Response 21**

EPA acknowledges this comment and appreciates the Town's efforts to ensure compliance with these CMOM requirements.

**Comment 22**

The new draft permit requires that sludge be monitored for pollutants (all Part 503 methods) and pathogen reduction and vector attraction reduction (land application and surface disposal) at a frequency based on the volume of sludge generated at the facility annually. The proposed requirements are indicative of a secondary sludge generated from a conventional activated sludge treatment process. The Pittsfield WWTF does not produce such a sludge. The primary and secondary sludge settles in the three (3) aerated lagoons and is retained for long periods between lagoon sludge removal operations (10 years or more). This sludge will be removed in the future from the lagoons and NH DES Residuals Management rules followed for proper dewatering and disposal.

**Response 22**

EPA clarifies that the sludge conditions (including monitoring) described in Part IV.D of the General Permit only apply to sludge that is being disposed. In other words, if the Permittee does not dispose of sludge during a given monitoring period, then they are not required to monitor the sludge based on Part IV.D of the permit during that monitoring period.

Note that this is not the case for PFAS monitoring described in Table 1, footnote 22, where PFAS monitoring is required for lagoon facilities once per permit term (in the first full 3<sup>rd</sup> calendar quarter following 6 months after EPA notifies the Permittee that an EPA multi-lab validated method for sludge is available) even if the sludge is not disposed of during that monitoring period.

This comment does not result in any change to the Final General Permit.

### **Comment 23**

Due to the number of concerns and requests in these comments the Town is requesting that after the Agency has considered these comments and modified the draft Permit, that the “revised draft permit”, Fact Sheet, and Reasonable Potential Analysis be reissued for public comment to allow the Town and other interested parties to review and comment on these documents before the “revised draft permit” is issued as a “final effective permit”.

#### **Response 23**

First, EPA notes that the comments submitted by the Town of Pittsfield did not raise any substantial new questions concerning the permit that warranted a reopening of the public comment period. Further, EPA notes that these comments did not result in any changes to the limits or conditions of the Final General Permit (other than allowing compliance schedules for ammonia nitrogen and lead, as discussed in Responses 14 and 16) which further supports EPA’s decision not to reopen the public comment period given that the Permittee has already commented on the permit limits and monitoring requirements that were in the Draft General Permit and they remain the same in the Final General Permit.

### **C. Comments from Timothy Watson, Hopedale Water & Sewer Manager, Town of Hopedale on behalf of the Town of Hopedale, MA, dated January 23, 2023**

#### **Comment 24**

As a facility deemed eligible for coverage under the aforementioned NPDES Small WWTF General Permit (Permit No. MAG580035), the Town of Hopedale has reviewed Permit Authorization No. MAG580035 issued by EPA, for the Hopedale Wastewater Treatment Facility (WWTF). The draft permit and authorization includes a number of items which are concerning to the Town of Hopedale. We offer the following comments on the draft permit and authorization, including addressing permit items or language that we believe should be changed, or which require additional explanation and/or justification from EPA.

The changes and comments in question are summarized as follows:

1. Comment on the lack of fact sheet or detailed basis for the information provided within the draft authorization.
2. Objection to the handling of aluminum in the draft authorization, including the reduction of the Maximum Daily Total Aluminum limit to 0.91 mg/L, and the lack of an appropriate change to the Average Monthly Total Aluminum limit, as described on page 2 of 19 of the draft authorization.

3. Objection to the reduction of the Total Copper limit to 7.5 µg/L (Monthly Average) and 11.4 µg/L (Maximum Daily), as described on page 2 of 19 of the draft authorization.
4. Objection to the changes in Ammonia limits in general, including the reduction of the ‘winter’ season limit, the use of a 7Q10 dilution factor for the ‘winter’ season, reduction of the May ‘shoulder season’ limit, and the reasonable potential calculation for the Acute criteria for the ‘summer’ and ‘shoulder’ seasons, as described on pages 3 and 7 of 19 of the draft authorization.
5. Comment on the new parameters included in the Whole Effluent Toxicity (WET) Testing as described on pages 4, 7, and 9 of 19 of the draft authorization.
6. Comment on the additional Total Phosphorus monitoring for both WET and Ambient Testing, as described on pages 4, 7, and 8 of 19 of the draft authorization.
7. Comment on the new requirement to sample for and report levels of PFAS compounds (including PFHxS, PFHpA, PFNA, PFOS, PFOA and PFDA), as described on pages 8 of 19 of the draft authorization.

The Town’s concerns regarding each of these above items are discussed in more detail as follows.

#### **Response 24**

EPA acknowledges this comment and has responded to the detailed comments regarding each issue below.

#### **Comment 25**

**Item 1 -Lack of Basis for Information:** The draft permit and authorization include very little information on establishment of new or reduced limits for the Hopedale WWTF. Individual permit renewals are accompanied by the preparation of a fact sheet to provide substantial information used in drafting the permit; and the Small General Permit and Authorization drafts lack this detailed information. With no detailed fact sheet provided, the Town finds it difficult to provide detailed comment on many of the permit adjustments, and questions the reasoning specific to the proposed changes. The Town requests that background information on the below comments be provided to the Town for review, and that adequate opportunity is provided to allow further comment before the permit modification and authorization are made final.

#### **Response 25**

EPA acknowledges that there are differences between an individual permit and a general permit primarily due to the need for a general permit to apply to multiple dischargers at the same time whereas an individual permit only applies to a single discharger. Given this difference, EPA has made every effort to ensure each eligible Permittee or other interested party was provided with all necessary information to review and comment on the 2022 Small WWTF General Permit modification. While certain details from an individual permit fact sheet may not be included in the General Permit Fact Sheet or Statement of Basis (*e.g.*, a detailed description of each eligible facility), EPA confirms that all necessary information regarding the development of permit limits and other permit requirements was included and available for review and comment. Specifically, the 2022 Draft General Permit modification included a 2022 Statement of Basis that

provided all necessary rationale and supporting information either directly or by reference to other documents that were publicly available throughout the public notice period. Given that this permitting action is a modification to an existing general permit, the first page of the 2022 Statement of Basis indicates “The 2021 Fact Sheet supporting the 2021 Small WWTF General Permit issuance is also included as the basis for this permit action.” Therefore, both the 2022 Statement of Basis (describing and justifying provisions being modified) and the 2021 Fact Sheet<sup>6</sup> (describing and justifying provisions in the original 2021 reissuance of this General Permit) were available throughout the public notice period and provided all necessary information and rationale for the various permit terms and conditions.

Additionally, EPA notes that draft individual permits include facility-specific discharge monitoring data (DMR) summaries as well as site-specific calculations for the establishment of new or more stringent limitations. EPA confirms that these were included with the Draft General Permit for each eligible facility (including the Hopedale facility) and were included in Appendix A and Appendix B of the 2022 Statement of Basis, respectively. Further, throughout the public comment period EPA also provided a “draft authorization” for each eligible facility which showed exactly how the General Permit, if finalized as proposed, would apply to each eligible facility.

Based on EPA’s review of Comments 26 through 32 below as well as the opening statement of this comment which refer only to the “draft permit and authorization,” it is unclear whether the commenter was aware of each of these documents available for review. In any case, EPA disagrees that the draft permit and record lacked sufficient information to allow for an informed review, as evident by the above detailed available information.

Additionally, before the public comment period began on October 27, 2022, EPA conducted an informational webinar<sup>7</sup> on October 13, 2022, to assist any interested parties in their review of the General Permit and to answer any clarifying questions. If any interested party was still unclear regarding where to find any supporting information, EPA was also available to answer any clarifying questions during the public comment period and the Town could have easily requested assistance to ensure their review of the permit was thorough. EPA highlights that among the 21 additional eligible facilities being added to the General Permit through this modification as well as various other interested parties who reviewed the Draft General Permit modification, only two sets of comments were received (*i.e.*, from the Town of Hopedale and the Town of Marion, below) indicating this challenge in locating the underlying rationale for certain permit terms (*i.e.*, the 2021 Fact Sheet).

Given that this information was available throughout the public notice period, EPA disagrees that the Town did not have adequate opportunity to review and comment on the

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<sup>6</sup> Available throughout the public comment period at: <https://www3.epa.gov/region1/npdes/wwtf/2021-small-wwtf-fact-sheet.pdf>.

<sup>7</sup> EPA records indicate Timothy Watson (representing Hopedale) and Nathaniel Munafo (representing Marion) both attended this webinar.

background information regarding any permit limits or other conditions established by this General Permit modification. Therefore, EPA has responded to the more detailed comments below but does not agree that this comment warrants a reopening of the comment period.

## **Comment 26**

**Item 2 – Aluminum**: The limits for aluminum in the permit need to be revisited by EPA. The Maximum Daily Total Aluminum limit in the authorization has been modified from 1.2 mg/L in the prior permit to 0.91 mg/L. The authorization is silent as to changes to the Average Monthly Total Aluminum limit, such that the current limit is not changed. EPA has now accepted the specific Massachusetts Water Quality Standards (WQS) for aluminum, which was recognized in the final issuance of the Medium General Permit late in 2022. The new Massachusetts WQS for aluminum are 270 µg/L (chronic) and 542 µg/L (acute), for the Blackstone River, and are applicable to the Hopedale permit. EPA specifically recognized in the final Medium General Permit that anti-backsliding should generally not apply to changes related to the new aluminum WQS. This acceptance of backsliding for aluminum was stated explicitly by EPA in the response to comments for that permit. More specifically, in Hopedale, the specific provision to allow backsliding of the aluminum limit exist (that is, the facility has been operated properly, and the old limits were not able to be consistently met) and should be applied. The approach used in drafting the aluminum limits for the SGP and authorization therefore needs to be corrected.

The Town feels that the appropriate action would be to remove the Average Monthly Total Aluminum effluent limit of 0.11 mg/L. Based upon preliminary calculations performed during our review, the Town expects that the Aluminum limits would be updated to reflect the calculated limits of 432 µg/L (Avg. Monthly, Chronic) and 927 µg/L (Maximum Daily, Acute). The reasonable potential calculations should then be calculated, using data and not the existing limits. When looking at the reasonable potential (95th percentiles from tabulated data) calculations versus the limits shown above, there may be a reasonable potential for the WWTF to hit the chronic limit, however, there appears to be no reasonable potential that the facility will hit the acute limit. As such, the permit should not include the lowered Maximum Daily limit of 0.91 mg/l for aluminum. If a permit limit is assigned to Average Monthly Total Aluminum, then the significantly higher calculated limit (432 µg/L or similar) would be the appropriate limit.

It should be noted that the Hopedale WWTF has only exceeded its existing daily maximum limit once in the last three years (February 2019), which was most likely due to the active construction upgrades occurring at the facility at that time. DMR data otherwise reflects that the effluent concentrations for aluminum are well below permit limits. The Town disagrees with the need to lower the Maximum Daily Total Aluminum limit when the facility consistently produces high quality effluent. As such, the Town requests that this limit is recalculated and its reasonable potential be used to eliminate the limit from the permit, or that the previously agreed upon Maximum Daily Total Aluminum limit of 1.2 mg/L be restored.

## **Response 26**

As an initial matter, see Response 25 which describes that the rationale and basis for EPA's analysis is included in the 2021 Fact Sheet and the 2022 Statement of Basis which were available for review throughout the comment period. Specifically, as described in

more detail below, the necessary information and basis of the analyses for aluminum is included in the 2021 Fact Sheet at 20-21 and Appendix A as well as the 2022 Statement of Basis at 5-7 and Appendix B.

This comment raises two issues related to aluminum. First, the comment objects to the maximum daily limit becoming more stringent and suggest that there is not reasonable potential for the facility to exceed the more stringent limit. Second, the comment requests that the aluminum limits allow backsliding, as done in the final issuance of the Medium WWTF General Permit (MAG590000), based on the revised 2021 MA WQS.

EPA acknowledges this comment and has responded to these two aspects of the comment below. EPA notes that this comment applies not only to Hopedale, but also to several other WWTFs that were subject to changing aluminum limits through this General Permit modification, including the 8 newly eligible facilities in MA discharging to freshwater<sup>8</sup> as well as the 5 previously covered facilities subject to revised aluminum limits through this permit modification<sup>9</sup>. Therefore, EPA has responded below more broadly as this comment applies to all 13 such facilities.<sup>10</sup>

First, regarding the daily maximum limit, EPA notes that 4 of the 13 facilities mentioned above have a daily maximum aluminum limit. These facilities are Hopedale, Upton, North Brookfield, and Charlton. In each of these cases, their respective individual permit already contained a daily maximum limit and EPA reevaluated these limits to ensure whether these limits continued to be protective of the revised MA WQS under updated critical conditions. In each case, as presented in Appendix B of the Statement of Basis and as summarized in Attachment E of the General Permit, the limit was made more stringent to ensure these limits remained protective.

For any pollutants (such as aluminum) with an existing water quality-based effluent limit (WQBEL), EPA notes that the analysis described in 40 CFR § 122.44(d)(1)(i) has already been conducted in a previous permitting action demonstrating that there is reasonable potential to cause or contribute to an excursion of water quality standards (WQS). Given that the permit already contains a WQBEL based on the prior analysis and the pollutant(s) continue to be discharged from the facility, EPA has determined that there is still reasonable potential for the discharge of this pollutant(s) to cause or contribute to an excursion of WQS. Therefore, the WQBEL will be carried forward unless it is determined that a more stringent WQBEL is necessary to continue to protect WQS or that a less stringent WQBEL is allowable based on anti-backsliding regulations at CWA §§ 402(o) and 303(d)(4) and 40 CFR § 122.44(l). For these pollutant(s), the mass balance calculation is not used to determine whether there is reasonable potential to cause or contribute to an excursion of WQS, but rather is used to determine whether the existing

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<sup>8</sup> As presented in Attachment E of the General Permit, these include: Hopedale, Upton, MCI Norfolk-Walpole, North Brookfield, Templeton, Charlton, MCI Bridgewater, and Oak Point Retirement Community.

<sup>9</sup> As described in the 2022 Statement of Basis at 5-6, these include: MCI – Concord, Hardwick Gilbertville, Douglas WWTP, Huntington, Oxford – Rochdale.

<sup>10</sup> EPA notes that this response does not apply to facilities already covered by this General Permit which were not subject to any revisions through this permit modification because it is out of scope (*i.e.*, this provision was not subject to comment and/or revision at this time).

limit needs to be more stringent in order to continue to protect WQS. For this reason, the existing permit limit, rather than the 95<sup>th</sup> percentile of recent effluent data, is used in the mass balance equation presented in Appendix B of the Statement of Basis.

From a technical standpoint, when a pollutant is already being controlled as a result of a previously established WQBEL, EPA has determined that it is not appropriate to use new effluent data to reevaluate the need for the existing limit because the reasonable potential to cause or contribute to an excursion of WQS for the uncontrolled discharge was already established in a previous permit. If EPA were to conduct such an evaluation and find no reasonable potential for the controlled discharge to cause or contribute to an excursion of WQS, that finding could be interpreted to suggest that the effluent limit should be removed. However, the new permit without the effluent limit would imply that existing controls are unnecessary, that controls could be removed and then the pollutant concentration could rise to a level where there is, once again, reasonable potential for the discharge to cause or contribute to an excursion of WQS. This could result in an illogical cycle of applying and removing pollutant controls with each permit reissuance. EPA's technical approach on this issue is in keeping with the Act generally and the NPDES regulations specifically, which reflect a precautionary approach to controlling pollutant discharges.

Therefore, these 4 more stringent maximum daily aluminum limits are necessary to ensure the continued protection of WQS and this part of the comment does not result in any change to the Final General Permit.

Second, the comment suggests that the existing aluminum limits should be allowed to backslide based on the revised 2021 MA WQS. EPA notes that 7 facilities<sup>11</sup> of the 13 facilities mentioned above have an existing monthly average aluminum limit. Based on this comment, EPA has reevaluated the aluminum limits for these 7 facilities to determine whether a less stringent limit may be allowable. First, EPA disagrees with the portion of the comment stating: "EPA specifically recognized in the final Medium General Permit that anti-backsliding should generally not apply to changes related to the new aluminum WQS. This acceptance of backsliding for aluminum was stated explicitly by EPA in the response to comments for that permit." EPA clarifies that anti-backsliding regulations do apply to the aluminum limits both under the Medium WWTF General Permit as well as this Small WWTF General Permit, but that in some cases there is an applicable anti-backsliding exception that allows certain permit limits to become less stringent in accordance with the anti-backsliding regulations. EPA presents the following reevaluation, which matches the reevaluation conducted under the recent 2022 Medium WWTF General Permit<sup>12</sup>.

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<sup>11</sup> These 7 WWTFs are: Hopedale, Upton, MCI Norfolk-Walpole, North Brookfield, Templeton, Charlton and MCI-Concord.

<sup>12</sup> See Response 75 of the Medium WWTF General Permit Response to Comments document available at: <https://www.epa.gov/npdes-permits/region-1-final-medium-wastewater-treatment-facilities-general-permit-massachusetts>.

In conducting this analysis, EPA considered the exceptions to the CWA’s anti-backsliding provisions found at CWA § 402(o). One exception, found at CWA § 402(o)(2)(E), specifies the following:

“the permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case the limitations in the reviewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).”

Based on this exception, EPA evaluated whether a less stringent effluent limit may be allowed for each of the 7 relevant facilities. Based on familiarity with all 7 facilities, EPA concludes that each permittee has installed and properly operates and maintains a secondary treatment facility. To characterize the “level of pollutant control actually achieved” EPA calculated the 95<sup>th</sup> percentile of the effluent data (presented in Appendix A of the 2022 Statement of Basis) from each facility during the 5-year review period for the General Permit modification. If this level is greater than the current permit limit, then EPA determined that backsliding is allowable. The results of this analysis are summarized in the table below.

Facility Name	Current Permit Number	Current Monthly Average AI Limit (µg/L)	Effluent 95 <sup>th</sup> (µg/L)*	Achieving limit?
Hopedale WWTP	MA0102202	110	666	No
Upton WWTP	MA0100196	88.7	59	Yes
MCI Norfolk-Walpole WWTF	MA0102253	100	53	Yes
North Brookfield WWTP	MA0101061	87	378	No
Templeton WWTP	MA0100340	200	768	No
Charlton WWTP	MA0101141	93	336	No
MCI - Concord	MA0032433	146.8	194	No

\*The effluent aluminum data used to calculate these 95<sup>th</sup> percentile values for all facilities (except MCI-Concord) are presented in Appendix A of the 2022 Statement of Basis. The effluent aluminum data for MCI-Concord are presented in Appendix A of this Response to Comments document.

As shown, there are 5 facilities that are not achieving the applicable limit and may qualify for a less stringent limit under this anti-backsliding exception while 2 facilities (Upton and MCI Norfolk-Walpole) are achieving the applicable limit and are not eligible for a less stringent limit under this exception. Therefore, EPA conducted a further evaluation on these 5 dischargers to determine if a less stringent limit (up to their level achieved) would comply with the revised chronic WQS for aluminum, as any backsliding must not result in a violation of WQS under CWA section 402(o)(3). EPA applied the default criteria for each watershed that are included in the revised WQS<sup>13</sup> (See Appendix A in 314 CMR 4.06) and conducted a mass-balance evaluation using the equations presented

<sup>13</sup> <https://www.mass.gov/doc/314-cmr-400/download>



in Appendix A of the 2021 Fact Sheet. The results of these calculations are presented below (see Appendix A of the 2021 Fact Sheet for the full equation and definition of terms).

Facility Name	Q <sub>s</sub> (MGD)	C <sub>s</sub> (µg/L, median)	Q <sub>e</sub> (MGD)	C <sub>e</sub> (µg/L, 95 <sup>th</sup> )	Q <sub>d</sub> (MGD)	C <sub>d</sub> (µg/L)	Watershed Default Criteria (µg/L)
Hopedale WWTP	0.48	73	0.588	666	1.07	398	262
North Brookfield WWTP	0	71	0.76	378	0.76	378	170
Templeton WWTP	3.02	161	0.60	768	3.62	262	200
Charlton WWTP	0.0323	59	0.45	336	0.48	318	270
MCI - Concord	7.5	80	0.31	<b>194</b>	7.84	84.5	394

As shown, the 95<sup>th</sup> percentile of the effluent data (C<sub>e</sub>) for each of the facilities (except MCI-Concord) results in a downstream concentration (C<sub>d</sub>) above the relevant watershed default criterion. Therefore, the 95<sup>th</sup> percentile value of 194 µg/L for MCI-Concord (shown in bold in the column labeled C<sub>e</sub>) is protective of water quality standards and is established as the monthly average limit for that facility.

For the other four facilities, the 95<sup>th</sup> percentile of the effluent data would result in a downstream concentration above the watershed default criterion. Therefore, EPA calculated (using the same mass balance equation from Appendix A of the 2021 Fact Sheet) a maximum allowable effluent concentration (C<sub>e</sub>) which results in a downstream concentration at or below the relevant watershed default criterion under critical conditions as their monthly average limits. The table below presents these calculations, with the resulting effluent limits in bold.

Facility Name	Q <sub>s</sub> (MGD)	C <sub>s</sub> (µg/L, median)	Q <sub>e</sub> (MGD)	Q <sub>d</sub> (MGD)	C <sub>d</sub> , Watershed Default Criteria (µg/L)	C <sub>e</sub> , Limit (µg/L)
Hopedale WWTP	0.48	73	0.588	1.07	262	<b>418</b>
North Brookfield WWTP	0	71	0.76	0.76	170	<b>170</b>
Templeton WWTP	3.02	161	0.60	3.62	200	<b>396</b>
Charlton WWTP	0.0323	59	0.45	0.48	270	<b>285</b>

EPA has determined that backsliding is allowable for these limits as they satisfy the exception at 402(o)(2)(E) and they ensure that WQS will be met, as required by 402(o)(3).

EPA has conferred with MassDEP with regard to application of its antidegradation policy to these revised limits. EPA and MassDEP agree that these limits are in accordance with Massachusetts' antidegradation policy given that these limits do not allow any increase in the actual load of aluminum from current levels and satisfy the newly revised aluminum water quality standard.

Therefore, these modified limits for these 5 facilities have been added to Attachment E of the Final General Permit.

### **Comment 27**

**Item 3 – Copper:** By not providing a fact sheet or other adequate information to support the new limits, EPA has restrained the Town’s ability to comment on the changes proposed in the draft authorization. The Monthly Average permit limit for Copper is proposed to be reduced from 8.14 µg/L to 7.5 µg/L and the Maximum Daily limit for Copper is proposed to be reduced from 11.82 µg/L to 11.4 µg/L under this draft permit authorization. The 2013 fact sheet reflected that 7.47 µg/L was acknowledged as the chronic limit based on criteria, and the proposed limit of 7.5 µg/L appears consistent with these findings. It should be mentioned that there were five months at the Hopedale WWTF between May 2017 and April 2022 that experienced an effluent Copper level between 7.5 and 8.14 µg/L (the gap between current and proposed permit limits).

The acute limit calculations from the 2013 Fact Sheet appear to have an error. It was shown that 11.34 µg/L of dissolved copper would be the limit, but when the total recoverable factor was applied, an incorrect value of 10.7 µg/L was used (noting  $10.7 \mu\text{g/L} / 0.96$ , instead of  $11.34 \mu\text{g/L} / 0.96$ ). The total recoverable factor when using the correct value of 11.34 µg/L equates to 11.81 µg/L. With no detailed fact sheet, the Town feels that not enough information was provided to allow adequate comment. As such, the Town requests that the Copper limits either are restored to the previously agreed upon limit, or that additional information be provided to clarify the reasoning as to why the limits used are higher than the values provided in Attachment A of the draft Authorization.

Additionally, the 2013 Fact Sheet showed Acute and Chronic criteria to be 7.3 µg/L and 5.15 µg/L, respectively. The current proposed Acute and Chronic criteria are listed as 7.4 µg/L and 5.2 µg/L. Because the criteria did not decrease, the Town requests additional information as to why the limits were decreased.

### **Response 27**

As noted in Response 25, the rationale and basis for EPA’s analysis is included in the 2021 Fact Sheet and the 2022 Statement of Basis which were available for review throughout the comment period. Specifically, as described in more detail below, the necessary information and basis of the analyses for copper and other metals is included in the 2021 Fact Sheet at 20-21 and Appendix A as well as the 2022 Statement of Basis Appendix B.

Regarding the proposed monthly average limit, the commenter seems to acknowledge that this is the appropriate limit by referencing the 2013 Fact Sheet for their current individual permit (*i.e.*, number MA0102202) but notes that there were five months during the review period when the effluent was between the current and proposed permit limits. EPA acknowledges that there were some excursions of the proposed limit of 7.5 µg/L, but notes that these excursions do not have any impact on the limit. Rather, these excursions are further justification that the limit is necessary to further reduce the

discharge of copper in the effluent to protect water quality standards under critical conditions.

Regarding the maximum daily limit, the comment notes that the 2013 Fact Sheet for their current individual permit contained a conversion error and indicated the limit should be 11.15 µg/L rather than the correct limit of 11.81 µg/L. EPA agrees that the Fact Sheet contained this conversion error, but notes that this error did not impact the limit in the 2013 individual permit which included the correct limit of 11.82 µg/L (note the difference of 11.81 µg/L noted in this comment and 11.82 µg/L in the 2013 Permit is merely a rounding issue and not an error). In any case, this clerical error in the 2013 Fact Sheet did not have any impact on the development of the 2022 General Permit modification.

The comment goes on to request the copper limits either be restored to previous levels or additional information be provided to justify the new limits. As noted above, the 2021 Fact Sheet provided such additional information. As noted in the 2021 Fact Sheet at page 21 and Appendix A, EPA performed a mass balance equation to project the copper concentration downstream of the discharge under updated critical conditions. The numeric values used in this mass balance for Hopedale are presented in Appendix B of the 2022 Statement of Basis. As shown, the median background copper concentration ( $C_s$ ) was 2.4 µg/L (based on the ambient copper data presented in Appendix A of the 2022 Statement of Basis). By comparison, the background copper concentration used in the 2013 Fact Sheet was 1 µg/L. This increase in the background concentration results in less assimilative capacity for the Hopedale discharge and, therefore, more stringent limits are necessary to continue to protect water quality standards under updated critical conditions.

Finally, the comment notes that the chronic and acute copper criteria increased slightly from the 2013 Fact Sheet to the 2022 General Permit modification and requests more information regarding why the limits decreased even though the criteria increased. As noted in the 2021 Fact Sheet at page 21, the copper criteria are hardness-dependent and the “estimated hardness of the receiving water downstream of the treatment plant is calculated using the critical low flow, the design flow of the treatment plant, and the median hardness for both the receiving water upstream of the discharge and the treatment plant effluent.” For Hopedale, these numeric values are presented in Appendices A and B of the 2022 Statement of Basis and result in a projected downstream hardness of 50.5 mg/L. The copper criteria resulting from this hardness value are 7.4 µg/L and 5.2 µg/L, respectively. While this slight increase in the criteria (compared to the 2013 Fact Sheet) is one factor in the development of the permit limits, the increased background concentration from 1 µg/L to 2.4 µg/L, as noted above, is another important factor. Taken together, the updated analysis results in the need for slightly more stringent limits compared to those in Hopedale’s 2013 individual permit to continue to protect water quality standards under updated critical conditions.

This comment does not result in any change to the Final General Permit.

## Comment 28

**Item 4 – Ammonia Nitrogen:** The draft permit (modification) authorization for Hopedale includes several changes to permit limits related to Ammonia Nitrogen. In summary, these notably include: (A) the reduction of the Average Monthly ‘winter’ season limit, (B) the reduction of the Average Monthly ‘shoulder’ season (May) limit, and (C) the Reasonable Potential calculation for the acute criteria for the summer and May limits are marked as “Yes”, while the effluent and combined effluent with receiving waters is both below this threshold for the months in question. The Town takes issue with each of these changes, as noted in the further discussion here:

- A. Reduction of ‘Winter’ Ammonia Limit: The monthly average limit for Ammonia Nitrogen from November 1st through April 30th includes a reduction of the chronic limit from 11 mg/L to 8.6 mg/L. The 95th percentile average month ammonia from 2017 through 2022 was 9.2 mg/L for the Hopedale facility. This performance would now exceed the proposed lower permit limit of 8.6 mg/L, where in the past it would not have violated the 11 mg/L limit. The 2013 permit cycle includes a calculation using the 30Q10 dilution factor for Winter months, while this draft permit authorization includes a 7Q10 dilution factor to be used year-round. The draft permit and authorization include very little information on establishment of new or reduced ammonia limits for Hopedale – no detailed fact sheet was provided and the general statement of basis is silent on this specific issue. Furthermore, the 2013 permit includes a chronic criteria for Winter months of 5.26 mg/L but is reduced to 4.7 mg/L in the draft permit authorization. The Town requests that additional information be submitted for the reduction of the chronic limit to 8.6 mg/L, as well as the basis for the dilution factor revision. If such information cannot be provided with proper time for review by the Town, or it does not properly determine the need for the reduced limit, the Town requests that the limit be restored to 11.0 mg/L.
- B. Reduction of May ‘Shoulder Season’ Ammonia Limit: The monthly average limit for Ammonia Nitrogen during the ‘shoulder’ season (May) includes a steep reduction from 5 mg/L to 2.7 mg/L. The Town requests that additional information is provided for basis for this decision. If temperature is the cause of this lowered limit, please provide water temperature data of the receiving waters in the month of May that was utilized in calculating the revisions. EPA has an established practice of issuing permits with ‘shoulder’ seasons for Ammonia Nitrogen. Such spring season limits are appropriate, recognizing that this can be a ‘shoulder’ season for nitrification in plants located in temperate climates, and that stream temperatures tend to remain cool in the spring (greatly mitigating the toxicity of ammonia). The proposed shoulder season limit reduction results in a limit that is much closer to that of the summer months than the winter months. As with the new winter ammonia limit, EPA has not shared the detailed basis of this limit change in the draft permit authorization.

The lack of information or basis presented to support a significant reduction in the May limits does not allow detailed review or comment by the Town. Further, the lowering of the May limit fails to recognize that the May water temperatures remain lower than the temperature used to calculate the proposed summer limit (we assume

25°C, though not stated by EPA). The draft permit and authorization include very little information on establishment of new or reduced ammonia limits for Hopedale – no detailed fact sheet was provided and the general statement of basis is silent on this specific issue. The Town asks that the monthly average limit for the shoulder season be recalculated, with supporting documentation. If this information cannot be provided, allowing for adequate review and comment by the Town, then the Town requests that the Average Monthly Ammonia Nitrogen limit be restored to 5 mg/L for the month of May.

- C. Acute Criteria for Summer and May Reasonable Potential Ammonia Limit: The acute criteria for Summer and May is shown as 13.3 mg/L in the Reasonable Potential calculation. The effluent and combined effluent with receiving waters are both below this threshold for these months, yet the Reasonable Potential presented in the draft permit marks “Yes” in the table (Appendix B). It appears that the RP for this period is not satisfied. The Town requests that an explanation is provided as to why the EPA believes the reasonable potential criteria is fulfilled for Summer and May months.

### **Response 28**

As noted in Response 25, the rationale and basis for EPA’s analysis is included in the 2021 Fact Sheet and the 2022 Statement of Basis which were available for review throughout the comment period. Specifically, as described in more detail below, the necessary information and basis of the analyses for ammonia nitrogen is included in the 2021 Fact Sheet at pages 22-23 and Appendix A as well as the 2022 Statement of Basis Appendix B.

Regarding the proposed reduction in the winter ammonia nitrogen monthly average limit, the commenter seeks clarification regarding how the proposed limit was derived. The commenter correctly notes that the critical low flow was the 7Q10 rather than the 30Q10. EPA notes that use of the 7Q10 low flow was noted in the 2022 Statement of Basis at 3, the specific value for each facility was presented in Attachment E of the Draft Permit modification, and the same value for each facility was included in the mass balance calculations in Appendix B of the Statement of Basis. Regarding the use of the 7Q10, EPA considers that the critical low flow during the winter months could include flows as low as the 7Q10 even though it typically occurs in the warmer months. Therefore, this low flow represents a conservative assumption regarding critical conditions to ensure water quality standards are adequately protected. The commenter also correctly notes that the chronic criteria was determined to be 4.7 mg/L, as shown in Appendix B of the Statement of Basis.

The commenter then requests additional information regarding the reduced winter limit. EPA considers that the only additional information relevant to the updated mass balance calculation is the receiving water temperature and pH used in the derivation of the 4.7 mg/L criterion. The 2021 Fact Sheet at 23 indicates that EPA used a default temperature of 5° C and either a default pH of 7.0 S.U. or a pH based on site-specific data, if available. For Hopedale, site-specific pH data was available as presented in Appendix A of the 2022 Statement of Basis (*i.e.*, a median pH of 6.7 S.U.).

The commenter also noted that the proposed limit of 8.6 mg/L is below the 95<sup>th</sup> percentile of their effluent data, which was 9.2 mg/L. This fact supports the need for a reduced ammonia limit to ensure protection of water quality standards under critical conditions.

Given that the necessary information was included in the record, EPA has determined that this comment does not warrant a reopening of the comment period and this portion of the comment does not result in any change to the Final General Permit.

Regarding the reduction of the May ammonia nitrogen limit, the commenter seeks clarification regarding the need for a lower limit and indicates that the change was likely due to instream temperature assumptions. EPA confirms that the reduction was primarily due to the assumed instream temperature of 25° C, as noted in the 2021 Fact Sheet at 23. Given that EPA did not have any site-specific instream temperature data in May to apply, the default value of 25° C was applied as a worst-case assumption to ensure water quality standards are protected under all conditions. While the commenter seems to have understood the rationale for this lower limit and suggests that water temperatures in May remain lower, they also did not provide any site-specific data for EPA to consider or apply. Therefore, this portion of the comment does not result in any change to the Final General Permit.

Finally, the comment requests an explanation for the finding that there is “reasonable potential” for ammonia in summer (*i.e.*, June through October) and May given that the effluent and downstream concentrations of ammonia (as presented in Appendix B of the Statement of Basis) are both below the relevant acute criterion of 13.3 mg/L. EPA acknowledges that the commenter’s description is accurate and provides the following explanation.

For any pollutants (such as ammonia in summer and May) with an existing water quality-based effluent limit (WQBEL), EPA notes that the analysis described in 40 CFR § 122.44(d)(1)(i) has already been conducted in a previous permitting action demonstrating that there is reasonable potential to cause or contribute to an excursion of water quality standards (WQS). Given that the permit already contains a WQBEL based on the prior analysis and the pollutant(s) continue to be discharged from the facility, EPA has determined that there is still reasonable potential for the discharge of this pollutant(s) to cause or contribute to an excursion of WQS. Therefore, the WQBEL will be carried forward unless it is determined that a more stringent WQBEL is necessary to continue to protect WQS or that a less stringent WQBEL is allowable based on anti-backsliding regulations at CWA §§ 402(o) and 303(d)(4) and 40 CFR § 122.44(l). For these pollutant(s), the mass balance calculation is not used to determine whether there is reasonable potential to cause or contribute to an excursion of WQS (which has already been determined to be “Yes”), but rather is used to determine whether the existing limit needs to be more stringent in order to continue to protect WQS. For this reason, the existing permit limit (rather than the 95<sup>th</sup> percentile of recent effluent data) is used in the mass balance equation presented in Appendix B of the Statement of Basis.

From a technical standpoint, when a pollutant is already being controlled as a result of a previously established WQBEL, EPA has determined that it is not appropriate to use new effluent data to reevaluate the need for the existing limit because the reasonable potential to cause or contribute to an excursion of WQS for the uncontrolled discharge was already established in a previous permit. If EPA were to conduct such an evaluation and find no reasonable potential for the controlled discharge to cause or contribute to an excursion of WQS, that finding could be interpreted to suggest that the effluent limit should be removed. However, the new permit without the effluent limit would imply that existing controls are unnecessary, that controls could be removed and then the pollutant concentration could rise to a level where there is, once again, reasonable potential for the discharge to cause or contribute to an excursion of WQS. This could result in an illogical cycle of applying and removing pollutant controls with each permit reissuance. EPA's technical approach on this issue is in keeping with the Act generally and the NPDES regulations specifically, which reflect a precautionary approach to controlling pollutant discharges.

This comment does not result in any change to the Final General Permit.

To the extent the issues raised in this comment apply to other eligible dischargers receiving more stringent ammonia nitrogen limits as part of this General Permit modification, EPA confirms that these responses also apply (in general terms) to them as well and this comment does not result in any change to the Final General Permit with respect to any eligible facilities.

### **Comment 29**

**Item 5 – WET Testing:** Please provide information on the rationale to require additional sampling of Total Organic Carbon, Dissolved Organic Carbon, and Total Phosphorus as part of WET Testing processes, as this additional requirement is overly burdensome and costly for permittees. These additional tests have significant costs which have a greater impact on small facilities. These additional test requirements should be removed from the permit.

#### **Response 29**

See Response 5.

### **Comment 30**

**Item 6 – Total Phosphorus Monitoring:** The draft permit authorization includes additional requirements for Total Phosphorus, stating in Footnote 19 that “effluent monitoring shall be conducted concurrently with any whole effluent toxicity testing between April 1st and October 31st (i.e., 2nd and 3rd calendar quarter).” Additionally, the draft permit requires that a sampling and analysis plan is to be developed and implemented for “biannually collecting monthly samples at a location upstream of the facility.” It is stated that these “samples are to be collected once per month, from May through September, every other calendar year starting on the calendar year following the effective date of this authorization.” The draft permit authorization includes Total Phosphorus in both the WET and Ambient Testing sections, but very little information is provided on the establishment of these new monitoring requirements. These additional testing requirements have both cost and staffing impacts. With no detailed fact sheet provided, the Town

requests information on the rationale to require additional sampling and testing procedures for Total Phosphorus. Lacking proper justification, these additional test requirements should be removed from the permit.

### **Response 30**

See Responses 5 and 9.

### **Comment 31**

**Item 7 - PFAS:** The draft permit includes additional requirements to sample for and report on per- and polyfluoroalkyl substances (PFAS) in influent flow, effluent flow, and sludge from the WWTF. It is our understanding that this testing will be completed via Method 1633 once the method is multi-lab validated. There is concern in the industry on the number of labs that will be capable of completing this sampling and testing. Once many permittees (as expected) are required to sample and test, this concern will likely be exacerbated. It is well known that PFAS compounds are present in the environment, but WWTFs should not be the target of enforcement. The Town supports the need for limiting PFAS compounds in consumer goods and industrial uses. We further understand that testing industrial users likely to contribute PFAS may be needed. The Town of Hopedale recognizes the need to provide for legislation to remove these components from commerce as the primary method of reducing the presence of these compounds in our environment. The impacts of these PFAS monitoring requirement will be significant for all WWTFs. One of the major concerns with this monitoring requirement is the resulting impact on sludge disposal. Once PFAS is demonstrated to be in wastewater sludge, the ability to properly dispose of sludge from not only this WWTF, but from all Massachusetts WWTFs may be severely compromised. The number of sludge processing facilities that can properly dispose of PFAS compounds is severely limited and will result in a significant cost increase for sludge disposal for all facilities.

Overall, the Town respectfully requests that the PFAS monitoring requirement be removed from the NPDES permit and authorization, until legislation related to PFAS removal from consumer products and industrial uses is in place in Massachusetts. At such time as those most important provisions are in place, a more reasonable approach to addressing the presence of PFAS compounds in wastewater may be appropriate.

### **Response 31**

See Responses 4, 7 and 10.

Regarding Method 1633 approval and availability, EPA notes that these monitoring requirements do not take effect until “the first full calendar quarter following 6 months after EPA notifies the permittee that an EPA multi-lab validated method for wastewater [or sludge] is available.” EPA acknowledges that there may be a transition period where an increased number of local labs are able to perform the method. In any case, EPA expects this issue to be temporary as more labs become accredited with this new analytical method as more facilities are required to conduct this monitoring. It is EPA’s understanding that two labs in Massachusetts are already certified for Method 1633 and EPA expects more labs to become certified in the near future.



Regarding sludge disposal, the commenter has not disputed that PFAS deposition is a cause for environmental concern but bases its objections on possible increases in cost and the potential that sludge disposal will become more difficult. EPA appreciates the hardship of potential rising costs and disposal logistics but notes that simply ignoring the likely presence of PFAS contamination in sludge is not appropriate under the Act.

This comment does not result in any change to the Final General Permit.

### **Comment 32**

The Town of Hopedale and its staff are committed to providing safe and effective service to its utility users and the general public, including acting appropriately to protect the environment. Our community is active in managing, maintaining and improving our water resource systems to meet local needs. We request that US EPA and Massachusetts DEP consider the comments submitted herein and make the requested revisions to the Small General Permit, the associated authorization for Hopedale, and the Massachusetts Permit before final issuance of these permitting components.

We are available to discuss these comments at your convenience

### **Response 32**

EPA acknowledges this comment.

## **D. Comments from Nathaniel Munafa, Marion Wastewater Director on behalf of the Town of Marion, MA, dated January 23, 2023**

### **Comment 33**

As part of the Town's renewal application for its individual NPDES permit in June 2022 (and resubmitted with requested updates in August 2022), the Town requested that the permit be reissued with an increased average daily discharge capacity to 0.686 MGD so that the Facility can accept the proposed flows from future needs areas discussed in the Town's Comprehensive Wastewater Management Plan (CWMP). In Marion, as with other Buzzards Bay and Cape Cod communities, the discharge of nitrogen from wastewater is a significant concern affecting local waters. The nitrogen load from poorly functioning, or even normally functioning, septic systems is significant and impacts coastal waters. The CWMP recommends a plan to expand the collection system to these coastal areas currently served by septic systems (known as Needs Areas, refer to attached map which shows locations of unsewered Needs Areas excerpted from the CWMP, Figure 6-1). Because the effluent from the Marion Facility contains very low levels of total nitrogen (4 mg/L or less, as required by the current NPDES permit), the expansion of sewers into these Needs Areas, which would eliminate the use of about 550 septic systems, would result in the reduction of excess nutrients entering the environment (and specifically, surrounding water resource areas). As presented in the CWMP, the six Needs Areas recommended for sewerage currently contribute an estimated 24.7 lbs/day of total nitrogen to coastal waters. This estimate is based on a typical Title 5 septic system contributing an average of 35 mg/L of total nitrogen, which is anticipated to be representative of a fully functioning septic system and may be lower than what many older septic systems are currently producing. The nitrogen load reduction projected includes only existing homes in these Needs Areas. When

connecting these needs areas to the Facility, the resultant reduction in nitrogen from the surrounding environment (from 35 mg/L to 4 mg/L) is approximately 21.9 lbs/day of total nitrogen. Of this, the Town estimates that the additional sewerage would remove 7 lbs/day of total nitrogen load from septic systems directly contributing to Aucoot Cove.

The Town needs the increased discharge capacity to move forward with the sewer expansion. The Town's request for the increase in permitted discharge capacity differs from similar requests made by other inland facilities, because the increased discharge capacity will be linked directly to reducing total nitrogen in the receiving waters (and Buzzards Bay in general). If the additional treatment capacity is not granted, the Town will be unable to significantly reduce the nitrogen load from septic systems to its coastal waters.

This watershed approach is consistent with good water resource planning principles and also allows the Town to conform to the intent of Massachusetts' recently proposed Nitrogen Sensitive Area (NSA) regulations. The goal of these regulations is to reduce environmental nitrogen load, especially from load caused by septic systems. Even though the NSA regulations do not currently apply to Marion, the Town's proposal is very much consistent with the goals of the regulations. EPA has recognized the validity of a watershed approach to nutrient management and explicitly stated this in the draft 2013 individual permit for the Marion Facility. This included EPA recognizing that reduction in watershed nitrogen loads would be an appropriate basis for modifying the limit for nitrogen in the Facility's effluent (point load).

Further to this point, the Town recently completed the lining of its primary wastewater lagoon at the Facility. According to EPA's approach for prior individual NPDES permitting at the Facility, this action to eliminate any potential nitrogen contribution from the primary lagoon to the watershed provides a significant reduction in the nitrogen load to Aucoot Cove as estimated by EPA. The Town suggests that EPA recognize this reduction in possible nitrogen loads and consider this when assessing the Town's request for an increased flow limit and related nitrogen load adjustment (Item 6).

Despite the environmental benefits from the Town's proposal, the draft permit authorization still lists the existing average daily discharge capacity of 0.588 MGD for the Marion Facility. EPA should increase the listed limit for Effluent Flow to the requested 0.686 MGD in the Small General Permit authorization. If EPA cannot address increasing the average daily discharge capacity to 0.686 MGD within the Small General Permit authorization, the Town requests that its facility be removed from the Small General Permit authorization and that it instead be reauthorized under an individual permit.

Note: EPA reviewed Item 6-1 referenced in this comment, but it is not reproduced in this Response to Comments document.

### **Response 33**

EPA acknowledges and appreciates the commenters request for a flow increase to remove nitrogen loading via septic systems to Aucoot Cove and Buzzards Bay. While EPA supports this effort, any increase in the effluent flow from a POTW would also increase the discharge of a variety of other pollutants besides nitrogen. This increase in pollutants would trigger an antidegradation review. Therefore, the Town's flow increase request is

not yet perfected, as it lacks attendant data and information to fully determine the impact of a flow increase on existing and designated uses, including an evaluation of the receiving water's assimilative capacity for all pollutants or combination of pollutants.

Therefore, in order for EPA to increase the permitted effluent flow from the Facility, MassDEP must first complete an antidegradation analysis, pursuant to 314 CMR 4.04 and MassDEP's "Implementation Procedures for the Antidegradation Provisions of the Massachusetts Surface Water Quality Standards, 314 CMR 4.00",<sup>14</sup> which reflect federal requirements at 40 CFR §131.12. It is MassDEP and EPA's joint position that the Town has yet to provide the information necessary to analyze and justify an increase of treated wastewater effluent flow from the Facility.

Given that EPA cannot act on this flow increase at this time, EPA understands this comment to include a request to be excluded from the Small WWTF General Permit. Therefore, EPA has removed the Marion Water Pollution Control Facility (WPCF) as an eligible facility from Attachment E of the Final General Permit.

If the Town chooses to move forward with an antidegradation analysis, accompanied by the necessary data and analysis, the Town may then request a corresponding increase in the effluent flow limit in their next individual permit reissuance.

Finally, given that the Marion WPCF has been removed from the list of eligible WWTFs in the Final General Permit, EPA has determined that it is not necessary to respond at this time to any aspects of the following comments submitted by Marion that only apply to the Marion WPCF. Rather, these issues will be addressed in the next reissuance of their individual permit if relevant at that time. However, EPA has responded to any issues raised in the comments below that may apply to other permittees in this General Permit.

### **Comment 34**

The draft permit authorization for Marion includes several changes to permit limits related to ammonia. These include:

- (A) the establishment of a new 'winter' season limit for ammonia, replacing the previous "report" requirement during the winter months,
- (B) the elimination of the separate May 'shoulder season' limit for ammonia, and
- (C) the reduction of the 'summer' season limit, with the summer season now including May.

The Town takes issue with each of these changes, as noted in the further discussion here.

- A. **New 'Winter' Season Ammonia Limit:** The Town's current individual NPDES permit includes a requirement for monitoring and reporting of effluent ammonia between

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<sup>14</sup> Implementation Procedures for the Antidegradation Provisions of the Massachusetts Surface Water Quality Standards, 314 CMR 4.00, Effective 10/21/2009. <https://www.mass.gov/files/documents/2016/08/wo/antideg.pdf>.

November and April (the ‘winter’ season). The previous draft permit included an analysis by EPA of the ammonia limits for the Marion Facility and concluded that the limits then in place were adequately protective, including considerations of EPA’s updated guidance for setting ammonia effluent limits. The draft permit and authorization include very little information on the rationale for establishing new or reduced ammonia limits for Marion –no detailed fact sheet was provided, the general statement of basis is silent on this specific issue, and the Reasonable Potential calculation in Appendix B seems to be the only information on the new ammonia limits (but lacks any description or substantiation of the need for new limits). Because EPA has not provided the basis of the new limit to allow detailed comment, the new limit should not be added. The prior individual permit process concluded that Marion’s approach to operating the Facility clearly emphasizes the reduction of total nitrogen year-round, meaning that significant ammonia discharges are rare (even in winter). As such, there is no need for a ‘winter’ ammonia limit in the permit. The new ‘winter’ season ammonia limit of 5 mg/l should be removed from the permit, and the previous monitor and report requirement should be restored.

- B. Elimination of the May ‘Shoulder Season’ Ammonia Limit:** As is common for many facilities, Marion’s current individual NPDES permit includes a separate ammonia limit for the month of May. The draft permit authorization, however, eliminates this specific May limit and combines the limit for May into the ‘Summer’ season ammonia limit, resulting in a lower limit on ammonia in the month of May. EPA has an established practice of issuing permits with ‘shoulder’ seasons for ammonia. Such spring season limits are appropriate, recognizing that this can be a ‘shoulder’ season for nitrification in plants located in temperate climates, and similarly that stream temperatures tend to remain cool in the spring (greatly mitigating the toxicity effects of ammonia). As with the new winter ammonia limit, EPA has not shared the detailed basis of this limit change in the draft permit. The lack of information or basis presented to support a significant reduction in the May limits does not allow detailed review or comment by the Town. Further, the combining of the May limit as part of the ‘summer’ season limit fails to recognize that the May water temperatures remain lower than the temperature used to calculate the proposed summer limit (we assume this to be 25 C, though EPA does not provide any details on its methodology). It is clear from EPA’s actions on other permittees’ limits that the practice of allowing ‘shoulder season’ limits for ammonia is still common and environmentally appropriate. The ammonia limit approach for Marion in the draft permit is not supported by any information presented. As with the winter limit change, Marion’s care in operating the Facility to emphasize the reduction of total nitrogen on a year-round basis means that these ammonia limits are not needed to protect the receiving waters. The change in this limit should be eliminated, and the previously used May ‘shoulder’ season ammonia limit should be restored at the 2.6 mg/l level.
- C. Reduction of ‘Summer’ Ammonia Limit:** The current individual NPDES permit includes a ‘summer’ average monthly ammonia limit of 1.74 mg/l, in force from June through October. The previous draft permit included an analysis by EPA of the ammonia limits for the Marion Facility and concluded that the limits then in place were adequately protective, including considerations of EPA’s updated guidance for setting ammonia

effluent limits. The draft permit authorization includes little information on the establishment of new or reduced ammonia limits for Marion –no detailed fact sheet was provided, the general statement of basis is silent on this issue, and the Reasonable Potential calculation in Appendix B seems to be the only information on the new ammonia limits (but lacks any description or substantiation of the need for reduced limits). Because EPA has not shared the basis of the reduced ‘summer’ limit to allow detailed comment, the limit should not be changed. The prior individual permit process concluded that Marion’s approach to operating the Facility emphasizes the reduction of total nitrogen year-round, meaning that significant ammonia exceedances are rare, and the total nitrogen limit (4 mg/l) already applicable to the Facility (and not being changed) for the summer season makes a separate ammonia limit unnecessary. As such, there is no need for a lower ‘summer’ ammonia limit. The reduced ‘summer’ season ammonia limit of 1.6 mg/l should be removed from the permit, and the previously agreed ‘summer’ limit of 1.74 mg/l should be restored.

#### **Response 34**

As discussed in Response 33, the Marion WPCF has been removed from the list of eligible WWTFs in the Final General Permit. Therefore, EPA has determined that it is not necessary to respond to this comment given that it only applies to the Marion WPCF and is, therefore, irrelevant.

However, many of these same issues were raised in Comment 28 with respect to the Hopedale facility. See Response 28 for EPA’s response to many of these issues.

#### **Comment 35**

The draft permit authorization provides numerous changes in sample type from “Composite” to “Grab” from the Town’s prior individual permit. The Town appreciates that EPA’s general intent is to simplify the sampling process. However, these modifications needlessly change the Facility’s existing requirements and appear to put the draft permit authorization in conflict with portions of the Small General Permit (which requires “Composite” samples for parameters that were switched to “Grab” in Marion’s draft authorization). The Town requests that EPA allow the choice of either composite or grab samples when sampling the required parameters and provide a modified footnote in the general permit to clarify and specifically allow this option.

#### **Response 35**

As discussed in Response 33, the Marion WPCF has been removed from the list of eligible WWTFs in the Final General Permit. Therefore, EPA has determined that it is not necessary to respond to this comment given that it only applies to the Marion WPCF and is, therefore, irrelevant.

#### **Comment 36**

The draft permit authorization proposes extending the length of the dissolved oxygen limit to be in effect year-round, rather than from June 1 through October 31 in the current individual permit. EPA provided no background information explaining this change. Because the Facility has never had issues with meeting the dissolved oxygen limit, there is no need to more than double the existing testing frequency. Further, EPA provided no background information in the permit

explaining this change. Also, the draft permit would more than double the additional manpower required to sample this parameter because the current 2017 NPDES permit calls for sampling 5 months out of the year, versus all 12 months in the new authorization. There is a regionwide shortage of licensed operators, and these types of changes exacerbate a significant industry-wide challenge. The Town requests that the dissolved oxygen limit remain in effect from June 1 to October 31 consistent with the current individual NPDES permit. Because EPA has not shared the basis of the new extended limit to allow detailed comment, such information should be provided in a new draft permit and authorization if the extended limit is not removed.

### **Response 36**

As discussed in Response 33, the Marion WPCF has been removed from the list of eligible WWTFs in the Final General Permit. Therefore, EPA has determined that it is not necessary to respond to this comment given that it only applies to the Marion WPCF and is, therefore, irrelevant.

### **Comment 37**

The draft authorization reduces the maximum daily enterococci limit from the current 276 colonies/100mL to 130 colonies/100mL. The Facility strives to provide effective effluent disinfection to meet as low of enterococci limit as possible. And from the data included in the draft permit, it is clear that the Facility is effective in providing appropriately disinfected treated wastewater. EPA, however, does not explain the need for the substantial reduction of this limit. Therefore, the current limit of 276 colonies/100mL should be restored.

### **Response 37**

As discussed in Response 33, the Marion WPCF has been removed from the list of eligible WWTFs in the Final General Permit. Therefore, EPA has determined that it is not necessary to respond to this comment given that it only applies to the Marion WPCF and is, therefore, irrelevant.

However, EPA notes that this change in the bacteria limit (which also applies to other eligible facilities) is based on updated Massachusetts water quality standards, as discussed in the 2022 Statement of Basis at 7.

### **Comment 38**

The Town acknowledges that the Total Nitrogen rolling average monthly ‘Summer Limit’ will remain at 4.0 mg/L, as well as the reporting without a limit for the remainder of the year. As stated in Item 1 –Increase Discharge Capacity, Marion has completed local planning through a CWMP process that addresses nitrogen from wastewater as a significant concern affecting local waters. The Marion Facility consistently treats to very low levels of nitrogen, as is required by the current NPDES permit, yet the environment and surrounding water resources continue to be negatively affected by excess nutrients. This can largely be attributed to areas in Town served by septic systems. The Town has reviewed alternatives, discussed recommendations, and would like to move forward with implementing the extension of sewers to areas in Town currently served by septic systems. With approval from EPA, increasing the discharge capacity will provide significant benefits to the environment by reducing the Total Nitrogen loads in coastal waters, which in essence is a significant goal of the NPDES permit. The Town asks that EPA increase

the discharge capacity limit for the reasons expressed in the NPDES renewal application and restated in this comment letter. Further, to support that change, the Town requests that the rolling average monthly ‘Summer’ Total Nitrogen load limit for the Facility be eliminated or be revised to 22.9 pounds per day (this is 0.686 MGD x 4 mg/L x 8.34 lbs/gal) to be consistent with the new requested flow limit.

### **Response 38**

As discussed in Response 33, the Marion WPCF has been removed from the list of eligible WWTFs in the Final General Permit. Therefore, EPA has determined that it is not necessary to respond to this comment given that it only applies to the Marion WPCF and is, therefore, irrelevant.

See Response 33.

### **Comment 39**

The draft permit authorization includes additional requirements for total phosphorus, stating in Footnote 19 that “effluent monitoring shall be conducted concurrently with any whole effluent toxicity testing between April 1<sup>st</sup> and October 31<sup>st</sup> (i.e., 2nd and 3rd calendar quarter).” The draft permit also requires that the Town develop and implement a sampling and analysis plan for “biannually collecting monthly samples at a location upstream of the facility.” The draft permit states that these ambient “samples are to be collected once per month, from May through September, every other calendar year starting on the calendar year following the effective date of this authorization”. The draft permit authorization includes Total Phosphorus in both the WET and Ambient Testing sections, but EPA provides very little information on the establishment of these new monitoring requirements. These additional testing requirements have both cost and staffing impacts. With no detailed fact sheet provided, the Town requests information on the rationale to require additional sampling and testing procedures for Total Phosphorus. Lacking justification, these additional test requirements should be removed from the permit.

### **Response 39**

See Responses 5 and 9.

### **Comment 40**

The draft permit authorization includes a new reporting section for Ambient Characteristic testing. Most of the parameters listed in this section are included in the WET Testing section and are therefore related to the comment offered in Item 7 (above). However, the following parameters listed under the ambient characteristic testing are both entirely new requirements and are not included as part of the WET Testing section: Dissolved Organic Carbon (DOC), pH, Temperature, and Phosphorus (discussed above in Item 7 of this comment letter).

Footnote 17 of the draft permit authorization states that monitoring and reporting for DOC are not requirements of the WET tests but are “additional requirements”. With no detailed fact sheet provided, the Town requests information on the rationale to require additional sampling and procedures for DOC under ambient testing. This additional sampling and testing have impacts on both cost and operator staff time, which are significant for small facilities, and must be justified.

Footnote 18 of the draft permit states that a pH and Temperature measurement are to be taken of each receiving water sample at the time of collection. The Marion Facility discharge outfall is located off of the Facility site, nearly a mile distant, and approximately 1.5 miles travel from the Facility. The outfall location is also off the road, and access to this site can pose safety concerns for operators accessing the stream for sampling (the ambient sampling location is similarly off the road). The Town will also incur additional costs and operator time to meet these new sampling requirements. In addition to time, the Town will likely need to purchase and maintain a new portable pH meter for testing at the outfall. As discussed previously, the Facility is facing staffing shortages for licensed operators. The addition of this requirement further impacts the schedules of the operators, potentially causing unnecessary risks or issues, or requiring more staffing, resulting in additional impacts to the Town. The Town therefore requests that these additional requirements be removed.

#### **Response 40**

See Response 5.

Regarding staffing, see Response 1.

#### **Comment 41**

The draft permit includes additional requirements to sample for and report on per-and poly-fluoroalkyl substances (PFAS) in influent flow, effluent flow, and sludge from the Facility. We understand that this testing will be completed via Method 1633 once the method is multi-lab validated. There is concern in the industry on the number of labs that will be capable of completing this sampling and testing. Once many permittees (as expected) are required to sample and test, this concern becomes exacerbated. We already face a similar situation with Enterococci, as increased demand for Enterococci testing via membrane filtration has created a shortage of media, causing many cancelled tests and dramatically extending the lead time to receive results. It is well known that PFAS compounds are present in the environment, but WWTFs should not be the target of enforcement. We suggest that EPA's efforts to reduce the presence of PFAS compounds focus on those who are producing these compounds rather than WPCFs that only receive PFAS that they did not produce or create.

The impacts of these PFAS monitoring requirements will be significant for the Marion Facility. One of the major concerns with this monitoring requirement is the resulting impact on sludge disposal. There is currently no comprehensive federal or state plan on how to handle sludge with PFAS, which creates uncertainty for both WWTFs and sludge processing facilities. The uncertainty causes many processing facilities to refuse to take sludge that contains any PFAS whatsoever to avoid future regulatory risk. The number of sludge processing facilities that will accept PFAS compounds is severely limited and will result in significant cost increases for sludge disposals for all facilities (if they can get a contract for disposal). Therefore, the Town requests that EPA and MassDEP develop a comprehensive plan for sludge before requiring testing.

Specific to the Marion Facility, the draft permit authorization should acknowledge that this facility currently uses lagoons for sludge disposal, and therefore should qualify as a "lagoon facility" as discussed in Part D, "Sludge Conditions", item 4, of the draft permit authorization.



As such, the Town requests that Table 1 be updated in the draft permit to reflect that the Facility is a “lagoon facility” and therefore qualifies for reduced sampling conditions. The Marion Facility disposes of all waste solids to the lagoon system (currently to the newly lined Lagoon No. 1), as there are no other sludge storage systems available on site. No sludge will be leaving the Facility for the foreseeable future, so sampling and testing of PFAS in sludge at the Facility should not be required to meet the requirements currently listed.

Overall, the Town respectfully requests that the PFAS monitoring requirements be removed from the NPDES permit and authorization until legislation to PFAS removal from consumer products and industrial uses is in place in Massachusetts. At such time as those important provisions are in place, a reasonable approach to addressing the presence of PFAS compounds in wastewater may be appropriate.

**Response 41**

Regarding PFAS, see Responses 4, 7, 10 and 31.

Regarding the lagoon at the Marion Facility, as discussed in Response 33, the Marion WPCF has been removed from the list of eligible WWTFs in the Final General Permit. Therefore, EPA has determined that it is not necessary to respond to this comment given that it only applies to the Marion WPCF and is, therefore, irrelevant.

**E. Response from Korrin N. Petersen, Esq., Vice President of Clean Water Advocacy on behalf of the Buzzards Bay Coalition, dated January 25, 2023**

**Comment 42**

Buzzards Bay was designated by the United States Congress in 1985 as an “Estuary of National Significance,” and was further designated by the US EPA as a “No Discharge Area” in 2000. Buzzards Bay is also a state-designated Ocean Sanctuary. More than thirty years of EPA-approved Coalition water quality monitoring data indicate significant nitrogen impairment in estuaries across Buzzards Bay. It is well established that nitrogen pollution, primarily from wastewater, is the greatest long-term threat to the health of Buzzards Bay waters. Nearly all of the more than 30 harbors and coves in Buzzards Bay are listed as Category 5 waters as impaired for nitrogen require Total Maximum Daily Loads. One of the major drawbacks of expanding coverage under a general permit is the elimination of the opportunity for administrative review before the Environmental Appeals Board. In many cases around Buzzards Bay, water quality in receiving waters has been protected and improved due to the ability of third parties advocating for improved permit limits. The general permit, without the ability to appeal, will jeopardize the long-term health of our coastal waters.

Whether the Small GP or Medium GP, the agency must reinstate citizen’s rights to appeal individual permits and/or authorizations.

**Response 42**

As mentioned on page 20 of the 2022 Statement of Basis, general permits may not be appealed to the Environmental Appeals Board (EAB). Rather, EPA regulations at 40 CFR

§ 124.19(o) provide that general permits may be appealed to the federal courts, as follows:

(o) General NPDES permits.

- (1) Persons affected by an NPDES general permit may not file a petition under this section or otherwise challenge the conditions of a general permit in further Agency proceedings. Instead, they may do either of the following:
  - (i) Challenge the general permit by filing an action in court; or
  - (ii) Apply for an individual NPDES permit under § 122.21 as authorized in § 122.28 of this chapter and may then petition the Environmental Appeals Board to review the individual permit as provided by this section.
- (2) As provided in § 122.28(b)(3) of this chapter, any interested person may also petition the Director to require an individual NPDES permit for any discharger eligible for authorization to discharge under an NPDES general permit.

The forum in which a particular agency action may be challenged is established by statute and regulations; the rules and processes associated with those forums apply uniformly to all parties and may not be unilaterally modified by Region 1. EPA does understand the commenter's preference for appeals to the EAB rather than directly to the federal courts, but finds the environmental benefits associated with more timely permit renewals, including faster incorporation of updated water quality standards, new monitoring needs, etc., weigh heavily in favor of the general permit approach. We also note that permits may (and often have been) appealed to the federal courts following an EAB decision, so the EAB is not necessarily a speedier path to a final permit.

**F. Response from Jennifer Ryan, Deputy Director of Advocacy and Zeus Smith, Policy Advocate on behalf of the Charles River Watershed Association, dated January 23, 2023**

**Comment 43**

CRWA notes that this modification, like the original small WWTF GP and the medium WWTF GP, has individual draft authorizations that include widely varying effluent limitations, indicating EPA's commitment to continuing to provide facility-specific limits even in a general permit format. However, CRWA finds that certain issues remain. MCI Norfolk-Walpole, the facility discharging to the Charles River Watershed covered by this draft modification, apparently has been included as an allowable discharge as part of relaxed restrictions on discharges to marine sanctuaries and territorial seas. However, this does not explain its inclusion. Additionally, EPA's statement of basis implies that no new receiving water flow data was available for MCI Norfolk-Walpole, despite there being 14 years of additional streamflow data. A cursory examination reveals that these issues are replicated for other facilities outside of the Charles River Watershed.

Footnote #1 on page two of the statement of basis implies that all the newly eligible 11 coastal dischargers in Massachusetts are now allowable because restrictions regarding discharges to marine sanctuaries and territorial seas have been dropped. However, this only seems to explain three of the newly eligible discharges: Manchester by the Sea, Rockport, and Marion. It does not explain the inclusion of MCI Norfolk-Walpole. The reason(s) for its inclusion, as well as for the other seven facilities, Oak Point Retirement, Upton, Templeton, North Brookfield, Charlton, Hopedale, and MCI Bridgewater, are not explained. These facilities were not listed as eligible under the original GP but they are now. The only specific references to any of these facilities were in the statement of basis in footnotes #3 and #4 on page three describing limits and receiving water flow, not why the facilities were included. CRWA requests that EPA explain the inclusion of these newly eligible dischargers.

### **Response 43**

As noted in the comment, EPA confirms the continued inclusion of facility-specific limits based on the terms of this General Permit modification.

Regarding the inclusion of additional eligible facilities, such as MCI Norfolk-Walpole, EPA notes that the commenter seems to have misunderstood the inclusion of these additional facilities to be based on “relaxed restrictions on discharges to marine sanctuaries and territorial seas.” EPA acknowledges that these eligibility restrictions were relaxed as part of the permit modification, as described on footnote 1 of page 2 of the Statement of Basis, but notes that even without this change most of the additional facilities (other than Manchester-by-the-Sea, Rockport and Marion as mentioned in the comment), already met the eligibility requirements listed in Part I of the General Permit. These facilities could have been included in the 2021 issuance of the General Permit but simply were not included in the initial batch of eligible facilities (*i.e.*, not listed in “Attachment E – List of Eligible Facilities”) and, therefore, could not seek coverage under the General Permit despite meeting all the eligibility requirements listed in Part I of the General Permit. The only way to add these facilities was through a modification to the General Permit.

Importantly, the General Permit modification process requires a public notice to ensure all interested parties have the opportunity to review and comment on the inclusion of these specific facilities under the General Permit as well as the specific terms and conditions (including facility-specific effluent limits) that apply to each facility. EPA finds that this aspect of the approach for implementing the Small WWTF General Permit allows for more robust public participation, rather than merely providing the methodology for establishing effluent limits and allowing an unspecified number of eligible facilities to seek coverage during the permit term (as is standard practice in many other general permits).

Regarding the receiving water flow data, see Response 44.

### **Comment 44**

Footnote #4 of the statement of basis states that no new receiving water flow data was available for 6 of the 11 newly eligible facilities, so the 7Q10 from the previous permit was carried

forward. These facilities include MCI Norfolk-Walpole, as well as Charlton, Upton, Hopedale, MCI-Bridgewater, and North Brookfield. EPA’s website shows the following issuance dates for the previous permits for these facilities:

- MCI Norfolk - Walpole – 2008
- Charlton – 2011
- Upton – 2013
- Hopedale – 2011
- MCI Bridgewater – 2015
- North Brookfield – 2019

As stated, there are 14 years of additional streamflow data available for MCI Norfolk-Walpole, and a significant number of years for the other dischargers, with the exception of North Brookfield, which was issued only three years ago. This makes the EPA statement regarding no new flow data for these facilities concerning.

Footnote #4 also states that dilution was not changed at Marion, Rockport, or Manchester-by-the-Sea, meaning that for the 11 newly eligible facilities, updated dilution factors were only calculated for Oak Point Retirement and Templeton. The discharge limits for MCI Norfolk-Walpole confirm that the same dilution factor was used; the limits in the draft authorization and the limits in the most recent (2008) permit are essentially the same, though ammonia limits have changed slightly. CRWA requests that EPA further address the reasoning behind using the same dilution factors.

#### **Response 44**

EPA acknowledges that footnote 4 on page 3 of the 2022 Statement of Basis indicates that there was not any new receiving water flow data available for six freshwater and three marine dischargers listed in the comment. Based on this lack of data, EPA carried forward the 7Q10 low flow (freshwater) or dilution factor (marine) used in the current individual permit for each facility and applied that same 7Q10 low flow or dilution factor in the development of the 2022 General Permit modification.

The commenter did not reference any specific available data but simply implies that there must be additional streamflow data in the vicinity of these discharges because of the number of years that have passed since the time of the most recent individual permit reissuance (*i.e.*, up to 14 years). However, EPA confirms that there is no more recent streamflow data available for each of these receiving waters in the vicinity of each discharge. Rather, many of the gauges previously used to collect this streamflow data have been discontinued many years ago. For each freshwater discharge, EPA conducted a search for more recent data through the online United States Geological Survey (USGS) tool called StreamStats<sup>15</sup>. In each case, the most recent data available from these gauges or any other similar gauges in the vicinity of each discharge was not any more recent than the data used in the development of the 7Q10 in each most recent individual permit reissuance. For this reason, EPA does not have the ability to update the 7Q10 low flow

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<sup>15</sup> Available at: <https://streamstats.usgs.gov/ss/>

and considers that the most representative low flow is the same as that used in the previous individual permit.

One important point regarding these six freshwater facilities is that they all discharge to relatively small streams with little dilution available under critical conditions. In fact, the dilution factors (based on the 7Q10 and design flow) that are carried forward range from 1.02 only as high as 1.8 (as shown in Attachment E of the General Permit). In other words, the available dilution allowed for these six facilities is already quite minimal and the potential reduction in available dilution, if more recent data were available and showed that less dilution were available, is also relatively minimal compared to most other eligible facilities with much higher dilution factors, many well over 1,000 (also shown in Attachment E of the General Permit). In any case, EPA notes that the inability to update these 7Q10 low flow analyses is concerning, given the potential changes in hydrologic conditions, and EPA has been collaborating with USGS to determine how to address this need for more updated streamflow data in the future.

In like manner, the commenter mentions three marine dischargers whose dilution factor was carried forward in the development of the General Permit. Given that marine discharges are tidally influenced, EPA does not rely on 7Q10 low flow but rather relies on site-specific modeling or dye studies to determine an appropriate dilution factor that represents the critical condition for permit development. In this case, the three marine discharges had a site-specific dilution factor that was used in the previous individual permit. One of the three, Marion, which is not afforded any dilution (*i.e.*, dilution factor of 1) is being removed from the list of eligible facilities for reasons specified in Response 33 above. For the other two, Manchester-by-the-Sea and Rockport, EPA found that the previous dilution factors were the most representative available information given that there are not any more recent site-specific models or dye studies to rely upon. Therefore, these dilution factors were carried forward.

EPA notes that it is not unusual to carry forward these prior analyses when they represent the best available information, regardless of whether the discharger is covered by an individual permit or a general permit.

#### **Comment 45**

CRWA is concerned that the format of this permit is inappropriate. As mentioned, despite individual authorizations, in many ways, this permit modification treats all newly covered facilities similarly, even where doing so is inappropriate and contrary to available data. These issues may affect all general permits. The general permit issued for medium WWTFs (Permit No. MAG590000) purports to cover 44 facilities and contains individual authorizations for all of them. As CRWA noted when commenting on that permit, it is unclear, in the end, how this approach benefits EPA in the long term. In that permit, EPA apparently expended significant time and effort developing individual authorization letters for each facility. If in the final accounting, the same amount of effort is put in for individual authorizations under a general permit as through the issuance of specific facility permits, and the sole reason why this format is more efficient for EPA is that it results in fewer public comments, that may itself be cause for concern. If it restricts public comment, removes the opportunity for administrative review in the

form of petitions to the Environmental Appeals Board, and potentially leads to inappropriate facility dilution factors, effluent limits, and authorizations— as it appears to with this permit—then the general permit approach may need to be reconsidered. To ameliorate these issues, CRWA suggests that EPA:

- Continue to provide an expanded comment period and specific information for each covered facility, and
- Continue to provide site-specific data and factsheets in a manner that is easy to navigate and provides enough time for the public to comment.

#### **Response 45**

First, the commenter suggests that this General Permit modification “treats all newly covered facilities similarly, even where doing so is inappropriate and contrary to available data.” While EPA disagrees with this suggestion, EPA notes that the comment does not specify what aspect of the General Permit is inappropriate or how it is contrary to available data, so EPA is unable to address these claims in more detail.

Second, the commenter repeats concerns they raised in the Medium WWTF General Permit proceeding regarding the effort to develop the general permit (with individual authorizations) may not be more efficient than developing individual permits and raises an additional concern that the “sole reason” it is more efficient is that it results in fewer public comments. EPA has thoroughly responded to these concerns raised in the Medium WWTF General Permit regarding the overall permitting efficiency of general permitting approach compared to reissuing all individual permits. The same rationale also applies to this Small WWTF General Permit. See the Medium WWTF GP Response to Comments<sup>16</sup> especially Part II.B. Significant Environmental Benefit and Administrative Efficiency to General Permit Approach.

Regarding the additional concern in this comment that the “sole reason” for this efficiency gain is due to fewer public comments, EPA disagrees. On one hand, it may be true that a single general permit may solicit only one comment from an interested party on a certain provision whereas many individual permits may solicit many identical comments from that interested party on that same provision. In this case, there would be an efficiency gained by only responding to that comment once and the result of that comment and response would be applied to all applicable facilities simultaneously. This scenario seems to be a beneficial outcome of the general permitting approach and is not likely the concern that is implied by this comment. On the other hand, the commenter may be suggesting that a general permit would somehow result in comments on a smaller number of issues compared to the respective individual permits for the same facilities due to the added complexity of the general permit and/or difficulty of understanding the general permit. EPA certainly does not intend to avoid such substantive and meaningful public participation and has taken every effort to make the terms and supporting record for the General Permit abundantly clear. See Response 25.

Regarding the Environmental Appeals Board, see Response 42.

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<sup>16</sup> <https://www3.epa.gov/region1/npdes/mwwtfgp/final-medium-wwtf-gp-rtc.pdf>

Regarding dilution factors, see Response 44.

Finally, the comment concludes that the issues raised in this comment may be ameliorated if EPA continues to provide an expanded comment period and specific information for each covered facility and continues to provide site-specific data and fact sheets in a manner that is easy to navigate and provides enough time for the public to comment. EPA confirms that these requests have been fulfilled in this General Permit modification and EPA intends to continue to apply these and many other process improvements in the future to ensure robust public participation as well as meaningful improvements in water quality protection and accountability.