RESPONSE TO COMMENTS
NPDES PERMIT NO. MAG580000 AND NHG580000
SMALL WASTWATER TREATMENT FACILITY GENERAL PERMIT

The U.S. Environmental Protection Agency's Region 1 (EPA) is issuing a Final National Pollutant Discharge Elimination System (NPDES) General Permit for Small Wastewater Treatment Facilities (WWTFs) located in Massachusetts and New Hampshire. 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 number MAG580000 and NHG580000 ("Draft General Permit"). The Response to Comments explains and supports EPA's determinations that form the basis of the Final General Permit. EPA solicited public comments on the Draft General Permit from April 8, 2021 through May 25, 2021.

EPA received comments from:

- Town of Allenstown, NH, dated May 4, 2021
- Town of Antrim, NH, dated May 25, 2021
- Town of Barre, MA, dated May 25, 2021
- Town of Charlemont, MA, dated May 3, 2021 and May 10, 2021
- Town of Cohasset, MA, dated May 25, 2021
- Town of Epping, NH, dated May 24, 2021
- The Governor's Academy, dated May 25, 2021
- Town of Hillsborough, NH, dated May 20, 2021
- Town of Lancaster, NH, dated May 24, 2021
- Town of Leicester, MA, dated May 7, 2021
- Town of Merrimac, MA, dated May 13, 2021
- Merrimack County Nursing Home, dated April 27, 2021 and May 24, 2021
- Town of Milton, NH, dated April 29, 2021 and May 20, 2021
- Town of Newington, NH, dated May 24, 2021
- Town of Newmarket, NH, dated May 24, 2021
- Town of Northfield, MA, dated April 26, 2021
- The Oxford-Rochdale Sewer District, MA, dated May 9, 2021
- Town of Pembroke, NH, dated May 24, 2021
- Plymouth Village, NH, dated May 24, 2021
- Town of Rollinsford, NH, dated May 8, 2021

- Town of Shelburne Falls, MA, dated May 25, 2021
- Town of Troy, NH, dated May 24, 2021
- Town of Whitefield, NH, dated April 8, 2021 and April 25, 2021
- Woodsville Fire District, dated April 26, 2021
- Anette Lewis, dated May 24, 2021
- Connecticut River Conservancy, dated May 25, 2021
- H2O Innovation, dated April 9, 2021
- MA Water Environment Association, dated May 13, 2021
- NH Water Pollution Control Association, dated May 25, 2021
- OARS, dated May 25, 2021
- Sudbury, Assabet, and Concord Wild and Scenic River Stewardship Council, dated May 25, 2021

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: https://www.epa.gov/npdes-permits/massachusetts-npdes-permits#fgp.

A copy of the Final General Permit may be also obtained by writing or calling Michael Cobb, U.S. EPA, 5 Post Office Square, Suite 100, Boston, MA 02109-3912; Telephone: (617) 918-1369; Email Cobb.Michael@epa.gov.

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I. Summary of Changes to the Final General Permit

1. The Allenstown (aka Suncook) WWTF has been removed from the list of eligible facilities in Attachment E of the Final General Permit. See Response 1.

2. For lagoon WWTFs, the total nitrogen, total Kjeldahl nitrogen and nitrate + nitrite effluent monitoring has been reduced to once per quarter in Part II.A and Part III.A of the Final General Permit. See Response 4.

3. For the Charlemont and Shelburne Falls WWTFs, a revised pH range of 6.0 to 8.3 S.U. is included in Part II.A.1 footnote 7 of the Final General Permit with a requirement to submit a pH study within three years of the effective date of the final permit if these WWTFs wish to continue with that pH range in future permits. See Responses 10 and 124.

4. For marine dischargers in MA, the diffuser inspection frequency has been changed to once every five years in Part II.E.1.b of the Final General Permit. See Response 16.

5. For Epping, the aluminum limit has been removed from Attachment E of the Final General Permit and an aluminum limit will not be included in Epping's authorization to discharge. See Response 19.

6. For all WWTFs that are required to conduct two WET tests per year, Part II.A footnote 14 and Part III.A footnote 16 of the Final General Permit have been adjusted to require WET testing in the second and third calendar quarters. See Response 24.

7. The Governor's Academy WWTF has been removed from the list of eligible facilities in Attachment E of the Final General Permit. See Response 28.

8. For the Leicester WWTF, the 7Q10 has been changed to 0.33 cfs, the dilution factor has been changed to 1.6 and the more stringent TRC and WET limits have been removed in Attachment E of the Final General Permit. Additionally, a new requirement for monitoring and reporting ambient flow immediately upstream of the

Leicester WWTF outfall has been added to the Final General Permit. See Response 48.

9. For the Leicester WWTF, the more stringent phosphorus limit has been changed to 0.16 mg/L in Attachment E of the Final General Permit. See Response 50.

10. For the Leicester WWTF, the compliance schedule for the more stringent phosphorus limit has been changed to 24 months from the authorization to discharge in Part IV.E.1 of the Final General Permit. See Response 51.

11. For the Leicester WWTF, the ammonia limits for April have been changed to 9.2 mg/L and 26.9 lbs/day in Attachment E of the Final General Permit. See Response 52.

12. For the Leicester WWTF, the more stringent copper limits have been removed from Attachment E of the Final General Permit and the compliance schedule has been removed from Part IV.E.1 of the Final General Permit. See Response 53.

13. The words "and tests completed" have been removed from Part II.A footnote 14 and Part III.A footnote 16 in the Final General Permit. See Response 67.

14. For clarity, the monitoring frequency for Total Residual Chlorine in Part III.A Table 1 has been changed to say "See Footnote 11" in the Final General Permit. See Response 73.

15. For WWTFs discharging to marine waters, a provision has been added to allow the Permittee to request an extension of up to 60 additional days to submit the diffuser inspection reports to EPA and the States in Part II.E.1.d and Part III.D.1.d of the Final General Permit. See Response 77.

16. For marine dischargers in New Hampshire, the notification requirement has been changed to be required when monitoring exceeds 43 organisms per 100 mL in Part III.D.2.c of the Final General Permit. See Response 82.

17. For the Oxford-Rochdale WWTF, the more stringent copper limits have been removed from Attachment E of the Final General Permit and the compliance schedule has been removed from Part IV.E.1 of the Final General Permit. See Response 105.

18. For all WWTFs, the daily maximum reporting requirements for total nitrogen, total Kjeldahl nitrogen and nitrate + nitrite have been removed in Part II.A and Part III.A of the Final General Permit. See Response 113.

19. For the Plymouth Village WWTF, the design flow has been updated to 0.70 MGD in Attachment E of the Final General Permit. See Response 119.

20. For all WWTFs, the influent, effluent and sludge PFAS monitoring has been reduced to twice per year (in the 3rd and 4th calendar quarters) in Parts II.A and III.A of the Final General Permit; for lagoon WWTFs, the sludge monitoring has been further reduced to once per permit term with details regarding how to sample the lagoon sludge in a representative manner; and for marine dischargers with a design flow less than 0.1 MGD, PFAS monitoring is not required in the Final General Permit. See Appendix A.

21. Based on Section 401 of the Clean Water Act, NHDES submitted a letter to EPA on June 4, 2021 certifying that the Draft Small WWTF General Permit would ensure the protection of NH's Surface Water Quality Standards. This letter included one condition that "EPA complete a reasonable potential analysis and develop permit limits for each New Hampshire facility that is eligible for coverage under the WWTF GP, regardless of dilution factor." Based on this condition, EPA completed an updated analysis of the WWTFs in New Hampshire and determined that effluent limitations beyond those proposed in the Draft General Permit may be necessary for the Woodstock and Swanzey WWTFs in NH. Given that these potential limitations were not included in the Draft General Permit, EPA has determined that it would not be appropriate to impose these limitations in the Final General Permit and instead has deemed these two WWTFs to be ineligible for coverage under the Final General Permit. Therefore, Woodstock and Swanzey WWTFs have been removed from the list of eligible WWTFs in Attachment E of the Final General Permit and they will continue to be authorized under their respective individual permits. EPA will address the potential effluent limitations mentioned above when these individual permits are reissued in the future. See NHDES certification letter dated June 4, 2021 and included as Appendix B to this Response to Comments document.

22. A typographical error under Part II.A, Table 1, footnote 10 and Part II.A, Table 1, footnote 12 of the Draft General Permit has been corrected from "See Part IV.F. …" to "See Part IV.E. …".

II. Responses to Comments

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

A. Comments from Jeffrey Backman, Superintendent, Allenstown Wastewater Treatment Facility

Comment 1

The purpose of this letter is to provide comment on behalf of the Allenstown Wastewater Treatment Facility (WWTF) regarding the subject draft permit issued by the US Environmental Protection Agency (USEPA) on April 8, 2021, with comments due to USEPA by May 10, 2021.

The Allenstown WWTF is currently covered under the existing general permit and under the proposed general permit (No. NH0100714), referred to as the "Suncook WWTF", both with a rolling average effluent flow discharge limitation of 1.05 million gallons per day (MGD). The

Allenstown WWTF was upgraded, with construction completed in 2011, with an increased design average daily flow capacity of 1.5 MGD, which is not referenced in the subject draft permit. We believe that the flow referenced for our facility in the 2021 draft general permit is incorrect.

The Allenstown WWTF provides treatment for sewerage service areas in the Towns of Allenstown and Pembroke. The two communities are working cooperatively to formulate a revised Intermunicipal Agreement (IMA) that allocates more of the expanded treatment facility capacity to the Town of Pembroke. This additional flow allocation depends upon the availability of the 1.50 MGD facility flow capacity and is critically needed in a timely fashion to accommodate ongoing residential growth in Pembroke.

On November 9, 2015, the Allenstown WWTF submitted an application for an individual NPDES permit (No. NH010390) with a design flow capacity of 1.5 MGD.

On January 25, 2016, the Allenstown WWTF received a letter from the NH Department of Environmental Services (NHDES) rescinding sewer moratoriums that had been in effect prior to the 2011 facility upgrade and referencing the facility's upgraded 1.5 MGD design flow (Attachment 1).

On April 14, 2016, the Allenstown WWTF received a letter from USEPA Region 1 indicating that the individual NPDES permit application had been deemed complete and that Allenstown would continue under the provisions of the general permit until the pending issuance of an individual permit (Attachment 2).

On April 12, 2016, the Allenstown WWTF received a letter from USEPA Region 1, also indicating the completeness of the individual permit application, and indicating that the next steps were for USEPA to prepare a draft permit and fact sheet and to open a public comment period (Attachment 3).

The Allenstown WWTF has not received any correspondence from USEPA on this matter since April, 2016.

The Allenstown WWTF continues to be regulated under the general permit, with a flow limitation of 1.05 MGD. The effect of this administrative delay is that the Allenstown WWTF is unable to provide the now critically needed additional flow allocation to the Town of Pembroke through a revised IMA until the general permit flow limitation is revised and/or a new individual permit is issued.

The Allenstown WWTF respectfully requests that the USEPA modify the general permit flow limitation for our facility to 1.5 MGD to apply through the interim period until the individual permit is issued, and that the individual permit be issued without further delay.

Response 1

EPA acknowledges the events described in this comment and agrees that the Allenstown WWTF (referred to as the "Suncook WWTF" in the Draft General Permit and in this Response to Comments document for consistency) has requested an increase in its

permitted flow limit based on the facility upgrade completed in 2011. As described in the comment, EPA intends to process this request through the issuance of an individual permit. This process will include close coordination with NHDES and a separate public process where the public can review and comment on the proposed change in the flow limit as well as any other changes necessary in the individual permit to ensure compliance with water quality standards (including antidegradation requirements) when discharging at the higher flow.

Given that EPA did not have any correspondence with the Suncook WWTF regarding the requested flow increase since 2016 and the facility is currently discharging well below its current flow limit of 1.05 MGD (*i.e.*, 0.64 MGD average flow during the review period), EPA was not aware that there was any urgency in processing the flow increase for the facility at the time the reissuance of the Small WWTF General Permit was being drafted. However, during the public comment period, Suncook made it clear to EPA (through this comment as well as other correspondence) that they continue to seek an increased flow limit and noted that there is a need for EPA to expedite this process in order for them to allocate additional flow to the Town of Pembroke for expected future growth.

Unfortunately, EPA is unable to process this flow limit increase in this Small WWTF General Permit for at least two reasons. First, Part I.C.2 of the General Permit clearly limits eligibility to only authorize dischargers with a design flow of less than or equal to 1 MGD. The Draft General Permit noted that an exception was made for the Suncook WWTF to continue to be eligible with a design flow of 1.05 MGD given that their design flow is very close to 1 MGD and they are already authorized under the current General Permit issued in 2011. However, this facility would no longer be eligible if its design flow increases significantly. Second, to process the flow increase EPA must allow for public review and comment on the proposed increase. Given that the Draft General Permit did not include a proposed flow limit increase, it would not be appropriate to include an increase in the Final General Permit without any opportunity for public review.

Therefore, EPA has decided to remove the Suncook WWTF from the list of eligible facilities and to prioritize the issuance of an individual permit for this facility with a proposed flow limit increase. Until a new permit is issued, the requirements in the 2011 General Permit will apply.

B. Comments from the Antrim Water and Sewer Commission: Peter Beblowski, Melissa Lombard, and Sam Harding

Comment 2

The Antrim Water and Sewer Commission offers the following comments regarding the draft public notice of the Small Wastewater Treatment Facility General Permit No NHG580000. The Antrim wastewater treatment facility (WWTF) utilizes a lagoon system with a retention time of approximately 60 days, additionally we have a small user base of approximately 361 accounts that are almost exclusively household and non-manufacturing businesses. Several of the sampling frequencies listed in the general permit seem excessive given the system's long

retention times, our small user base that consists primarily of private households, and the increased cost of sampling that will burden our users.

The following comments are provided. We ask that EPA consider them prior to finalizing the permit.

New Effluent Total Recoverable Lead Permit Requirement

We understand that information from previous Whole Effluent Toxicity Testing was utilized to estimate the reasonable potential for Lead to cause exceedances to the State approved water quality limits. The upstream river values of Lead are already at the current water quality limit of 0.41 ug/L for fresh water chronic criteria, affording no capacity for discharge of Lead from the WWTF.

Clean sampling techniques were not used to collect samples during past whole effluent toxicity (WET) sampling efforts. We ask that additional river sampling and effluent sampling be allowed to take place so that clean sampling techniques can be used to minimize any contamination and obtain accurate results.

The new Lead limit may be difficult to meet for our facility because it was not designed to remove metals. The draft permit requires the Department to submit a status report on compliance within 12 months and meet the new limit in 18 months. This may be an achievable schedule if chemical addition is the solution, however additional time to pilot alternatives to select the cost-effective solution is needed. The addition of chemicals using metal salts will impact pH and additional alkalinity may be needed. Capital costs for new structures will have to be approved at Town meeting. An 18-month compliance schedule may not be achievable.

The additional testing and new permit limits for Lead (Pb) required in the draft permit will cause a significant increase in our annual budget. The additional laboratory testing is estimated to increase our budget approximately 4%. It is unknown how much a new unit process to remove Lead to below detection limits will cost for capital and operations until a study is performed. If we assume chemical addition using a metal salt and alkalinity addition is needed for Lead removal, this requirement will have the potential of increasing our annual budget by 11 %. Overall, this is a 15% increase in our budget that affects a user base of 361 accounts, not including any capital costs.

Response 2

EPA agrees with the comment that the median upstream lead concentration from the Whole Effluent Toxicity testing of 0.5 µg/L exceeds the freshwater chronic criterion of 0.4 µg/L. EPA also recognizes that this was based on limited data (*i.e.*, 5 WET tests conducted once per year during the review period) and agrees that additional data (especially data collected using clean sampling techniques) may be helpful in confirming the analysis. While EPA appreciates any efforts to improve sampling techniques and methodologies to obtain the most representative data, the comment does not provide any indication that the data used in EPA's analysis was contaminated or was not representative of ambient conditions. However, given that the permit includes a

compliance schedule of 18 months and a status report after 12 months, EPA will review any additional ambient data submitted within this timeframe before the limit becomes effective. If the data shows that the median ambient lead concentration is below 0.4 µg/L, EPA may reopen the General Permit and remove the lead limit, if appropriate.

Regarding the length of the compliance schedule, EPA agrees with the comment that there may be multiple pathways to achieve compliance and some of those pathways are achievable within 18 months whereas other pathways may take a longer time. 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." Given the potential for compliance within 18 months through chemical addition, as confirmed in the comment, any extension of the schedule would not ensure that the schedule requires compliance "as soon as possible." Therefore, the compliance schedule in the Final General Permit has not been changed. However, if the Permittee is unable to comply with the limit once it becomes effective, they may contact EPA's Enforcement and Compliance Assurance Division (ECAD) to discuss a potential administrative order with additional time to achieve the lead limit through alternate means.

Comment 3

PFAS Testing

We have asked our engineer to estimate the costs for testing for this permit condition. Initial estimates are $1,900 per quarter or $7,600 per year for influent, effluent, sludge and a blank for QA/QC. This is a high burden for a small user base such as ours. We have approximately 263 accounts in Antrim and 98 accounts in Bennington served by our system. This user base pays for a budget of approximately $244,000 per year. Additional testing for PFAS alone will increase our user costs 3%.

We ask that EPA reduce the testing frequency due to our lagoon treatment process providing an extremely long time of storage before discharging. Our annual average flow is less than 100,000 gpd (80,000 gpd) and the plant was designed for 210,000 gpd. Basins 1 and 2 are used to meet permit. Basin 1 has a volume of 3.057 million gallons. Basin 1 alone provides approximately 38 days of retention time. Basin 2 has a volume of 1.58 million gallons and provides 19 days of retention time. Effluent quality does not vary significant from week to week, but by season to season.

We request PFAS sampling for influent and effluent be adjusted to 1 time per year and alternated by season over permit period to capture each season. It also is requested that if PFAS concentrations are below detection limits and/or regulatory limits, that the sampling requirement be eliminated.

We request sampling for sludge be eliminated from this permit or at a minimum be adjusted to 1 time per 5-year cycle. Our lagoons accumulate sludge over a long period before sludge is removed. We have cleaned Lagoon 1 out twice in the forty years of operation and Lagoon 2 once

in forty years. The last sludge removal occurred in 2015 when Lagoons 1 and 2 were cleaned. We expect the frequency of sludge removal to be on the order of every 15 to 20 years. If we sample once every permit cycle, we will capture any concerns. There is no indication that our users are or ever have utilized PFAS components. The first-year sludge sampling event will tell us whether there is any concern.

Response 3

See the General Response Regarding PFAS Monitoring in Appendix A

Comment 4

Total Nitrogen Monitoring

This is a new requirement in our permit. The fact sheet for the draft permit indicates that EPA is concerned about nitrogen discharges to the Merrimack River Watershed. Facilities with design flows above 100,000 gpd are required to test 1 x/month. Our design flow is above this, however historically we have always been below 100,000 gpd.

Estimated costs for sending the testing out to a certified laboratory monthly is approximately $1,440 ($120 per month). Since our system provides a long residence time, we think it is reasonable to reduce sampling to quarterly rather than monthly. After the five-year period, we will have twenty total samples that provide information on nitrogen discharged from our facility. Please consider the above comments as you move forward with issuing the final permit.

Response 4

EPA agrees that the reduced effluent variability and extended hydraulic retention time in lagoon facilities compared to other types of treatment (such as activated sludge systems with much shorter typical hydraulic retention times) are adequate justifications to reduce the frequency of nitrogen monitoring to once per quarter in order to adequately characterize nitrogen in the discharge. This reduction is consistent with other monitoring frequency reductions associated with lagoon facilities in NH, as shown in Part III.B.10 of the General Permit. Therefore, the total nitrogen, total Kjeldahl nitrogen and nitrate + nitrite effluent monitoring for lagoon WWTFs has been reduced to once per quarter in Part II.A and Part III.A of the Final General Permit.

C. Comments from Thomas George, Chief Operator, Town of Barre WWTP

Comment 5

PFAS

The requirement to test influent, effluent and sludge for "PFAS 6" on a quarterly basis is the same as any other facility regardless of size (e.g. MWRA, Springfield & Upper Blackstone will have same requirement). The cost of testing will be in the $3,000-$5,000 range ($300-$400 per test is the range of lab cost we are seeing) which is a significant portion of a small facility's budget while larger facilities have more ability to adsorb the cost. This "one size fits all" testing protocol should be balanced according to facility size and budget. The Town requests Barre (and other small WWTFs under the general permit) conduct testing once per year, review data after 3

years and adjust testing requirements as deemed necessary. This approach would get the same results and spread out the financial impact. It would also allow for discontinuation of testing after a number of non-detects.

Response 5

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 6

WHOLE EFFLUENT TOXICITY

The Town of Barre feels that here is no need for a C-NOEC of >5%. The permit should just have a limit of LC50 >100%. In addition (as noted in the footnote below), NPDES permits allow for reduction in testing from the 4 times per year for facilities with a positive pass rate (Barre has met their acute limit since 2013). The Town requests a testing frequency of one per year with a re-test if there is a permit limit violation. This will also help with the laboratory budget.

As stated in Part 1, A.1. Footnote 11 of the 2013 NPDES Permit;

After submitting one year and a minimum of four consecutive sets of WET test results, all of which demonstrate compliance with the WET permit limits, the permittee may request a reduction in the WET testing requirements. The permittee is required to continue testing at the frequency specified in the permit until notice is received by certified mail from the EPA that the WET testing requirement has been changed.

Response 6

As described in the Fact Sheet at 27-29, the toxicity requirements are established in accordance with EPA Region 1 and (for MA dischargers) MassDEP[1] current toxic policies which base the limits and frequency on dilution factor. The updated dilution factor for the Barre WWTF is 19.1, which is less than 20 and, therefore, results in the need to conduct 4 tests per year and requires an acute LC_{50} limit using 100% effluent and a chronic C-NOEC limit of ≥ 5% effluent (based on 1/DF or 1/19.1, which is 5%). EPA notes that the Barre WWTF has been conducting both acute and chronic tests and has reported no violations of the existing LC_{50} limit and no chronic toxicity even using 100% effluent. Therefore, EPA does not anticipate that this limit of ≥ 5% will result in any non-compliance issues at the facility.

Regarding the request for reduced frequency, EPA and MassDEP do not consider a reduction below the current toxic policies appropriate at this time in order to continue to ensure the facility does not cause or contribute to any toxic effects in the receiving water. However, EPA confirms that the reduction from two species to one species included in Barre's individual permit is being carried forward in the General Permit, based on footnote 14 of Part II.A of the Final General Permit. EPA also notes that the footnote referenced in this comment from Barre's individual permit is not included in the General Permit and EPA does not contemplate reducing these frequencies during the life of this General Permit.

[1] *Massachusetts Water Quality Standards Implementation Policy for the Control of Toxic Pollutants in Surface Waters*. February 23, 1990.

Comment 7

TOTAL COPPER

Since the inception of the copper limit of 2.5 ug/L average monthly and 3.2 ug/l daily maximum in the 2013 NPDES Permit, The Town of Barre WWTP received and has complied with requirements of an administrative order issued by EPA in 2017 (Docket No. CWA-AO-FY17-013). In that order the EPA recommended an interim limit of 20 ug/l monthly average and 26 ug/l daily maximum measured once (1) per month. Per the Order, the Town of Barre with the assistance of the engineering firm Tata & Howard, submitted a Copper & Aluminum Reduction Report in August 2019. The Town of Barre WWTP has consistently met the requirements of the interim limit and request that the original limit of 2.5 ug/l be adjusted to that of the interim limit of 20 ug/l monthly average and 26 ug/l daily maximum measured once (1) per month.

The Town of Barre feels that current interim limits are more in keeping with the water quality criteria that MassDEP put in place in numerous streams in the state in response the knowledge and evidence that copper values are based upon stream chemistry. The MassDEP and EPA should review the copper criteria for the Ware River and adjust the effluent levels to reflect the more appropriate ambient criteria (as done in the interim limits).

Response 7

EPA appreciates the efforts by the Town of Barre to comply with the administrative order, including the interim copper limits. EPA notes that those interim limits were established to ensure the existing facility optimizes the removal of copper until such time that the facility can achieve further copper reductions. These interim limits are not based on a level that would ensure protection of water quality standards and, therefore, cannot be included in the General Permit. Rather, the limits that ensure the protection of water quality standards were established in the 2013 Permit and are being carried forward in this General Permit (see pages 13-15 of the 2012 Fact Sheet).

Finally, EPA notes that if the Town of Barre is transfers from an individual permit to the General Permit, the administrative order associated with the individual permit would no longer be in effect. However, the Permittee may contact EPA Region 1's Enforcement and Compliance Assistance Division to pursue a new administrative order associated with the General Permit, if necessary, to provide the time or other flexibilities necessary to achieve permit compliance.

Comment 8

TOTAL ALUMINUM

The proposed permit limit (87 ug/l) is based upon the existing MassDEP water quality standard which is in the process of being changed. It is based upon background levels being above that criteria (note that the upstream water is part of the MRWA Quabbin/Ware River system which obviously is a water supply).

Since the inception of the aluminum limit of 87 ug/L in the 2013 NPDES Permit, The Town of Barre received and has complied with requirements of an administrative order issued by EPA in

2017 (Docket No. CWA-AO-FY17-013). In that order the EPA recommended an interim limit of 172 ug/l monthly average and report the daily maximum measured once (1) per month. Per the Order, the Town of Barre with the assistance of the engineering firm Tata & Howard, submitted a Copper & Aluminum Reduction Report in August 2019. The Town of Barre WWTP has consistently met the requirements of the interim limit and request that the original limit of 87 ug/l be adjusted to that of the interim limit of 172 ug/l monthly average and report daily maximum measured once (1) per month.

The permit should keep the interim limits and make changes as soon as the new and less stringent criteria are in place.

Response 8

EPA appreciates the efforts by the Town of Barre to comply with the administrative order, including the interim aluminum limit. EPA notes that the interim limit was established to ensure the existing facility optimizes the removal of aluminum until such time that the facility can achieve further aluminum reductions. The interim limit is not based on a level that would ensure protection of water quality standards and cannot be included in the permit. Rather, the limit that ensures the protection of water quality standards were established in the 2013 Permit and are being carried forward in this General Permit.

However, as EPA noted in the Fact Sheet at 14, EPA is aware of ongoing efforts by MassDEP to soon revise the Massachusetts aluminum criteria based, at least in part, on new EPA aluminum criteria recommendations which were finalized in 2018. After these revisions are finalized and become effective, EPA may be able to relax the effluent limit to the extent consistent with antidegradation and anti-backsliding requirements, if warranted by the new criteria.

Also see Response 7 regarding the administrative order.

Comment 9

TOTAL PHOSPHORUS

The Town of Barre WWTP, for simplicity and consistency, requests that there be one limit year round for Total Phosphorus of 1.0 mg/L measured once (1) per week and eliminating the April 1st – October 31st limit of 0.9 mg/l measured once (1) per week.

Response 9

The limit of 0.9 mg/L from April 1st through October 31st was established to ensure the protection of water quality standards in the receiving water during the warm weather months. To relax this limit from 0.9 mg/L to 1.0 mg/L (to match the winter limit) would not ensure the protection of water quality standards during the warm weather months and would violate anti-backsliding regulations. Therefore, the Final General Permit has not been changed.

D. Comments from Kurt Boisjolie and the Charlemont Sewer District Commissioners

Comment 10

The Charlemont Sewer District (CSD) in Charlemont MA offers the following comments, within the allowable Public Comment Period and specific to the proposed pH Effluent Limits in proposed draft permit MAG 580000:

CSD presently has a discharge limitation of 6.0 to 9.0 in its existing MAG 580003.

The draft revised permit MAG 580000 developed by EPA proposes a pH discharge limitation of 6.5 to 8.3.

CSD presently barely meets its existing pH limit of 6.0, with final effluent pH normally between 6.0 to 6.2, so the proposed increase in pH limitation to 6.5 is of great concern to CSD. CSD has little to no concern with the upper pH limitation dropping from 9.0 to 8.3.

CSD requests at this time that EPA and MassDEP retain CSD's existing effluent pH limit of 6.0 in the newest forthcoming version of MAG 580000.

From review of the recent January 4, 2021 Individual NPDES Permit # MA0101257 issued to the Orange MA wastewater treatment facility , CSD is aware of the "alternative pH limit" of 6.0 to 8.3 approved for Orange, with the stipulation that Orange perform a pH Study during the term of that permit. For CSD to retain its effluent pH limit of 6.0, CSD understands that it may also be required to perform its own pH Study during the term of the newest forthcoming version of MAG 580000.

CSD is permitted to discharge 50,000 gallons per day (equivalent to 0.050 MGD) of wastewater effluent to the Deerfield River. Average daily flow of CSD wastewater effluent is presently approximately 17,000 gallons per day.

Past correspondence with EPA and MassDEP shows that the Deerfield River Flow has a dilution factor of more than 800 to 1 to the permitted CSD wastewater flow of 0.050 MGD, as documented in MassDEP and EPA correspondence including:

- July 9, 2012 letter from MA DEP (Claire Golden) to Merideth Timony of EPA noting that the CSD wastewater design flow discharge of 0.050 MGD to the Deerfield River has a dilution factor of 806, and CSD should be authorized to discharge to the Deerfield River with a pH discharge limitation of 6.0

- a July 18, 2008 memorandum from Janet Deshais (EPA) to Paul Hogan providing the Dilution Calculation which calculates a 831 Dilution Factor at the CSD outfall.

Please contact CSD as soon as possible as to what CSD needs to do to initiate its pH Study, if such pH Study is necessary.

Response 10

EPA appreciates the offer to perform a pH demonstration study and notes that the updated dilution factor as presented in Attachment E of the Draft General Permit is 1,798. Based on this extremely high dilution afforded by the receiving water even under critical flow conditions (*i.e.*, 7Q10 and design flow) and the fact that the receiving water (*i.e.*, the Deerfield River) is not impaired for pH, EPA and MassDEP agree that a discharge of 6.0 S.U. is highly unlikely to impact the receiving water and cause or contribute to a violation of water quality standards. Therefore, the pH limit in the authorization to discharge for this facility will be 6.0 to 8.3 S.U. However, in order to continue the pH limit of 6.0 – 8.3 S.U. in future permits, the Town of Charlemont shall be required conduct a study to demonstrate that the pH in the receiving water does not exceed the range of 6.5 – 8.3 S.U. This revised pH limit for Charlemont and associated requirement for future permits are included in Part II.A.1 footnote 7 of the Final General Permit.

Comment 11

The Charlemont Sewer District (CSD) in Charlemont provides, since 1992, wastewater collection and treatment service to approximately 200 billing units serving approximately 300 people in the Charlemont Village area of Charlemont, discharging approximately 17,000 gallons per day to the Deerfield River. CSD has had remarkably good effluent for decades, benefitting the designated uses of the Deerfield River for many years, and should do so for many years to come. CSD does so with an annual operating budget of approximately $152,000 per fiscal year.

At this time, CSD offers the following comments regarding the proposed to MAG 580000 within the allowable Public Comment Period, with comments specific to the proposed additional PFAS monitoring and analysis in proposed draft Permit MAG 580000.

In summary, although the connection between the designated uses of the Deerfield River and the proposed PFAS data collection is unclear, CSD is willing to take the 4 Influent wastewater and 4 Effluent wastewater PF AS samples per year proposed in new MAG # 580000, and 2 sludge PFAS samples per year (not 4 sludge samples per year) , in order to assist EPA and DEP in their PFAS data collection efforts. However, CSD asks that EPA and/ or DEP pay the annual cost for analyzing such PFAS samples.

The first sentence of the footnote to the required PFAS sampling would be modified (modifications in italic bold) to state:

> "Beginning six (6) months after the permittee has been notified by EPA of a multi-lab validated method for wastewater, and EPA or DEP has provided the funding to pay the cost of such PFAS lab analysis , ... the permittee shall conduct monitoring of the influent, effluent , and sludge for PF AS compounds as detailed in the tables " ... (such table showing quarterly sampling of CSD influent and CSD effluent, and twice per year sampling of CSD sludge).

<u>Background:</u>
CSD wastewater discharge is presently covered under MA general Permit MAG 580003, which allows a permitted discharge of 50,000 gallons per day (equivalent to 0.050 Million Gallons per

Day) to the Deerfield River. Average daily flow of CSD wastewater effluent to the Deerfield River is approximately 17,000 gallons per day (0.017 MGD). Under the existing MA General Permit# 580003, CSD is not required to sample and analyze for PFAS's.

At permitted flow of 0.050 MGD, the CSD wastewater treatment plant (WWTP) is one of the smallest of the "small" WWTP's (flows of up to 1.00 MGD) covered in the existing, and proposed, MA General Permit # MAG 580000.

EPA and DEP wish to obtain data regarding PFAS's and propose to do so by requiring sampling and analysis for PFAS's by the small WWTP's covered by MAG 580000, with the entire expense borne by the WWTP's. The Fact Sheet, draft Water Quality Certification, and other documents associated with the new proposed MAG 580000 provides a narrative as to why EPA and DEP feels it is important that PFAS are considered “pollutants” and therefore PFAS samples should be taken and analyzed.

Within the new proposed general Discharge Permit MAG 580000, twelve (12) PFAS samples and analysis are proposed to be required per year, within the 5 years of the duration of the proposed Permit. Influent wastewater, effluent wastewater, and sludge are proposed to be sampled and analyzed 4 times per year. The new proposed general Discharge Permit MAG 580000 proposes that the WWTP's (including CSD) pay the entire cost of the laboratory analysis cost for the 12 PFAS samples each year.

At a price of $ 275 / sample analysis, this would cost CSD an extra $16,500 over the 5 year coverage period of the proposed permit ($3,300 per year , in addition to additional labor time to take the additional samples, over the 5 year coverage period of the proposed permit). Also of note, CSD could routinely take two sludge samples per year, coinciding with the normal twice per year CSD Septic Tank Pump Outs, but 4 Sludge samples per year would involve additional labor time.

It may be fair for EPA and DEP assume that most NPDES permittees with individual NPDES permits could routinely absorb the additional $3,300 per year lab analysis costs and additional labor time for monitoring to meet the additional PFAS requirements.

However, as the situation applies to the small WWTPs to be covered in the new proposed MA General Permit MAG 58000, and certainly to the "smallest of the small " such as CSD, that assumption no longer applies. With a $152,000 annual budget, an additional expenditure of $3,300 per year is significant. CSD does not spend an additional $ 3,300 per year for 5 consecutive years on a low priority item, relative to other more high priority maintenance or operational items that will present themselves over time, and where that money will be required in that time period.

CSD is willing to take the 4 Influent wastewater and 4 Effluent wastewater PFAS samples per year proposed in new MAG # 580000, and 2 sludge PFAS samples per year) , in order to assist EPA and DEP in their PFAS data collection efforts. However, CSD asks that EPA and/ or DEP pay the annual cost for analyzing such PFAS samples. The first sentence of the footnote to the required PFAS sampling would be modified (modifications in italic bold) to state :

"Beginning six (6) months after the permittee has been notified by EPA of a multi-lab validated method for wastewater, *and EPA or DEP has provided the funding to pay the cost of such PFAS lab analysis*, ... the permittee shall conduct monitoring of the influent, effluent, and sludge for PFAS compounds as detailed in the tables " ... (such table showing quarterly sampling of CSD influent and CSD effluent, *and twice per year sampling of CSD sludge*).

Thank you for your consideration, and willingness to show that the desired PFAS data collection is important enough such that EPA and / or DEP will provide the funding to pay the annual PFAS lab analysis costs for CSD PFAS samples.

Response 11

See the General Response Regarding PFAS Monitoring in Appendix A.

E. Comments from Chris Senior, Town Manager, Brian Joyce, Director of Public Works / Town Engineer, and William McGowan, Chairman, Board of Sewer Commissioners. Town of Cohasset

Comment 12

The Town would like to emphasize the potential financial impacts that newly proposed regulations may have on small communities and sewer plants like Cohasset. We hope that the promulgation of such regulations may be viewed through the lens of budget and financial impact to the resident customer to meet requirements stated.

The Town, Sewer Board and Plant Operator will continue to protect the environment and public health through good stewardship and sewer operations as we work under the new permit. Thank you for issuance the permit and consideration of these comments and requests from the Town.

The Draft GP currently proposes quarterly composite sampling and testing for six (6) discrete parameters generally categorized as PFAS testing for influent, effluent and sludge at the smaller facilities (a total of 72 discrete analytical tests per year). The sampling and testing criteria have yet to be developed or standardized by EPA for this new permit requirement and as such the costs for the testing cannot be definitively determined, but it is envisioned that the testing will easily add several thousand dollars per year to the permit compliance cost for each small plant. We realize that EPA is seeking to collect data on this emerging contaminant; however, conducting four (4) quarterly analyses would appear excessive given that the establishment of aquatic water quality criteria for such compounds could easily take years to properly assess and promulgate. Given these compounds are best removed at the source or even better through restrictions on their formulation and manufacture, we believe it would be pre-mature to establish such an aggressive analytical requirement within the GP for small wastewater facility. We feel EPA's direction should be more focused on eliminating these "forever" compounds or subsequent copy-cat compounds from the manufacturing chain. EPA has and will continue to collect a massive amount of data on PFAS for water suppliers and larger wastewater treatment facilities, both which can more suitably bear the costs for such testing. Given that there should be no lack

of test data to evaluate, we believe a single annual influent and effluent test for three (3) years (possibly sequenced in year 1, 3 and 5 of the permit) would be more than sufficient to characterize the Cohasset facility given its predominantly residential user base which is void of industrial influence.

In terms of sludge testing, most small facilities, like the Cohasset WWTP, either truck or haul their wastewater sludge to larger regional facilities for processing, treatment and disposal. We believe that monitoring sludge at the larger facilities should amply define the destination of PFAS compounds and we believe that any local testing for small plants should be eliminated or at least reduced to a single testing (possibly sequenced in year 3 of the permit).

Response 12

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 13

We also have a concern regarding the frequency of WET Testing at the small facilities and the high variability of such testing (annual, semi-annual and quarterly) currently within New England. Cohasset has been adhering to a quarterly WET test requirement in place for well over a decade and each test has returned with no toxicity. We had approached EPA staffers close to a decade ago for a testing reduction but were told it would not be considered until a new permit was issued, which left this aspect in limbo for close to a decade as permit issuance was delayed. The new permit, similar to the last, does not define a standardized WET Testing frequency "reduction mechanism" for small plant. The WET testing is an expensive aspect of the permit requiring elaborate lab testing as well as the added cost of ambient water collection and its analytical assessment. There are some highly performing treatment facilities, such as our own, which have always shown "no residual toxicity" and the quarterly testing requirement is excessive for these facilities. There should be an automatic testing frequency reduction methodology incorporated into the new GP, based upon the historical testing results at a given facility. The mechanism should be made a part of the GP to ensure that testing requirements and frequencies are more reflective of the effluent toxicity risks at each facility based upon historical data and not arbitrarily established as a quarterly requirement. We feel that a requirement for a single WET Test per year is ample for facilities which have consistently shown (for 3 years, based upon historical testing) that the Acute LC-50 is > 100%. The Ambient Characteristic Testing requirement which is conducted simultaneously with the WET Testing should also be reflective of any reduced testing frequency realized by the proposed frequency reduction methodology detailed above.

Response 13

As described in the Fact Sheet at 27-29, the toxicity requirements are established in accordance with EPA Region 1 and (for MA dischargers) MassDEP[2] current toxic policies which base the limits and frequency on dilution factor. The dilution factor for the Cohasset WWTF was 30 in the 2007 individual permit and this was confirmed to be the same in the 2021 General Permit. This dilution factor is greater than 20 and less than 50 and, therefore, results in the need to conduct 4 tests per year and requires an acute LC_{50}

[2] *Massachusetts Water Quality Standards Implementation Policy for the Control of Toxic Pollutants in Surface Waters*. February 23, 1990.

limit using 100% effluent. EPA notes that the Cohasset WWTF has been conducting acute tests quarterly and has reported no violations of the existing LC_{50} limit of 100%.

Regarding the request for reduced frequency, EPA and MassDEP do not consider a reduction below the current toxic policies appropriate at this time in order to continue to ensure the facility does not cause or contribute to any toxic effects in the receiving water. EPA also notes that the "reduction mechanism" referenced in this comment is not included in the General Permit and EPA does not contemplate reducing these frequencies during the life of this General Permit.

Regarding the Ambient Characteristic Testing requirement, EPA agrees that any reduction in WET Testing would also apply to most of the ambient monitoring requirements given that most of them are simply reporting values from the relevant WET tests. However, given that the WET test frequency has not changed, the ambient characteristic reporting frequency will also remain the same.

Comment 14

The Draft GP details that MCZM will be commenting on the permit for coastal communities through a Consistency Review. We are uncertain how this will impact the coastal permits and feel that any changes, modifications or revisions resulting from the MCZM review should result in a re-initiation of the Public Review and Comment period. We herein reserve our rights to provide additional comment once the MCZM Consistency Review has been completed and issued. We feel formal notification should also be conducted by EPA to each of the five (5) potentially impacted MA coastal facilities at the conclusion of MCZM's review.

Response 14

EPA has received a determination from Massachusetts Coastal Zone Management (MA CZM) on June 7, 2021 that the proposed General Permit is consistent with their enforceable program policies and does not impose any additional requirements. Therefore, this comment is noted for the record and does not warrant any further action prior to the General Permit being finalized.

Comment 15

The Draft GP details the requirement for the additional notification of MADMF within 4 hours of an emergency which could impact receiving water quality. Invariably such instances are often related to extreme weather, power outages and major equipment failure where normal safeguards have proved insufficient. This is an aggressive requirement since the operators would likely be exerting a maximum effort to contain or abate the emergency condition at that time. We would also note that there does not appear to be a MADMF 24/7 Hot Line established at this time which would make notification during non-business hours essentially impossible. The Covid crisis has also shown that continuous office staffing protocols may no longer be the norm making contacting MADMF further problematic. If this requirement is to be mandated in the permit, a 24/7 Hotline for MADMF is essential since operator will unlikely be available for exercise multiple attempts or for returned call for a message service. We feel this time requirement should be changed to "as-soon-as feasible" or within 24 hours whichever is less.

Response 15

Given the potential for this type of emergency condition to impact public health, EPA disagrees that the 4 hours should be extended as requested in the comment. However, EPA notes that the phone number for MA Division of Marine Fisheries provided in Part II.E.2 of the General Permit can receive voice messages at any hour. Furthermore, MA Division of Marine Fisheries is committed to maintaining the availability of this line regardless of future staffing changes. Therefore, a Permittee can comply with this requirement at any time by calling the number and either speaking with a representative or leaving a voice message. Therefore, this comment does not result in any change to the Final General Permit.

Comment 16

The Draft GP details a requirement to conduct a free dive inspection and video documentation of all outfalls on a two year basis. A properly designed and constructed outfall should easily last decades in terms of structural integrity and location stabilization. A two year frequency appears very aggressive and would likely not yield significantly different results in that time frame. Cohasset has previously conducted such an inspection on its outfall, the last time in 2013 and it is scheduled for re-inspection in 2023, at a 10 year interval. Cohasset's outfall is outside of the navigable channel which is maintained by the ACOE. The ACOE historically conducts maintenance dredging in the area at 8 to 12 year intervals so long-term sediment accumulation is not a significant issue for the Cohasset outfall. We feel a fixed 2 year interval for the inspection is excessive. Given the age of the Cohasset outfall, now over 20 years, a more frequent interval of once during the permit period or every 5 years would be more suitable for Cohasset moving forward. We realize this is a general permit and some outfalls may warrant a more aggressive inspection but 2 years seems excessive regardless. Ultimately it is the responsibility of the small WWTP owner to properly operate and maintain its facilities including its outfalls to ensure suitable dilution and dispersion of its effluent. On this basis a permit requirement of once every 5 years seems more than adequate to document the outfalls integrity and function.

Response 16

EPA notes that the Cohasset WWTF is the only marine discharger in MA equipped with an outfall diffuser and eligible to discharge under the Final General Permit for which this provision would apply. The other three eligible marine dischargers in MA (*i.e.*, USCG Boston Light, Merrimac, and Shore Cliff – Deaconess Retirement Home) are not equipped with an outfall diffuser.

For the reasons specified in the comment which apply specifically to the Cohasset diffuser, EPA agrees that once every five years is adequate and has revised Part II.E.1.b of the Final General Permit to require an inspection of the outfall to be conducted every five years with the first inspection occuring within twelve (12) months of the effective date of the permit.

Finally, EPA notes that there are three eligible marine dischargers in NH equipped with an outfall diffuser (*i.e.*, Newfields, Newington and Newmarket). They must conduct diffuser inspections according to the schedule set forth in Part III.D.1.c. which has not been changed in the Final General Permit. EPA is aware that Newington and Pease

(individual permit number NH0109000) share an outfall and notes that they may submit the same inspection report to satisfy the requirement in each permit.

Comment 17

The Draft GP details a new requirement for a comprehensive collection system mapping product which maintains attributes on the various system components. The requirement essentially mandates a GIS based mapping product which can be both time-consuming and costly to assemble and implement, especially for small communities which do not have expansive in-house engineering capabilities already in place. Older collection systems where construction plan information may be sparse will have an even larger task, requiring field investigation to define system attributes and to locate all structures. CCTV inspection of the entire collection system could potentially be required to capture all features of the system and to locate buried or paved over structures. During the early stages of the federal stormwater outfall mapping program imposed on small MS4's, grant funding was made available to some communities to complete the mapping efforts. We would recommend a similar funding program from EPA to facilitate this new permit requirement and given the potential for delays due to funding, we would also recommend a 5 year period for the small facilities to come into compliance with this item.

Response 17

The intention of this requirement is to ensure the Permittee has a thorough knowledge of the collection system in order to perform proper operation and maintenance practices that may prevent violations of water quality standards in the future. As noted in the preceding comment, "Ultimately it is the responsibility of the small WWTP owner to properly operate and maintain its facilities…." EPA agrees with this comment and notes that the Permittee would not be able to carry out this responsibility without a detailed map of the collection system. However, the requirement in the General Permit does not specify that the map must be a GIS-based mapping product nor does it specify that the map must be based on CCTV inspections of the entire collection system. Rather, the owner of the collection system is free to prepare the map in whatever way they deem appropriate to best aid the proper operation and maintenance of the collection system. EPA is not able to fund these mapping efforts but notes that the costs should be modest based on the clarifications above.

Regarding the request for additional time, EPA believes 30 months is sufficient time. EPA has been including these mapping requirements in municipal permits for large and small WWTPs in Massachusetts for more than 10 years and permittees and co-permittees have been able to fulfill these requirements within this timeframe, even given funding constraints faced by smaller communities. The Town has also been on notice since publication of the Draft Permit in April 2021 that these requirements would be forthcoming and presumably could have laid the preliminary groundwork for fulfilling these obligations, especially since the Town has not objected to the provisions on substantive grounds.

If the Permittee is unable to meet the deadline, then it is encouraged to contact EPA's Enforcement and Compliance Assurance Division (ECAD) to explore the possibility of an administrative order.

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

F. Comments from James E. Pouliot Jr, Superintendent, Epping Sewer and Water Commission

Comment 18

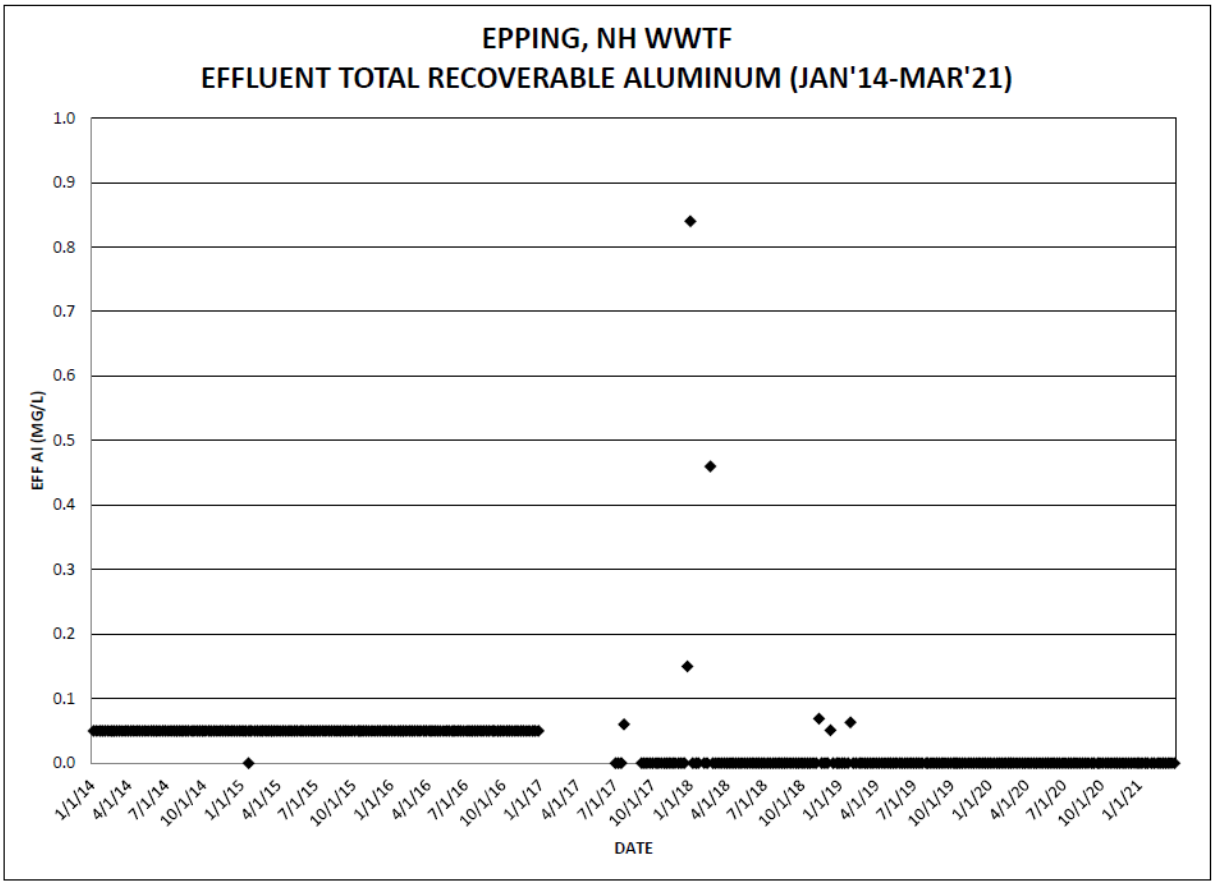
The average weekly summer CBOD value of 23 lbs/d appears to be a typo and should read 33 lbs/d.

Response 18

EPA agrees that this was a typo in the facility-specific table provided to Epping. The correct value of 33 lbs/day will be included in the authorization to discharge under the Final General Permit.

Comment 19

The total recoverable aluminum limits should be removed from the table as there is no reasonable potential for this parameter to exceed water quality standards. Attached is a table citing the last seven years' worth of effluent TRA data for Epping and as can be seen, the effluent TRA is almost always non-detect. Further, the plant discontinued the use of polyaluminum chloride (PAC) for total phosphorus removal in early 2019, and now uses a rare earth element chemical (RE 300) for TP removal. Since that time, there have been no effluent TRA sample results above non-detect. We therefore request that testing for TRA be removed from the table.



Response 19

In the development of the Draft General Permit, EPA determined that the aluminum limits for Epping needed to be more stringent to continue to protect water quality standards (WQS). However, based on this comment EPA acknowledges that the facility stopped using PAC as part of its treatment process in early 2019. EPA also recognizes that in the development of Epping's current individual permit (issued in 2000) stated on page 23 of the Fact Sheet that the aluminum limit was based solely on Epping's use of aluminum (*i.e.*, PAC) in the treatment process for phosphorus removal. Given that aluminum is no longer being added in the treatment process and the effluent has been shown since that time to not contain detectable amounts of aluminum, EPA confirmed that the use of PAC in the treatment process was the only reason that aluminum limits may be necessary to protect WQS. As PAC is no longer being used, the aluminum limits are no longer necessary to protect WQS. This can be compared to the removal of total residual chlorine (TRC) limits when a facility discontinues the use of chlorine in the treatment process, given that the addition of chlorine in the treatment process is the sole source of TRC. See 40 CFR 122.44(l)(2)(i)(A). Therefore, these aluminum limits have been removed from the Final General Permit.

However, if the facility begins to use PAC (or any other additive containing aluminum) in the future they must notify EPA and the State as detailed in Part III.B.7 of the Final

General Permit. At such time, EPA may reopen and modify the General Permit to include an aluminum limit for Epping, if necessary, to protect WQS.

Comment 20

The total recoverable zinc limits are new. While we presume that the limits were established utilizing the reasonable potential analysis, we do not know that for sure as a site-specific fact sheet for Epping was not provided. We do not know water river background levels were used, what effluent quality data was used, what dilution flows were used, and if the sample data being used was collected using clean sampling techniques (we suspect not). Therefore, we cannot verify the appropriateness of the proposed limits. We request that the data utilized by EPA to establish these limits be provided for our review. Further, if this new limit is to be imposed, the 18 months' time to come into compliance is insufficient as it will require time to get an engineer on board, conduct pilot studies to determine the most appropriate treatment scheme to implement, line up funding, design the upgrade and construct the upgrade. At a minimum, this process will require 2 to 3 years.

Response 20

Firstly, EPA confirms that the zinc limit proposed in the Draft General Permit is the result of a reasonable potential analysis. The Fact Sheet at 21, indicates that EPA conducted reasonable potential analyses using the mass balance equation presented in Appendix A of the Fact Sheet and any "new" limits resulting from those analyses (including the new zinc limits for Epping) are presented in Attachment E of the Draft General Permit.

As with all NPDES permits, EPA acknowledges that not all of the supporting information and underlying data associated with the Draft General Permit was included in the Fact Sheet. Rather, this information is included in the administrative record and is available for review upon request. The Fact Sheet at page 50 specifically stated "The administrative record on which this Draft Permit is based may be accessed by contacting Michael Cobb, via email at cobb.michael@epa.gov." EPA notes that other Permittees took advantage of this and requested the supporting data related to their facility, which was provided by EPA expeditiously. However, Epping did not request any of the supporting information described in this comment during the public comment period.

Specifically, the comment requested what "water river background levels were used, what effluent quality data was used, what dilution flows were used, and if the sample data being used was collected using clean sampling techniques (we suspect not)" and "the data utilized by EPA to establish these limits."

In response to this comment, EPA notes that some of the data mentioned in the comment is already provided in the Fact Sheet and Draft General Permit. For example, Attachment E of the Draft General Permit presented the dilution flows used to derive the dilution factor (i.e., design flow of 0.5 MGD [0.77 cfs] and upstream 7Q10 flow of 1.85 cfs [1.2 MGD]). The remainder of the requested information is provided below.

The median background zinc concentration immediately upstream of the discharge was estimated to be 0 µg/L based on the available Whole Effluent Toxicity testing data provided by the Permittee from November 2015 through October 2020 (*i.e.*, the "review period"). Given the background concentration of 0, the quality of the background data and sampling techniques are irrelevant in the analysis. Therefore, the determination that the discharge has the reasonable potential to cause or contribute to a violation of WQS was driven by the monthly effluent data submitted by Epping in their monthly Discharge Monitoring Reports (DMRs). During the review period referenced above, Epping submitted 60 effluent results and EPA determined that the 95th percentile of those 60 samples was 0.291 mg/L (less than the maximum value of 0.47 mg/L). The downstream impact under critical flow conditions was determined to be 85.8 ug/L using the mass balance equation presented in Appendix A of the Fact Sheet. This downstream concentration of 85.8 µg/L was found to be above the criteria of 57.4 ug/L (based on a downstream hardness value of 47.5 mg/L), resulting in a determination that the discharge has the reasonable potential to cause or contribute to a violation of WQS. Therefore, the limit was calculated to be 195 ug/L using the same mass balance equation presented in Appendix A of the Fact Sheet.

The complete effluent and ambient data are provided below:

Effluent DMR Data

Parameter	Zinc
	Daily Max
Units	mg/L
Effluent Limit	Report
Minimum	0.002
Maximum	0.47
Median	0.0775
11/30/2015	0.062
12/31/2015	0.077
1/31/2016	0.095
2/29/2016	0.11
3/31/2016	0.025
4/30/2016	0.044
5/31/2016	0.057
6/30/2016	0.11
7/31/2016	0.091
8/31/2016	0.069
9/30/2016	0.076
10/31/2016	0.2
11/30/2016	0.078
12/31/2016	0.033
1/31/2017	0.071
2/28/2017	0.15
3/31/2017	0.039
4/30/2017	0.037
5/31/2017	0.038
6/30/2017	0.031
7/31/2017	0.33

Parameter	Zinc
8/31/2017	0.073
9/30/2017	0.002
10/31/2017	0.065
11/30/2017	0.47
12/31/2017	0.084
1/31/2018	0.086
2/28/2018	0.084
3/31/2018	0.046
4/30/2018	0.061
5/31/2018	0.082
6/30/2018	0.14
7/31/2018	0.072
8/31/2018	0.069
9/30/2018	0.13
10/31/2018	0.057
11/30/2018	0.059
12/31/2018	0.031
1/31/2019	0.07
2/28/2019	0.11
3/31/2019	0.094
4/30/2019	0.079
5/31/2019	0.046
6/30/2019	0.1
7/31/2019	0.084
8/31/2019	0.09
9/30/2019	0.21
10/31/2019	0.12
11/30/2019	0.052
12/31/2019	0.27
1/31/2020	0.13

Parameter	Zinc
2/29/2020	0.083
3/31/2020	0.073
4/30/2020	0.053
5/31/2020	0.077
6/30/2020	0.039
7/31/2020	0.26
8/31/2020	0.21
9/30/2020	0.22
10/31/2020	0.29

Ambient WET Data

Parameter	Zinc
	Daily Max
Units	mg/L
Effluent Limit	
Minimum	0
Maximum	0.072
Median	Non-Detect
1/31/2016	0.072
8/31/2017	0.007
1/31/2018	<0.005
8/31/2018	0.002
1/31/2019	<0.005
8/31/2019	<0.005
8/31/2020	<0.005

Finally, regarding the request to lengthen the compliance schedule from 18 months to 2 to 3 years, 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." An evaluation of the effluent data presented above indicates that only 9 of the 60 values exceeded the zinc limit of 195 µg/L and the median value of 77.5 ug/L was less than half of the limit, indicating that the

facility may be able to comply through optimization or source reduction and without the need to design and construct a facility upgrade. Given the potential for compliance within 18 months through optimization or source reduction, any extension of the schedule would not ensure that the schedule requires compliance "as soon as possible." Therefore, the compliance schedule in the Final General Permit has not been changed. However, if the Permittee is unable to comply with the limit once it becomes effective, they may contact EPA's Enforcement and Compliance Assurance Division (ECAD) to discuss a potential administrative order with additional time to achieve the zinc limit through alternate means.

Comment 21

The Town of Epping has submitted a formal NOI to be covered under the Great Bay TN General NPDES Permit (NHG58A000). We believe that the summer and winter ammonia testing requirements should be removed from the table as the total nitrogen testing that we will be performing under NHG58A000 is more comprehensive, and by nature of measuring effluent TKN we will know what our effluent ammonia values are. We will not be able to meet our TN limits without achieving full nitrification. We therefore request that testing for ammonia be removed from the table.

Response 21

EPA acknowledges that the Epping WWTF is currently authorized under the Great Bay Total Nitrogen General Permit (GBTN GP). The purpose of that permit is to regulate discharges of total nitrogen to protect the Great Bay estuary for eutrophic impacts. That permit did not evaluate toxic impacts from the discharge of ammonia. The following statement was provided in the Response to Comments on the GBTN GP at 70:

> "Some comments requested that EPA remove the ammonia nitrogen monitoring requirement from the permit, noting that it is not necessary to determine the total nitrogen load and adds unnecessary costs to comply with the General Permit. EPA agrees that ammonia nitrogen monitoring is not necessary in order to determine the total nitrogen load. Further, EPA notes that ammonia nitrogen as a toxic pollutant will continue to be regulated through each permittee's individual NPDES permit. Therefore, EPA has removed ammonia monitoring from the Final General Permit."

As described, EPA's intention is to continue to regulate ammonia through each Permittee's individual permit, or in this case through the authorization for Epping to discharge under the Small WWTF General Permit.

Further, EPA notes that the Epping WWTF has ammonia limits in their current individual permit which are being carried forward into this General Permit. Therefore, ammonia monitoring and reporting are necessary to confirm compliance with those ammonia limits.

Comment 22

New requirements have been added for PFAS testing of influent, effluent and sludge from the WWTF on a quarterly basis. The testing is not required until an approved method for testing exists, which EPA predicts will occur by the end of 2021. We note that the final permits recently issued to the Hampton, NH and Seabrook, NH WWTFs did not include PFAS testing, and they were issued after the NH MCLs and AGQSs became effective on 7/23/20. Further, as a report only parameter, there is no indication how long this reporting requirement will exist and what it will take to get the requirement dropped out of the permit. It is premature and inappropriate to incorporate a testing requirement based on the assumption that an approved test method will be developed during the 5-year permit cycle. We request that the PFAS testing requirements be deleted or at the least reduced to 1/year.

Response 22

See Appendix the General Response Regarding PFAS Monitoring in A.

Comment 23

The draft table proposes increased monitoring requirements compared to our existing permit. In particular, PFAS testing and total recoverable zinc are new requirements. The direct sampling costs for these new parameters are significant, and indirect costs for coordination, payment authorizations, invoicing, evaluation, reporting, and record keeping can further increase the cost. Quarterly PFAS testing of the influent, effluent, and sludge alone will run in excess of $7,000 per year. This is unreasonable as this requirement is a fact-finding mission to see if it even exists at certain plants and at what levels. We believe quarterly testing is too excessive and request it be significantly decreased if it must be kept in the permit.

Response 23

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 24

WET Testing. Epping has never had an issue passing WET Tests. Based on a history of favorable results, we request that the frequency of testing be reduced to 1/yr. If that is not possible, we would request the timing of the 2/yr. tests be allowed to be spring/fall rather than summer/winter given that sampling in the winter with the cold and ice is difficult and at times dangerous.

Response 24

EPA acknowledges that the Epping WWTF has been conducting both acute and chronic tests twice per year based on their current individual permit. EPA notes that the effluent was mostly in compliance with the WET limits during the review period for the Draft General Permit (November 2015 through October 2020), but Epping reported one violation of the acute LC50 limit (35.4%) in the first quarter of 2017.

Regarding the request for reduced frequency, EPA and NHDES do not consider a reduction below the current toxic policies appropriate in order to continue to ensure the facility does not cause or contribute to any toxic effects in the receiving water.

Regarding the request for the season to be adjusted from the first and third calendar quarter to the second and third calendar quarter, EPA agrees that this is appropriate given the challenges to monitoring in the winter months as described in the comment. Therefore, the Final General Permit has been adjusted to require WET testing in the second and third calendar quarter for all dischargers that are only required to conduct two WET tests per year.

Comment 25

Page 23, Footnote 1. A routine sampling program shall be developed **in which samples are taken at the same location, same time, and same days of the week each month**. We take exception to this requirement. It is not reasonable with limited staff and resources to sample the same time all the time. Emergencies arise, vacations, holidays, etc. that do not allow us to sample like clockwork. Further, it is much better practice to vary your sample days and times to try and catch the variations that occur in flow and loads over the course of the work day. If we are held to this we will most certainly be in non-compliance on a regular basis and will be continually submitting reasons for the deviations. We request that this requirement be stricken from Footnote 1.

Response 25

EPA disagrees that this requirement should be removed from the footnote based on the following response.

First, EPA confirms that a routine sampling plan is necessary to ensure that results yield consistently representative data. The flexibility requested in the comment could be used to catch variations in effluent data but it could also be used to avoid those variations or extreme events. The best way to ensure consistently representative data is through the development and implementation of a consistent routine sampling program.

Second, EPA clarifies that the intent of this requirement is not to require that sampling be done at the exact same time every day of the month which could indeed preclude capturing the natural variability of the effluent as described in the comment. Rather, the intent of this requirement is twofold. Firstly, it is to require the Permittee to set up a sampling program that would yield the most representative data, noting that the most representative sampling program may require setting different sampling times on different days with a given month. Secondly, it is to require the Permittee to adhere to this sampling program each month in order to ensure consistently representative data that can be analyzed for long term trends, etc.

Third, EPA clarifies that the phrase “same time” is not intended to be strictly enforced but is intended to mean approximately the same time of the day.

Fourth, EPA notes that the footnote in question also includes the following: “Occasional deviations from the routine sampling program are allowed, but the reason for the deviation shall be documented as an electronic attachment to the applicable discharge monitoring report.” This sentence makes clear that there is some flexibility in the implementation of a routine sampling plan for valid reasons. This includes things like

emergencies, vacations, holidays, etc. as listed in the comment. EPA notes that the routine sampling program may include reasonable considerations regarding availability of staff, holidays, expected times without any discharge, etc. such that when these issues arise that may be handled in accordance with the routine sampling program and would not require notifying EPA of a "deviation" from the routine sampling program.

Therefore, this comment does not result in any change to the Final General Permit.

Comment 26

Page 39. We request that PFAS monitoring requirements for Industrial Users be removed. Mechanisms for identifying and eliminating potential pass through and interference already exist. Discharges to the wastewater collection system are controlled through local limits, pretreatment programs, industrial discharge permits, and sewer use ordinances. Regulating PFAS compounds differently than other pollutants complicates the existing systems already in place. In the event that the WWTF influent comes back with PFAS at unacceptable limits, then it would be appropriate to begin searching the collection system for the source. However, as a Town we would put that requirement into our IPP program and require the individual industrial users to perform those tests and provide the results to us at their expense and not ours.

Response 26

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 27

Draft Fact Sheet Comments

Page 29, Section 4.12. A general comment about PFAS is that these chemicals should be regulated at the source rather than left to the WWTFs to deal with a problem they did not create. We will never get ahead of this unless we stop their production. The existing WWTFs of today are no designed for and are not meant to remove PFAS chemicals. In fact, many times they are broken down by the treatment process into smaller chain chemicals that are more persistent and harder to rid the environment of. We would request that the approach be changes to target those creating these chemicals and releasing them to the environment.

Response 27

See the General Response Regarding PFAS Monitoring in Appendix A.

G. Comments from Wendy Reed, Environmental Health and Safety Manager, The Governor's Academy

Comment 28

The Governor's Academy (the "Academy") provides the following comments on the Draft NPDES General Permit MA580000 ("Draft Permit") and related Fact Sheet (the "Fact Sheet") setting forth Effluent Limitations and Monitoring Requirements for the Academy's wastewater treatment facility ("WWTF") in Byfield, MA.

1. Limitations on Permit Coverage: Draft Permit Section I.C (Page 2 of 49) of the Draft Permit

states that the following dischargers are not eligible for coverage under the Draft Permit:

7. *Discharges to Special Resource Waters in Massachusetts as defined by Massachusetts surface water quality standards 314 CMR, which include discharges "Outstanding Resource Waters* (ORWs)".

8. *Discharges to an Area of Critical Environmental Concern (ACEC) in Massachusetts.*

The existing NPDES Permit identifies the WWTF's receiving water as an unnamed intermittent freshwater tributary to the Mill River which flows into the Parker River, and then to Plum Island Sound. The Mill River, Parker River, and Plum Island Sound are all included in the Great Marsh ACEC designation in addition to being classified as ORW's. Based on this assessment of discharge location, the Academy would not eligible for coverage under the Draft General Permit and should instead be subject to an individual permit.

The Academy hereby requests to be excluded from coverage under this General Permit, and requests an individual permit based on the justification above.

Response 28

EPA agrees with this comment and has removed Governor's Academy from the list of eligible WWTFs in the Final General Permit.

Comment 29

WWTF Discharge Receiving Water: The existing NPDES Permit identifies the WWTF's receiving water as an unnamed intermittent freshwater tributary to the Mill River. This "unnamed tributary" to the Mill River is a stormwater drainage channel that originates from a 24-inch culvert adjacent to Elm Street and runs along the fence line of the Academy's treatment plant before passing under Route 1 and joining the Mill River. The Academy formally requests that the EPA and MassDEP consider designation of the Mill River as the receiving water for the Academy's WWTF outfall as opposed to the unnamed tributary to the Mill River, which is currently identified as the receiving water in the Draft Permit. This adjustment more accurately reflects the on-site conditions.

Additional discussion and support documentation for this modification in receiving water designation are provided below.

<u>Current Effluent Discharge</u>

WWTF effluent discharges from a 6-inch pipe located approximately 450 feet from the culvert. Stormwater run-off from two stormwater catch basins at the intersection of Elm Street and Route 1 enter this combined flow just before it crosses under Route 1. On the east side of Route 1, additional stormwater flow from a drainage channel joins the combined stormwater and effluent channel before the conveyance enters the Mill River 270 feet away. (See Exhibit A for an aerial photo showing the sources of flow into this channel). The combined stormwater and WWTF

effluent discharges into the Mill River at river mile 3.5, which is within the freshwater portion of the Mill River[3].

State and regional GIS mapping show a stream originating in a wetland area approximately 1800 feet upstream of the culvert and continuing along the treatment plant boundary before crossing under Route 1; however, the location and course of the stream shown in these maps is not consistent with actual conditions. There are a series of wet areas and discharges through this area that terminate in a culvert at the corner of Old Road and Elm Street. (See Exhibit B for a depiction of actual conditions). It appears that this flow passes through an underground stormwater collection system and is the source of the drainage channel to which the WWTF discharges. Based on this hydrology, the Academy requests that EPA identify the receiving water for the WWTF effluent discharge as the Mill River rather than the unnamed drainage channel. This change is further consistent with the Massachusetts Surface Water Quality Standards, which indicates that the Academy discharges to the "confluence" with the Mill River. See 314 C.M.R. § 4.06, Table 28.

Proposed Effluent Discharge Impacts

This modification, which is representative of the existing conditions, would increase the dilution factor used in the calculation of permit effluent limitations. The Academy used Stream Stats to calculate the drainage area and resulting low flow statistics for the current drainage channel versus the proposed Mill River discharge location. The results are summarized below. (See Exhibit C for the full Stream Stats reports).

Discharge Location	7Q10 (ft3/sec)	Dilution Factor
Unnamed drainage channel	0.0079	1
Mill River	0.432	6.36

Furthermore, designating the Mill River as the WWTF's receiving water will allow the Academy to satisfy the proposed Draft Permit requirements for Ambient Characteristics monitoring and WET dilution water sampling. Attachment A to the Draft Permit states that collection of dilution water should avoid areas of obvious road runoff and storm sewers. As long as the drainage channel is considered the receiving water for the Academy's WWTF effluent, it will be impossible to collect upstream samples that are unaffected by road and storm sewer runoff.

[EPA note: Exhibits were reviewed but not reproduced here.]

Response 29

Given that the Governor's Academy has been removed from the list of eligible WWTFs in the Final General Permit and this comment is only applicable to the Governor' Academy discharge, EPA has determined that is it not necessary to respond to this comment at this time. This issue will be addressed in the next reissuance of the individual permit for Governor's Academy.

[3] From its origins in Boxford to mile point 2.3, the Mill River is a freshwater with a B classification. From mile point 2.3 to its terminus at the Parker River, the Mill River is a SA class coastal water

Comment 30

Unauthorized Discharges: Draft Permit Section II.C.2 (Page 15 of 49) requires public notification within 24 hours of any unauthorized discharge on a publicly-available website where information remains available for a minimum of 12 months. The requirement to post unauthorized discharges on a publicly-available website is considered to be an overly burdensome and unnecessary requirement when applied to all "small" WWTFs. While this requirement may be practical for larger, suburban communities, it will be an onerous and redundant requirement for many of the small permittees under the permit, including the Academy. Consistent with Section VI of the Draft Permit, the Academy must already submit monthly monitoring data in discharge monitoring reports ("DMRs") to EPA and to the State electronically via NetDMR. Information from the Academy's DMRs is available to the public via EPA's Enforcement and Compliance History Online ("ECHO") database. Section VI also requires the Academy to provide verbal notification of certain exceedances to both EPA and to the State within 24 hours. Requiring the Academy to notify the public of unauthorized discharges on a publicly-available website is duplicative of these existing reporting obligations and overly burdensome, especially given that the Draft Permit would require the Academy to maintain such web notices for a minimum of 12 months. The Academy does not currently provide such information on a publicly-available website and would have to create and maintain a new webpage to meet this requirement. In addition, posting of this information on a publicly-available website may also lead to the filing of numerous citizen's suits, to which the Academy, the EPA, and the State will have to respond.

Based on this discussion, the Academy objects to inclusion of the public notification requirement in Section II.C.2 of the Draft Permit, and requests that it is removed from the draft permit.

Response 30

EPA disagrees that public notification of SSOs that impact a surface water or the public is "an overly burdensome and unnecessary requirement when applied to all 'small' WWTFs." Rather, EPA considers it a necessary protection of public health to notify the public of unauthorized discharges to surface waters that the public may be planning to use, as specified in the Draft General Permit, regardless of the size of the facility. EPA has authority under the CWA to impose conditions related to the proper operation and maintenance of the treatment plant, and an SSO may be the result of an operation and maintenance malfunction within the collection system. However, EPA notes that the permit does not require public notification of every SSO. Instances when an SSO does not impact a surface water or the public, such as a low volume SSO at a manhole cover, do not need to be posted. Further, EPA does not consider this requirement duplicative of reporting to EPA and the State given that neither the DMR reports nor the verbal notification would be available to the public to make timely decisions about recreational use of the water body. Therefore, this comment does not result in any change to the Final General Permit.

Given that the Governor's Academy has been removed from the list of eligible WWTFs in the Final General Permit, this issue will not apply to the Governor's Academy in the Final General Permit but will be addressed in the next reissuance of the individual permit for Governor's Academy.

Comment 31

Additional Requirements for Facilities Discharging to Marine Waters: Draft Permit Section II.E.2 (Page 16 of 49) requires that the Division of Marine Fisheries, Shellfish Management Program, be notified verbally within 4 hours of any emergency condition, plant upset, bypass SSO discharge or other system failure. As noted above, the current permit indicates that the Academy discharges to an unnamed freshwater tributary of the Mill River (or directly to the Mill River if the request above is considered). Further, as noted above, the WWTF discharges to mile 3.5 of the Mill River, at which point the Mill River is a freshwater body. Based on the location of the WWTF's discharge point, the requirement in Section II.E.2 does not apply to the Academy.

To the extent that EPA finds that Section II.E.2 applies to the Academy, the Academy requests that this verbal notification requirement is revised from "within 4- hours" to "within 12 hours" based on the Academy's historical operation and existing permit. A 12-hour notification requirement is sufficiently protective of marine fisheries, as evidenced by the 12-hour verbal notification requirement in the Academy's current permit.

Response 31

Given that the Governor's Academy has been removed from the list of eligible WWTFs in the Final General Permit and this comment is only applicable to the Governor' Academy discharge, EPA has determined that is it not necessary to respond to this comment at this time. This issue will be addressed in the next reissuance of the individual permit for Governor's Academy.

Comment 32

BOD/TSS Limits – Table 1: The average monthly BOD and TSS limitations in the Draft Permit are 30 mg/L. Those proposed in the "Permittee specific" table provide by EPA to the Academy, however, are 5.8 mg/L. In light of the receiving water change requested in the prior comment, the BOD and TSS limitations should be the same as for other small wastewater treatment facilities under the Draft Permit. At a minimum, the EPA must provide justification and Fact Sheet information for review of the proposed more stringent site-specific limits.

Response 32

Given that the Governor's Academy has been removed from the list of eligible WWTFs in the Final General Permit and this comment is only applicable to the Governor' Academy discharge, EPA has determined that is it not necessary to respond to this comment at this time. This issue will be addressed in the next reissuance of the individual permit for Governor's Academy.

Comment 33

Lead Monitoring Frequency – Table 1: The Draft Permit increases the frequency of sampling and reporting lead concentrations from twice a year to twice a month. This change is overly burdensome and unnecessary. The Academy's historical lead testing results to date have been at or below detection limits. There is no justification for increasing the sampling frequency, making twice monthly lead monitoring unnecessarily burdensome. The Academy requests that this monitoring frequency be reduced to previous permit criteria.

Response 33

Given that the Governor's Academy has been removed from the list of eligible WWTFs in the Final General Permit and this comment is only applicable to the Governor' Academy discharge, EPA has determined that is it not necessary to respond to this comment at this time. This issue will be addressed in the next reissuance of the individual permit for Governor's Academy.

Comment 34

Bacteria Limits – Table 1: Per Attachment E of the draft permit, the Academy's watershed is identified with the receiving water class B/SA. According to draft Permit Table 1, Footnote 8 (Page 10 of 49) of in the Fact Sheet (Section 4.5) of the Draft Permit, the proposed indicator organisms for bacteria limits are as follows:

a. E. Coli (for discharges to freshwater Class B);
b. Enterococci (for discharges to Class SA or SB Marine Waters); and
c. Fecal Coliform (for discharges to Class SA or SB Marine Waters used for shell fishing).

As noted above, the Mill River is classified as a Class B freshwater receiving water at the point where the Academy's WWTF effluent discharges. The Mill River is identified as a Class SA tidal waterbody starting at mile 2.3, which is another 1.2 miles downriver from the confluence point of the effluent channel and the Mill River (mile 3.5). As such, shell fishing is prohibited on the Mill River until the confluence with the Parker River. The Academy's receiving water should be classified as Class B, not Class B/SA. Consistent with this requested classification change, E. coli should be the sole indicator organism identified in the Academy's discharge limitations.

Response 34

Given that the Governor's Academy has been removed from the list of eligible WWTFs in the Final General Permit and this comment is only applicable to the Governor' Academy discharge, EPA has determined that is it not necessary to respond to this comment at this time. This issue will be addressed in the next reissuance of the individual permit for Governor's Academy.

Comment 35

Copper Limits: While not designed to remove the high concentrations of copper in the Byfield water supply, the WWTF currently removes about 80 percent of the influent copper. Only a portion of the dissolved fraction of copper passes through the membrane bioreactor ("MBR") wastewater treatment system and is discharged in the effluent; however, these concentrations nevertheless exceed current permit limitations. The Academy requests that the EPA complete a reasonable potential analysis to derive facility-specific effluent limits based on the appropriate downstream concentration of copper in the Mill River. The Academy has conducted semi-annual Whole Effluent Toxicity ("WET") Testing since 2005 and routinely meets the acute and chronic toxicity limitations of the permit, which demonstrates that the presence of dissolved copper in the WWTF effluent does not cause toxicity to aquatic organisms, even at concentrations in exceedance of the current permit limitations.

Response 35

Given that the Governor's Academy has been removed from the list of eligible WWTFs in the Final General Permit and this comment is only applicable to the Governor' Academy discharge, EPA has determined that is it not necessary to respond to this comment at this time. This issue will be addressed in the next reissuance of the individual permit for Governor's Academy.

Comment 36

Total Nitrogen – Table 1: The Academy objects to the quarterly reporting requirement for Total Nitrogen imposed in the Draft Permit. This additional monitoring and reporting of Total Nitrogen is unnecessarily burdensome. The Academy requests that this monitoring frequency be reduced for smaller facilities in consideration of the actual nitrogen loading impact and the financial burden with negligible environmental gain.

Response 36

See Response 4 and 120.

Given that the Governor's Academy has been removed from the list of eligible WWTFs in the Final General Permit, this issue will not apply to the Governor's Academy in the Final General Permit but will be addressed in the next reissuance of the individual permit for Governor's Academy.

Comment 37

PFAS Monitoring, Sampling, and Analysis Issues

A. Part II.A Table 1 – PFAS Testing Methods: The Draft Permit includes new effluent, influent, and sludge sampling requirements for PFHxS, PFNA, PFOS, and PFOA. Per Footnote 12 (MA), this sampling shall take effect the first full calendar quarter beginning 6 months after the EPA notifies the Permittee that a multi-lab validated method of wastewater is available. This approach is not consistent with the NPDES Permit Standard Conditions which stipulate as follows, "…the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter, N or O". Although the need to monitor, assess, limit and regulate PFAS in the effluent of POTWs is desirable since it is a contaminant of emerging concern ("CEC"), operative obligations in NPDES permits are premature until such time as the PFAS class are recognized and regulated as toxic pollutants or at least such time as more defined federal guidance and approved testing methods and validated sampling protocols are available.

B. Part II.A Table 1 – PFAS Monitoring Requirements: The Draft Permit PFAS testing requirements (quarterly for influent, effluent, and sludge) are unduly burdensome and unnecessary for a private facility, especially one such as The Governor's Academy whose operation is and has always been the education of high school students. In addition, the Draft Permit does not allow for permittees to request for a reduction or elimination of PFAS sampling if historical sampling show stable or declining trends. In the case of small WWTF's without industrial users, such as Governor's Academy, the overall impact of PFAS at the WWTF may prove to be minimal or nonexistent based on sampling results. The Academy is not currently, nor

has it ever been, an industrial source of any products containing PFAS, and the Academy's sludge is not land applied. Given the burden imposed by continual quarterly PFAS testing and the fact that the Academy does not contribute to PFAS contamination, the Academy requests that the EPA decrease the frequency of required PFAS monitoring and reporting requirements in its final permit. Given the complexity and financial burden anticipated to accompany proper PFAS sampling and testing, the EPA should strongly consider the addition of specific PFAS permit mechanisms or "off ramps" to allow for the reduction in PFAS sampling requirements based on regulatory review of historical PFAS testing results, in addition to the general language included in Part IV – Monitoring, Record-Keeping, and Reporting Requirements. The Academy would consider sampling for the first year, and if the first year of PFAS testing yields consistent or results or PFAS concentrations below a minimum threshold, the frequency of monitoring and reporting PFAS compounds should then be considered to be reduced to a maximum of once per year.

Response 37

See the General Response Regarding PFAS Monitoring in Appendix A.

Given that the Governor's Academy has been removed from the list of eligible WWTFs in the Final General Permit, this issue will not apply to the Governor's Academy in the Final General Permit but will be addressed in the next reissuance of the individual permit for Governor's Academy.

H. Comments from Peter Mellen, Commissioner, Town of Hillsborough Water and Sewer Commission

Comment 38

The Town of Hillsborough Wastewater Treatment Facility (WWTF) is currently regulated under NPDES Permit No. NH0100111 which expires on October 31, 2024 (existing NPDES permit). The Hillsborough Water and Sewer Commission intends to discharge under our existing NPDES permit and does not desire the WWTF to be included under the NPDES General Permit No. NHG580000 at this time. Because the WWTF may be included under the general permit in the future, we ask that EPA consider the following comments regarding the draft public notice of the Small Wastewater Treatment Facility General Permit No. NHG580000 prior to finalization.

The draft permit proposes increased monitoring requirements compared to our existing permit. PFAS testing is a new requirement and monitoring frequency is increased for several other parameters. The direct sampling costs for these new parameters can be significant, and indirect costs for coordination, payment authorizations, invoicing, evaluation, reporting, and record keeping can further increase the cost.

Response 38

EPA acknowledges this comment and notes that Part V.C of the Draft General Permit states the following:

> "In accordance with 40 CFR § 122.28(b)(3)(iii), any owner or operator authorized by this General Permit may request to be excluded from the coverage of this General

> Permit. The owner or operator shall submit an application under § 122.21, with reasons supporting the request, to the Director no later than 90 days after the publication by EPA of the Notice of Availability of the General Permit in the Federal Register. The request shall be processed under Part 124. The request shall be granted by issuing of an individual permit if the reasons cited by the owner or operator are adequate to support the request."

EPA notes that the Town of Hillsborough did not provide any justification or rationale supporting its "desire" to not be included in the Small WWTF General Permit other than the implication of avoiding increased monitoring costs based on the remainder of the comments from Hillsborough below. EPA does not agree that the differences in monitoring frequency is a valid reason to exclude a facility from the Small WWTF GP. The monitoring frequency for each parameter is based on state guidance and state review and, overall, EPA considers these changes to be modest and necessary to continue to protect WQS in the future. Therefore, EPA will continue to include Hillsborough as an eligible WWTF in the Final General Permit.

However, within 90 days from the time the Final General Permit is issued, Hillsborough may submit another request to be excluded with additional justification(s), and it will be processed as described above. If EPA decides to exclude any WWTF based on such a request after the General Permit is finalized, EPA will simply refrain from authorizing that WWTF under the General Permit and will not modify the General Permit to remove them from the list of eligible WWTFs in Attachment E.

Comment 39

PFAS Testing

We request that EPA remove the requirements for monitoring PFAS in the influent, effluent, and sludge, for the following reasons:

1. We question whether the PFAS testing requirement is appropriate at this time since there is no PFAS water quality standard and PFAS has not been demonstrated to be at concerning levels in our system. It would be more appropriate to include the monitoring requirements in a future permit after the water quality standards are in place.

2. Including PFAS testing as a Report parameter does not allow for any mechanism to have this testing reduced or eliminated. It would be more appropriate to require PFAS sampling as part of the NPDES permit application process than requiring regular monitoring. If initial sampling identifies concerning levels of PFAS in our system, then appropriate monitoring levels can be established.

3. We do not think it is appropriate to require PFAS influent testing in the NPDES permit since it does not appear to be related to plant performance. Typically, we only test the influent for BODs and TSS to calculate percent removal through the plant. Our treatment process is not designed to remove PFAS and there is no percent removal requirement. It is not clear why EPA included influent sampling for PFAS.

4. Our lagoons accumulate sludge over a long period before sludge is removed. We expect the frequency of sludge removal to be on the order of every 15 to 20 years. Regular testing of our sludge is not appropriate since we do not regularly dispose of sludge. Furthermore, when we do clean our lagoons and dispose of sludge, the testing requirements should be determined according to the methods of sludge disposal.

5. We have asked our engineer to estimate the costs for sample collection and testing for PFAS permit conditions. Initial estimates are $1,900 per quarter or $7,600 per year for influent, effluent, sludge and a blank for QA/QC. This would significantly increase our annual operating budget.

Response 39

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 40

PFAS Testing for Industrial Users

We request that PFAS monitoring requirements for Industrial Users be removed. Mechanisms for identifying and eliminating potential pass through and interference already exist. Discharges to the wastewater collection system are controlled through local limits, pretreatment programs, industrial discharge permits, and sewer use ordinances. Regulating PFAS compounds differently than other pollutants complicates the existing systems already in place.

Response 40

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 41

Total Suspended Solids Monitoring

The facility specific Table 1 provided to us by EPA requires us to measure effluent TSS twice per week. However, we believe this may be a typographical error, since the table provided in Section III.B.10 indicates that lagoon facilities are only required to measure TSS once per week. Our current permit requires us to test effluent TSS once per week, and it does not change much week to week. TSS varies season to season.

Response 41

EPA agrees that this was a typographical error and confirms that the frequency of once per week will be included in Hillsborough's authorization to discharge under the Final General Permit.

Comment 42

Total Nitrogen, Total Kjeldahl Nitrogen, and Nitrate + Nitrite Monitoring

The draft permit increases nitrogen monitoring frequency from quarterly to once per month. Since our system provides a long residence time, we think quarterly monitoring is sufficient to obtain representative samples for the discharge. After a five-year period collecting quarterly

samples, we will have twenty total samples for each parameter that provide information on nitrogen discharged from our facility.

Estimated costs for sending the testing out to a certified laboratory monthly is approximately $1,380 ($115 per month).

Please consider the above comments as you move forward with issuing the final permit.

Response 42

See Response 4.

I. Comments from David Mercier, Underwood Engineers, on behalf of the Town of Lancaster

Comment 43

New requirements have been added for PFAS testing of influent, effluent and sludge from the WWTF on a quarterly basis. The testing is not required until an approved method for testing exists, which EPA predicts will occur by the end of 2021. We note that the final permits recently issued to the Hampton, NH and Seabrook, NH WWTFs did not include PFAS testing, and they were issued after the NH MCLs and AGQSs became effective on 7/23/20. Further, as a report only parameter, there is no indication how long this reporting requirement will exist and what it will take to get the requirement dropped out of the permit. It is premature and inappropriate to incorporate a testing requirement based on the assumption that an approved test method will be developed during the 5 year permit cycle. In particular for the Grange WWTF, the flow comes from only 13 private residences so the potential for PFAS to be present at detectable levels is slight. We therefore request that the PFAS testing requirements be deleted or at the least reduced to one/year.

Response 43

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 44

We request that the requirement to test for PFAS in the sludge be removed entirely as the Grange WWTF is a below grade sand filtration facility that produces no sludge other than that which is periodically taken by septic pumper truck to the main WWTF for treatment.

Response 44

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 45

The direct sampling costs for quarterly PFAS testing of the influent, effluent, and sludge will run in excess of $7,000 per year. Indirect costs for coordination, payment authorizations, invoicing, evaluation, reporting, and record keeping can further increase the cost. This level of expenditure is unreasonable to put on 13 private residences that contribute to this treatment plant. We believe quarterly testing is too excessive and request it be significantly decreased if it must be kept in the permit.

Response 45

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 46

Page 23, Footnote 1. A routine sampling program shall be developed in which samples are taken at the same location, same time, and same days of the week each month. We take exception to this requirement. It is not reasonable with limited staff and resources to sample the same time all the time. Emergencies arise, vacations, holidays, etc. that do not allow us to sample like clockwork. Further, it is much better practice to vary your sample days and times to try and catch the variations that occur in flow and loads over the course of the work day. If staff are held to this they will most certainly be in non-compliance on a regular basis and will be continually submitting reasons for the deviations. We request that this requirement be stricken from Footnote 1.

Response 46

See Response 25.

Comment 47

DRAFT FACT SHEET COMMENTS

Page 29, Section 4.12. A general comment about PFAS is that these chemicals should be regulated at the source rather than left to the WWTFs to deal with a problem they did not create. We will never get ahead of this unless we stop their production. The existing WWTFs of today are no designed for and are not meant to remove PFAS chemicals. In fact, many times they are broken down by the treatment process into smaller chain chemicals that are more persistent and harder to rid the environment of. We would request that the approach be changed to target those creating these chemicals and releasing them to the environment.

Response 47

See the General Response Regarding PFAS Monitoring in Appendix A.

J. Comments from Joseph Wood, Superintendent, Leicester Water Supply District

Comment 48

Calculation of 7Q10 - The draft general permit lists the 7Q10 flow in Town Meadow Brook at the point of discharge as 0.04 cfs. The drainage area for Town Meadow Brook above the point of discharge is 3 square miles. With this 7Q10 value, the rate of discharge per square mile calculates to 0.04 cfs / 3.0 mi^2= 0.0133 cfs per mi^2.

MassDEP indicates that USGS Gauging Station 01125100 on the French River in North Grosvenordale, CT, 24.5 miles south of the LWSD WWTP was used to calculate 7Q10 flow figures for the LWSD treatment plant.

7Q10 flow figures for other USGS gauging stations on the French River, nearer to the Leicester facility have been used in the past for determining effluent parameters at the plant. Records show

the Webster, MA gauging station 01125000 has a drainage area of 84 square miles and has a 7Q10 flow of 11.62 cfs. Flows per square mile for this location on the French River calculate to 0.14 cfs/mi^2; 10.5 times higher than the value calculated for the LWSD facility.

For the gauging station at Hodges Village Dam which is even closer to the LWSD treatment plant with a drainage area of 31.2 square miles, the 7Q10 flow has been calculated to be 2.2 cfs. Flows per square mile at this location calculate to be 2.2 cfs / 31.2 mi^2 = 0.07 cfs per mi^2. This value is 5.25 times greater than the flow per square mile figure used for the Leicester treatment facility in the draft permit.

The District hereby requests EPA/MassDEP re-examine the 7Q10 flow calculations for the treatment plant as they appear to be in error.

If Hodges Village or Webster 7Q10 flows per square mile were used, 7Q10 flows for the Leicester plant would be between 0.21 cfs to 0.42 cfs.

Response 48

EPA and MassDEP used StreamStats[4] to determine the 7Q10 of 0.04 cfs and acknowledge that this is lower than the 7Q10 of 0.33 cfs used in the 2010 individual permit. Based on this comment, EPA reevaluated the historic flow record within this watershed and found that there is no reason to believe that flows have dramatically decreased since 2010 by a factor of 8. Therefore, EPA acknowledges that the 7Q10 would not be expected to dramatically decrease to this degree.

However, regarding the gauges referenced in the comment[5], EPA and MassDEP note that the ratios of the drainage areas between the Leicester outfall and the three USGS gaging stations (01125000, 01125100 and 01124350) were significantly out of the range recommended in the October 2018 *LOW FLOW STATISTICS TOOLS - A How-To Handbook for NPDES Permit Writers*[6] (referred to below as the "Handbook"). Page 3-8 of the Handbook recommends that the ratio of the outfall drainage area to the gage drainage area be around 0.5 to 1.5. The ratios corresponding to the gages mentioned above are:

$A_{outfall}/A_{01125100}$ = 3.47 mi^2 / 101 mi^2 = 0.03
$A_{outfall}/A_{01125000}$ = 3.47 mi^2 / 86 mi^2 = 0.04
$A_{outfall}/A_{01124350}$ = 3.47mi^2 / 31.2mi^2 = 0.11

Additionally, the Handbook at page 3-7 states another condition related to using the drainage ratio to calculate the 7Q10, as follows: "If there are no other contributors of

[4] StreamStats is a USGS Web application that provides access to an assortment of Geographic Information Systems (GIS) analytical tools that are useful for water-resources planning and management, and for engineering and design purposes, and can be found online at: https://www.usgs.gov/mission-areas/water-resources/science/streamstats-streamflow-statistics-and-spatial-analysis-tools?qt-science_center_objects=0#qt-science_center_objects
[5] In addition to the two gage numbers provided, EPA notes that the gage at the Hodges Village Dam is USGS 01124350 FRENCH RIVER BELOW DAM, AT HODGES VILLAGE, MA.
[6] Available at https://www.epa.gov/npdes/low-flow-statistical-tools-handbook#:~:text=The%20Low%20Flow%20Statistics%20Tools,using%20free%20publicly%20available%20tools.

flow between the outfall and gage location (*e.g.*, other permitted discharges), and if no man-made impoundments or water withdrawal systems are intervening, you can make the adjustment using the rule of proportions (*i.e.*, by multiplying gage low flow value by a ratio of the outfall drainage area and the gage drainage area)." In this case there is at least one other permitted discharge (*i.e.*, the Oxford-Rochdale WWTF) located between the outfall and any of these gaging stations, presenting another challenge.

Therefore, EPA has determined that there is not enough data to justify any change to the 7Q10 at this time, based on two factors:

(1) The 7Q10 of 0.33 cfs used in the existing permit is quite close to the proposed 7Q10 of 0.32 cfs in the comment based on updated flow data at the gages, and
(2) The 7Q10 of 0.04 cfs based on StreamStats is drastically lower without evidence of such a significant flow reduction in other parts of the watershed.

Given that the 7Q10 has significant impacts on several permit limits, EPA has decided that it is not appropriate to revise it at this time without more information. Therefore, EPA has adjusted the 7Q10 back to 0.33 cfs and has reevaluated the limits using this 7Q10. Based on this revision, dilution factor reverts back to 1.6 and the more stringent limits for total residual chlorine (TRC) and whole effluent toxicity (WET) are no longer required. Accordingly, for the Leicester WWTF, the 7Q10 has been changed to 0.33 cfs, the dilution factor has been changed to 1.6 and the more stringent TRC and WET limits have been removed in Attachment E of the Final General Permit. EPA notes that the TRC and WET limits in Leicester's current permit will be carried forward based on footnote 13 of Part II.A of the Final General Permit and in accordance with anti-backsliding requirements found at CWA §§ 402(o) and 303(d)(4) and 40 CFR § 122.44(l).

Finally, in order to obtain more flow data for future permitting decisions, EPA has added a requirement in the Final General Permit that Leicester shall install a gauge by the first July following 60 days of their authorization date under this General Permit. The gauge shall be located immediately upstream from the facility's discharge location and immediately downstream of Dutton Pond on Town Meadow Brook. Leicester shall monitor the instream flow of the receiving water at a frequency of at least three (3) days per week (*e.g.*, Monday, Wednesday, and Friday) from July through November of each year. Occasional deviations are allowable based on holidays, staff availability or emergencies. Sampling is not required when inclement weather precludes safe instream flow monitoring. All data shall be submitted annually by January 15 for the previous calendar year in spreadsheet format as an electronic attachment to each December's Discharge Monitoring Report (DMR). This new requirement will be added to the Final General Permit under Part II.B as subpart 10 and will only apply to the Leicester WWTF.

Comment 49

Dilution Factor - The draft permit for the LWSD treatment plant uses a Dilution Factor of 1.1. Our research shows the Dilution Factor is calculated using the formula.....

$DF = (Q_s + Q_{wwtp}) / Q_{wwtp}$

For the LWSD WWTP and a 7Q10 of 0.31 cfs (average of 0.21 & 0.42), the Dilution Factor should be 1.60. This Dilution Factor has been used for the treatment plant in the past.

Response 49

See Response 48.

Comment 50

Total Phosphorous Limit - The draft permit for the LWSD treatment plant has a Total Phosphorous, TP, limit of 0.11 mg/l. The Total Phosphorous limit right now is 0.20 mg/l. The existing permit limit was assigned after the District constructed a $750,000 pipeline to divert treated effluent past Dutton Pond Dam on Town Meadow Brook.

The existing treatment plant removes more than 98% of the incoming phosphorous in the influent. Current TP stream loadings from the treatment plant are 56.31 #/yr in the summer and 287.57 #/yr in the winter. If the TP limit is reduced to 0.11 mg/l, the 2021 TP loading to the stream will only be reduced by 25.85 #/yr. At treatment plant design flows, the change in TP limits will only reduce the phosphorous loading to Town Meadow Brook by 47.91 #/year.

The District agrees that the levels of phosphorous in the plant effluent do represent a controllable level of phosphorous in the stream ecosystem. However, there has been no consideration to phosphorous loads coming from non-point sources. Not only that, but to achieve the suggested effluent TP concentrations, a significant upgrade of the treatment facility will be required. The plant currently removes phosphorous using ferric chloride with chemical precipitation and filtration. To consistently achieve a TP concentration of 0.11 mg/l, the District will need to add/construct new phosphorous removal processes.

If 7Q10 flow figures are revised to 0.33 cfs/mi^2 as cited in Item 1 on the previous page, the existing TP limit of 0.2 mg/l is adequate to maintain a non-eutrophic ecosystem downstream of the point of discharge in Town Meadow Brook. Therefore, the District first requests that the TP limit remain at 0.2 mg/l in consideration of actual 7Q10 stream flows.

Response 50

EPA acknowledges that the current limit of 0.2 mg/L is based on a MassDEP report entitled *Total Maximum Daily Loads of Phosphorous for Selected* ***French Basin Lakes*** *(MA 42003- 2002-28 May 28, 2002)*[7]. (emphasis added) In this report, MassDEP determined that if Leicester relocated its outfall downstream of Dutton Pond then a limit of 0.2 mg/L would be protective of WQS downstream in Greenville Pond (See Table 4g(ii) of the TMDL report). Based on this determination, Leicester diverted its outfall in 2009 just downstream of Dutton Pond and was given a limit of 0.2 mg/L in the 2011 individual permit reissuance. However, as stated in the July 12, 2002 EPA TMDL approval document[8], "MA DEP should be aware that while the discharges from these

[7] Available for review on EPA's website at https://ofmpub.epa.gov/waters10/attains_impaired_waters.show_tmdl_document?p_tmdl_doc_blobs_id=70194.
[8] Available for review on EPA's website at https://ofmpub.epa.gov/waters10/attains_impaired_waters.show_tmdl_document?p_tmdl_doc_blobs_id=67838.

treatment plants will satisfy lake water quality standards they may not meet phosphorus criteria for the French River which has low flow conditions at critical times of the year."

As the limit based on the TMDL was established to protect French Basin Lakes it is still necessary for EPA to ensure that the Leicester discharge does not cause or contribute to a violation of the Gold Book target of 0.1 mg/L downstream in the French River. Therefore, in the development of the Draft General Permit, EPA used the mass balance equation presented in Appendix A of the Fact Sheet and found that the existing limit is not protective under critical low flow conditions, and a more stringent limit of 0.11 mg/L was required.

However, based on the revised 7Q10 described in Response 48, EPA reevaluated the phosphorus limit. Using the same mass balance equation presented in Appendix A of the Fact Sheet results in a change in the necessary phosphorus limit from 0.11 mg/L to 0.16 mg/L. EPA notes that this is assuming the upstream phosphorus concentration is zero because there was not any upstream data[9] and EPA is not aware of any significant sources of phosphorus upstream from the Leicester discharge. Therefore, the phosphorus limit has been changed to 0.16 mg/L in Attachment E of the Final General Permit.

Comment 51

Schedules of Compliance - The General Permit indicates the District must have a Schedule for Compliance of 18 months for meeting new Total Phosphorous limits.

The District can generate a Schedule for Compliance. However, the treatment facility will not be able to comply with the new phosphorous limit within 18 months. The proposed time schedule is as cited [below].

Total Phosphorous Limit - If the USEPA/MassDEP moves forward with the draft permit TP limit of 0.11 mg/l, the District will require time to pilot test several process alternatives, time to design proposed improvements followed by time to construct the new facilities.

The proposed schedule for this work effort would include...

1. Two summer seasons of pilot testing.
2. One year to prepare contract documents for the proposed improvements; And
3. Two years to secure financing, publicly bid, construct, start up, & fine tune the operation of proposed improvements.

The District requests that the schedule cited above be added to the draft permit if the TP limit is justified.

Response 51

Regarding the request to lengthen the compliance schedule from 18 months to approximately 5 years, EPA notes that a compliance schedule in a permit must comply

[9] EPA notes that Part II.A.1 Table 1 footnote 19 of the General Permit requires Leicester to conduct upstream phosphorus monitoring which will provide EPA with background data to use in the next permit reissuance.

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." Based on the revised limit of 0.16 mg/L as described in Response 50, it is unclear whether the facility can optimize its current treatment process to comply with the limit. An evaluation of the effluent data during the growing seasons from 2016 through 2020 indicates that the facility discharged from 0.14 mg/L to 0.20 mg/L with a median of 0.18 mg/L, indicating that the facility may be able to comply with the limit of 0.16 mg/L through optimization and without the need to design and construct a facility upgrade. However, EPA recognizes that a compliance schedule of 18 months would only allow one full growing season before the limit becomes effective. Therefore, EPA agrees to extent the compliance schedule to 24 months from the date the facility is authorized to discharge under the General Permit. This schedule will allow one full growing season to perform pilot testing on potential process improvements and one full growing season to incorporate and optimize any necessary process improvements. Given that the limit is only applicable from April through October, this means that the limit will not become effective before April of 2024. If the Permittee is unable to comply with the limit once it becomes effective, they may contact EPA's Enforcement and Compliance Assurance Division (ECAD) to discuss a potential administrative order with additional time to achieve the revised phosphorus limit through alternate means.

Comment 52

Ammonia Limit - The draft permit for the LWSD treatment plant reduces the ADF Ammonia discharge limit in the month of April from 10.0 mg/l to 6.2 mg/l. It is apparent that 7Q10 stream flows do not occur at this time of the year. And certainly eutrophication in Town Meadow Brook does not occur at this time of the year. Therefore it does not seem evident why the permit levels for Ammonia would be changed from 10.0 mg/l to 6.2 mg/l.

The District hereby requests an explanation of the basis for lowering the effluent Ammonia levels for the month of April when stream flows are high from the winter snow melt and springtime rainfall events and stream temperature levels are close to 45°F or less.

If this springtime Ammonia limit is changed to 6.2 mg/l, the District hereby requests a time allotment for piloting a means to achieve this level of treatment along with additional time to design and construct treatment plant improvements.

Response 52

EPA's typical practice is to provide seasonal limits for the warm weather months (*i.e.*, from April 1st through October 31st) based on reasonable worst-case conditions for flow (7Q10) and temperature (25 degrees Celsius) during those months. In this case, the ammonia limits were based on a 1980 waste load allocation (WLA) as described in the 2011 individual permit reissuance (See 2011 MA0101796 Fact Sheet at page 4). Given that the WLA provided unique limits for April, May and June through October, EPA incorporated them as such in the previous individual permit. In EPA's 2021 analysis of Leicester's discharge for the Draft General Permit, EPA found that the limit applicable in April was not stringent enough to continue to meet WQS based on the typical worst-case

assumptions for warm weather months, which includes the use of the upstream 7Q10 flow and an assumption of 15° C (59° F) in April. EPA notes that ammonia toxicity increases with temperature so assuming a temperature of 45° F (7° C) would not be protective under all expected instream temperatures in April.[10]

As described in Response 48, the 7Q10 for Leicester has been changed to 0.33 cfs. Accordingly, EPA updated this analysis and found that the limit of 10 mg/L must still be reduced, but only to 9.2 mg/L. EPA notes that had the 1980 WLA not specified a less stringent limit for April, EPA would have conducted this analysis in its typical manner by looking at the entire warm weather season. This would have resulted in a limit in April of approximately 5 mg/L based on 7Q10 flow and 25 degrees Celsius. EPA also notes that over the past five Aprils (*i.e.*, April 2016 through April 2020), the facility has had a median concentration of 3.2 mg/L and never exceeded 9.2 mg/L (max 7.1 mg/L). Therefore, EPA anticipates that the facility will be able to comply with this revised limit so there is no compliance schedule associated with this limit.

Based on this comment and the revised 7Q10 presented in Response 48, the ammonia limit for April has been revised to 9.2 mg/L (with a corresponding mass limit of 26.9 lbs/day) in Attachment E of the Final General Permit.

Comment 53

Total Recoverable Copper Limit - The draft permit plant reduces the total recoverable copper limit to 12.2 ug/l for a monthly average and 18 ug/l for the monthly maximum. The treatment plant is not designed to remove copper from the waste stream.

It appears that the total recoverable copper permit limit is related to the dilution ratio, the calculated 7Q10 flows and the total hardness in Town Meadow Brook.

Since 7Q10 flow figures appear to be in error, calculation of total recoverable copper would not be correct. The District requests that the permit value for total recoverable copper be revisited by EPA & MassDEP.

Note that hardness values for 2020 range from 21 to 25 mg/l for the river while hardness values for the plant effluent range from 92 mg/l to 130 mg/l for the same monitoring period.

Response 53

Based on this comment, EPA reevaluated the copper analysis for Leicester conducted in the development of the Draft General Permit and found that EPA did not properly account for the site-specific copper criteria for this receiving water found in the MA WQS at 314 CMR 4.06 (Table 28 for the French River[11]). Applying these site-specific

[10] USGS StreamStats National Data Collection Station Report for Station 01125100: https://waterdata.usgs.gov/ct/nwis/uv?site_no=01125100

[11] EPA interprets the reference in 314 CMR 4.06 Table 28 to the "French River" in the site-specific criteria to include the Town Meadow Brook segment to which the Leicester facility discharges. Town Meadow Brook (segment MA42-02) is the headwater stream to the French River, and the total miles specified in the site-specific

criteria as well as the updated 7Q10 described in Response 48, EPA confirms that the existing copper limits in the Leicester individual permit continue to be protective of WQS. Therefore, EPA has removed the more stringent copper limits from Attachment E of the Final General Permit. EPA notes that the existing copper limits for Leicester in their current individual permit will be carried forward in their authorization to discharge based footnote 13 of Part II.A in the Final General Permit and in accordance with anti-backsliding requirements found at CWA §§ 402(o) and 303(d)(4) and 40 CFR § 122.44(l). Further, the compliance schedule to achieve the more stringent copper limits will also be removed from Part IV.E.1 of the Final General Permit.

Comment 54

Total Recoverable Aluminum Limit - The draft permit plant includes a limit for Total Recoverable Aluminum of 87 ug/l. Even though the District does not currently use any aluminum based chemical products at the treatment plant, with the possible change in the Total Phosphorous limit to 0.11 mg/l, use Aluminum based products may be considered.

The District recognizes that a Compliance Schedule for meeting the Aluminum limit is listed on page 14 of the General Permit Fact Sheet. The Fact Sheet indicates a 3 year window for MassDEP to develop and promulgate new WWTP effluent Aluminum criteria. The District also recognizes that the proposed AL limits might be higher than those stipulated in the draft permit.

However, should there be no change in the draft permit limits, the District believes that limits should be changed to regulate Total Dissolved Aluminum and not Total Recoverable Aluminum. The District also believes the Aluminum limit of 87 ug/l is based on incorrect 7Q10 flow figures for Town Meadow Brook.

The District requests that the specified Aluminum discharge limit be re-evaluated with substantiated 7Q10 flow figures and the consideration of using Total Dissolved Aluminum.

Response 54

EPA notes that the 2010 Leicester individual permit already includes a limit of 87 µg/L and this limit was not proposed or established based on this General Permit. Rather, this limit is merely being carried forward into the General Permit based on footnote 13 of Part II.A of the General Permit and in accordance with anti-backsliding requirements found at CWA §§ 402(o) and 303(d)(4) and 40 CFR § 122.44(l). Given that this limit was developed in a previous individual permit, the 7Q10 issue described in Response 48 associated with the development of the Draft General Permit is not relevant. In any case, EPA has reverted to use the same 7Q10 that was used in the 2010 individual permit and this does not have any impact on the aluminum limit. Additionally, the aluminum compliance schedule described in Part IV.E.3 of the General Permit does not apply to any limits that are already in effect, such as Leicester's aluminum limit. That compliance schedule only applies to the limits for the WWTFs specifically mentioned in Part

criteria (20.3 miles) indicates that the segments identified in 314 CMR 4.06 Table 10 as "French River" (MA42-03 to -06; 17.8 miles), "Town Meadow Brook" (MA42-02; 1.9 miles), and "Unnamed Tributary to Town Meadow Brook" (MA42-01; 0.5 miles) were intended to be included.

IV.E.3.a that received new or more stringent aluminum limits listed in Attachment E of the General Permit.

However, EPA notes that the aluminum limit in the 2010 individual permit includes the following footnote:

> Aluminum monitoring is required during months when aluminum is added to the treatment process (*i.e.*, aluminum sampling is not required during months that aluminum is not added for phosphorus removal or other purpose). The limitations are in effect year-round. For months when no aluminum is added, and no monitoring is conducted, the permittee shall report a no discharge code (NODI). Sampling for aluminum monitoring and phosphorus monitoring shall be conducted concurrently.

As the comment confirms that the facility does not currently add aluminum to the treatment process but that an aluminum-based product may be considered to meet the more stringent phosphorus limit, EPA will carry forward this footnote (in accordance with footnote 13 of Part II.A) in Leicester's authorization to discharge under the Final General Permit. Given that the inclusion of the existing aluminum limit with the corresponding aluminum footnote is based on footnote 13 of Part II.A of the Draft General Permit, no change is made to the Final General Permit.

Regarding the request to regulate total dissolved aluminum rather than total recoverable aluminum, EPA notes that 40 CFR § 122.45(c) states the following:

> (c) Metals. All permit effluent limitations, standards, or prohibitions for a metal shall be expressed in terms of "total recoverable metal" as defined in 40 CFR part 136 unless:
>
> (1) An applicable effluent standard or limitation has been promulgated under the CWA and specifies the limitation for the metal in the dissolved or valent or total form; or
>
> (2) In establishing permit limitations on a case-by-case basis under § 125.3, it is necessary to express the limitation on the metal in the dissolved or valent or total form to carry out the provisions of the CWA; or
>
> (3) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium).

Given that none of the three exceptions apply to this limit, the limit must be expressed as total recoverable.

Comment 55

In summary, the District is requesting the following changes to the draft permit:

1. Revise the 7Q10 flow figure to between 0.21 cfs to 0.42 cfs; based on Hodges Village Dam gauging station flows per mi2 of 0.07 cfs/mi2 and the Webster MA gauging station with flows per mi2 of 0.14 cfs/mi2.
2. Re-establish the Dilution Ratio at 1.60.
3. Set the Total Phosphorous limit at 0.20 mg/l.
4. Set the Ammonia limit for the month of April each year at 10.0 mg/l.
5. Revise the Total Recoverable Aluminum limit to Total Dissolved Aluminum.
6. Revise Total Recoverable Copper limit to Total Dissolved Copper.
7. If plant improvements are required to meet new effluent limits, allow time for pilot testing, design, bidding, construction, startup, and fine tuning of proposed improvements.

In conclusion, the District believes the comments cited provide a detailed review of the draft General Permit and its components. We believe comments relative to the calculated 7Q10 & Dilution Ratios are justified as stream flow data much closer to the point of discharge yield very different results.

Response 55

EPA notes that each of these items have been addressed in Responses 48 through 54 above.

K. Comments from Michael Roy, Sevee and Maher Engineers, on behalf of the Town of Merrimac

Comment 56

The Town of Merrimac WWTF discharges to the Merrimack River (brackish) which discharges to the ocean. The discharge poses no threat to a drinking water supply. The new PFAS influent and effluent sampling frequency of quarterly seem like an excessive burden for a WWTF that discharges to saltwater. Consideration for sampling the influent and effluent for PFAS annually in combination with the WET testing would still provide data on PFAS levels within the Town's wastewater flow.

This comment does not apply to the new sludge PFAS sampling requirements.

Response 56

See the General Response Regarding PFAS Monitoring in Appendix A.

L. Comments from Chris Peterson, Director of Facilities, Merrimack County Nursing Home

Comment 57

Merrimack County Nursing Home Boscawen, NH would like to comment on the NPDES General Permit # NHG580000 for the quarterly PFAS sampling requirement for the Influent, Effluent, and sludge. New Hampshire Department of Environmental Services (NHDES) has already conducted PFAS sampling for Influent, Effluent, and sludge at many of the wastewater treatment plants throughout the state.

The NHDES testing results have found the issues with PFAS at the locations where they predicted that it would be an issue. Has the EPA considered only sampling the plants with a known PFAS issue?

The annual estimated cost for the PFAS sampling requirement is approximately $3,300 per year. This cost wasn't part of the Nursing Home Treatment Plant annual $7,000 budget for Testing and chemical supplies. It's an assumption on our part that EPA and NHDES do not have funding for this sampling? We are requesting a provision to allow for sampling reduction to 1/year if the initial test results are low. We are also requesting that sampling of sludge for lagoons only be conducted prior to the sludge being removed.

In addition, we are requesting that PFAS sampling is not required during the winter months [November to March]. We have valid safety concerns about persons using a boat on freezing water or walking on covers with ice & snow on them to acquire samples. Given the remoteness of many treatment plants this requirement vastly increases the chance of someone accidentally falling in leading to an avoidable tragedy.

Please contact me at your convenience with any questions or feedback.

Response 57

See the General Response Regarding PFAS Monitoring in Appendix A.

M. Comments from David Mercier, Underwood Engineers, on behalf of Merrimack County Nursing Home

Comment 58

The table requires the WWTF to sample for TKN, nitrite and nitrate quarterly, and to calculate and report the TN load. This facility is not within the Connecticut River watershed, and does not discharge to a salt water environment. As such we request that the requirement to monitor for nitrogen series be deleted.

Response 58

EPA disagrees that nitrogen monitoring and reporting is not necessary for the reasons specified in the comment. Rather, the federal regulation at 40 CFR § 131.10(b) requires that "In designating uses of a water body and the appropriate criteria for those uses, the State shall take into consideration the water quality standards of **downstream waters** and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters." (emphasis added) Therefore, EPA must protect water quality standards in the receiving water as well as in all downstream waters that may be impacted by the discharge. In this case, as stated in the Fact Sheet at 26:

> "EPA is also concerned about nitrogen discharges to other estuaries, such as Great Bay, **the Merrimack River estuary** and Narraganset Bay, that are not subject to TMDLs but may be experiencing nitrogen enrichment. To address this concern, the draft General Permit includes year-round monitoring and reporting requirements for

> total nitrogen for all discharges covered under the WWTF GP. The frequency of such monitoring is based on the design flow of the facility. Facilities with design flow less than 100,000 gpd will receive quarterly monitoring; facilities with design flow greater than or equal to 100,000 gpd will receive monthly monitoring." (emphasis added)

Therefore, quarterly nitrogen monitoring is required for the Merrimack County Nursing Home to characterize the discharge and its potential impact downstream. This comment does not result in any change to the Final General Permit.

Comment 59

New requirements have been added for PFAS testing of influent, effluent and sludge from the WWTF on a quarterly basis. The testing is not required until an approved method for testing exists, which EPA predicts will occur by the end of 2021. We note that the final permits recently issued to the Hampton, NH and Seabrook, NH WWTFs did not include PFAS testing, and they were issued after the NH MCLs and AGQSs became effective on 7/23/20. Further, as a report only parameter, there is no indication how long this reporting requirement will exist and what it will take to get the requirement dropped out of the permit. It is premature and inappropriate to incorporate a testing requirement based on the assumption that an approved test method will be developed during the 5-year permit cycle. In particular for the MCNH WWTF, the flow comes from only the nursing home and jail so the potential for PFAS to be present at detectable levels is slight. We, therefore, request that the PFAS testing requirements be deleted or at the least reduced to one/year.

Response 59

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 60

We request that the requirement to test for PFAS in the sludge be removed entirely as the MCNH WWTF is a lagoon facility and does not produce a sludge product on a regular basis. Rather, sludge is removed from the lagoons and disposed of offsite once every 10 to 30 years. We believe that it is appropriate to test the sludge for PFAS when it is being taken off site but not on a regular basis. If the requirement must stay in, it should be once a year at most and not during cold weather/ice conditions on the lagoons.

Response 60

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 61

The direct sampling costs for quarterly PFAS testing of the influent, effluent, and sludge will run in excess of $7,000 per year. Indirect costs for coordination, payment authorizations, invoicing, evaluation, reporting, and record keeping can further increase the cost. We believe quarterly testing is too excessive and request it be significantly decreased if it must be kept in the permit.

Response 61

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 62

Page 23, Footnote 1. A routine sampling program shall be developed in which samples are taken at the same location, same time, and same days of the week each month. We take exception to this requirement. It is not reasonable with limited staff and resources to sample the same time all the time. Emergencies arise, vacations, holidays, etc. that do not allow us to sample like clockwork. Further, it is much better practice to vary your sample days and times to try and catch the variations that occur in flow and loads over the course of the work day. If staff are held to this they will most ce1iainly be in non-compliance on a regular basis and will be continually submitting reasons for the deviations. We request that this requirement be stricken from Footnote 1.

Response 62

See Response 25.

Comment 63

DRAFT FACT SHEET COMMENTS

Page 29, Section 4.12. A general comment about PFAS is that these chemicals should be regulated at the source rather than left to the WWTFs to deal with a problem they did not create. We will never get ahead of this unless we stop their production. The existing WWTFs of today are not designed for and are not meant to remove PFAS chemicals. In fact, many times they are broken down by the treatment process into smaller chain chemicals that are more persistent and harder to rid the environment of. We would request that the approach be changed to target those creating these chemicals and releasing them to the environment.

Response 63

See the General Response Regarding PFAS Monitoring in Appendix A.

N. Comments from Chris Jacobs, Town Administrator, and Dale Sprague, Plant Operator, Town of Milton

Comment 64

The draft permit has increased the effluent sampling requirement for TSS and CBOD from 1/week to 2/week. We feel this is an additional burden on time and laboratory costs that is not warranted.

The Milton treatment plant is a 3 lagoon aerated plant with a capacity of 2 million gallons. The historical annual flow averages 55,000 gallons per day, which equals 36 days of detention and treatment time.

The effluent quality does not change day to day and often goes for weeks with no significant changes. An additional effluent sample per week will not provide any additional or different data than the current 1/week frequency. Additionally, the newly issued Great Bay Total Nitrogen General Permit (which covers Milton) only requires effluent sampling 1/week specifically because of the long detention and treatment time described above.

Response 64

EPA acknowledges that this is a typographical error. Given that the Milton WWTF is a lagoon facility, the monitoring frequency will be 1/week for TSS and $CBOD_5$ based on Part III.B.10 of the General Permit. EPA confirms that this 1/week frequency will be included in Milton's authorization to discharge under the Final General Permit.

Comment 65

The draft permit has added PFAS testing requirements for both effluent and influent at a frequency of 1/quarter. We understand that the permit includes a compliance schedule which delays the effective date of this requirement and we understand the need for such testing. The Town does not agree to the frequency of sampling or the need to sample the influent, The Town believes that testing I/quarter is another burden on labor and certainly on laboratory costs as these tests are expensive. All PFASs testing to date, both groundwater and effluent were below detection limits. The Town is requesting the frequency be reduced to 1/year and only for effluent samples. This frequency would provide sufficient indication if PFASs are present in our wastewater system. The EPA/NHDES could modify the permit to add additional sampling frequency if PFASs are detected in the future.

Page 31 of the Fact Sheet and Supplemental Information for the Draft Permit states "The purpose of this monitoring and reporting requirements is to better understand potential discharges of PFAS from this facility .... ". Additionally, Section 308(a)(A)(iv) states " ... sample such effluents ... ". Therefore, the Town does not believe that sampling of influent is required and would not add awareness the issue.

Response 65

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 66

Part III. A (New Hampshire) Foot Note 1:

The foot note states that regularly monthly compliance sampling schedules shall, "a routine sampling program shall be developed in which samples are taken at the same locations, same time and same days of the week each month." This requirement is troublesome and unnecessary for Wastewater facilities based on the following justification.

WWTC staff are licensed professionals and are required to have the knowledge to know how to collect representative wastewater samples. This new requirement is an overreach on the means and methods of the operators.

Small WWTF's have small operations with a wide range of tasks to preform to maintain operations. Milton has one part-time operator who has the responsibility of operating the plant, sampling, monitoring, reporting, etc. Unexpected and unanticipated events happen that require adjusting daily schedules in order to meet all of the regulatory requirements. There are days and even weeks when there is no discharge from the plant. So, it would be at that point there would be no sampling required.

Compliance with this requirement will result in unnecessary compliance requirements on the limited available staff. Every month the staff will be required to submit NetDMR documentation explaining sampling schedule variation on top of all of the other work that will have to be done to keep in compliance with regulatory requirements.

Response 66

See Response 25.

Comment 67

Part III.A (New Hampshire) Footnote 16:

The footnote states, "Toxicity test samples shall be, collected, and tests completed during the same weeks each time of the calendar quarter ending ... " Also, any deviation from this sampling procedure requires the permitter to document in the monthly reports.

This requirement should be removed or at a minimum expand the time period to the same month to allow for potential coordination issues that can occur in the completion of testing through outside testing agencies. This time constriction does not allow for coordinating issues that may occur with outsourced laboratory testing.

Response 67

EPA agrees that the requirement for tests to be "completed" may be outside the control of the Permittee. Accordingly, EPA has removed the words "and tests completed" from this requirement in Part II.A Table 1 footnote 16 of the Final General Permit. The same change is made to Part II.A Table 1 footnote 14 of the Final General Permit for MA WWTFs.

Comment 68

Part III. A (New Hampshire) Foot Note 20:

This new permit requirement states that "a pH and temperature measurement shall be taken for each water sample at the time of collection and the results reported on the appropriate monthly report.

The town requests that the EPA provide supplemental information as to the origin and purpose of the new requirements.

The EPA continues to add ambient water quality monitoring at the towns expense and adds additional burden to an already busy operator.

Response 68

Ambient pH and temperature data are used to characterize the receiving water which is necessary to calculate pH and/or temperature dependent criteria (such as ammonia) which is used in the reasonable potential analysis as explained in section 2.2.4 of the Fact Sheet. Therefore, this information is necessary for evaluating the need for a water quality based effluent limit, as provided for in CWA §308(a).

Further, EPA notes that these measurements are required at the time of sample collection (rather than at a later time in the lab) because pH and temperature would likely change after the time the sample is collected and the data taken at a later time would, therefore, not be as representative.

Comment 69

Part II. A. Table 1:

The current general permit PFAS testing requirements (quarterly for the influent, effluent, and sludge) do not allow for permittees to request a reduction or elimination of PFAS sampling if historical sampling show below detection results or shows a declining trend. In the case of Milton with no significant industrial users, the overall impact of PFAS at the WWTF may prove to be non-existent or minimal sampling results. Given the complexity and the financial burden anticipated to accompany proper PFAS sampling and testing, the EPA and NHDES should strongly consider the addition of specific PFAS permit mechanisms to allow the reduction or elimination in PFAS sampling requirements with review of historical PFAS testing results.

In addition to the towns initial request to reduce PFAS sampling to 1/year and the above request to have the EPA and NHDES consider methods to reduce or eliminate long term PFAS sampling, we also object to having the financial and regulatory burden to collect annual PFAS data from industries connected to the wastewater system. (Part IV C.3 Industrial users PFAS monitoring).

The town requests that the draft permit be revised to require PFAS monitoring to only those with significant industrial users that are known or suspected sources of PFAS and only for one round of sampling. All results will be reported to the EPA and NHDES as required at which time their agencies can follow up if needed with other better equipped and trained agency personal.

Response 69

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 70

Part III. A. Table-Effluent Limitations:

Total organic carbon is a new testing requirement for both effluent and ambient water and dissolved organic carbon is new reporting requirement for ambient water. The town requests that the EPA provide supplemental information as to the origin and purpose of these new testing requirements.

Response 70

The Fact Sheet at 29 states the following:

> "EPA's 2018 *National Recommended Water Quality Criteria* for aluminum are calculated based on water chemistry parameters that include dissolved organic carbon (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 for freshwater discharges in order to assess potential impacts of aluminum in the receiving water."

As described, these monitoring are reporting requirements will allow EPA to better characterize the impact of aluminum in the discharge on the receiving water using site-specific information and are necessary to evaluate the need for and, if necessary, establish water quality based effluent limits. This monitoring and reporting requirement is consistent with the provisions of CWA § 308(a).

O. Comments from Dennis Messier, Wastewater Treatment Plant Operator, Town of Newington

Comment 71

Part III.A (New Hampshire) Footnote 1: This footnote specifies that regularly monthly compliance sampling schedules shall "A routine sampling program shall be developed in which samples are taken at the same location, same time and same days of the week each month." This requirement is considered unnecessary and overburdensome on small wastewater treatment facilities based on the following:

WWTF Staff are licensed professionals and are required to have the knowledge to know how to collect representative wastewater samples. This new requirement is considered an overreach on the means and methods required of licensed treatment plant operators.

"Small" WWTF' s typically have a small operations staff with wide range of tasks to perform to maintain successful operations. Unexpected and unanticipated events occur all the time that necessitate adjusting daily schedules in order to successfully accomplish the prime directive of these WWTFs: protect the waters and environment of New Hampshire. This scenario is especially true on weekends when all employees rotate limited coverage to perform the daily duties. This sampling schedule requirement will place undue burden on the staff if the allowable sampling date/time are required to be unwaveringly rigid. Furthermore, if the WWTF's deviate from the permit criteria, the permittees are required to submit NetDMR documentation explaining sampling schedule variations, which is yet another administrative burden on these small WWTF staffs.

If this requirement is maintained in the final permit, the EPA must define what constitutes "the same time"? Does this requirement mean to the nearest second? Minute? Hour? As written, the requirement is ambiguous. The Town requests that this criterion be revised to be an explicit time window of time that would satisfy the "same time" requirement.

Response 71

See Response 25.

Comment 72

Fecal Coliform Testing: Part III.A. Table 1 -Effluent Limitations: Per Footnote 10 and State Condition Part III.E.11, Fecal Coliform testing must be tested using the 5-tube decimal dilution method included in 40 CFR Part 136. Previous permits allowed for the use of the Colilert-18

(IDEXX) method for fecal coliform testing as it has been approved under 40 CFR Part 136 under the Clean Water Act since 2017 and has been recognized as an equivalent coliform testing method by EPA. Based on discussions with EPA and NHDES, this new method requirement is based on interpretation of references in the NH RSA 485-A:8.V and National Shellfish Sanitation Program (NSSP) Manual of Operation (2017). Based on previous comments made in the last 12 months on similar permit conditions (Seabrook and Hampton) the Town would like to reiterate similar requests approval for use of the IDEXX method.

Response 72

As in the recent reissuances of the Seabrook and Hampton individual permits, EPA recognizes that Colilert-18 (the "IDEXX method") is an approved 40 CFR Part 136 method for fecal coliform bacteria testing in wastewater. However, The NH WQS include two different bacteria criteria for tidal waters based on designated use: the enterococci criteria protect the swimming use and NSSP bacteria criteria protect the shellfishing use. Related to the shellfishing use, the NH Statute at Title 50, Chapter 485A, Section 485-A:8.V requires that "Those tidal waters used for growing or taking of shellfish for human consumption shall, in addition to the foregoing requirements, be **in accordance with the criteria recommended under the National Shellfish Program Manual of Operation, United States Department of Food and Drug Administration.**" (emphasis added)

EPA notes that the criteria for the shellfishing use are included in the NH WQS by reference to the National Shellfish Sanitation Program (NSSP): Guide for the Control of Molluscan Shellfish, 2017 Version[12] which requires the following:

E. Standard for the Approved Classification of Growing Areas Affected By Point Sources.

(1) Water Quality. The bacteriological quality of every station in the growing area shall meet the fecal coliform standard in Section E.(2).
(2) Fecal Coliform Standard for Adverse Pollution Conditions. The fecal coliform median or geometric mean MPN or MF (mTEC) of the water sample results shall not exceed fourteen (14) per 100 ml, and not more than ten (10) percent of the samples shall exceed an MPN or MF (mTEC) of:

(a) 43 MPN per 100 ml for a five-tube decimal dilution test;
(b) 49 MPN per 100 ml for a three-tube decimal dilution test;
(c) 28 MPN per 100 ml for a twelve-tube single dilution test; or
(d) 31 CFU per 100 ml for a MF (mTEC) test.

Note that while the geometric mean MPN or MF is 14 for each method above, the 10% statistical threshold value which the MPN or MF may not exceed is different depending on the method used. As shown, the Colilert-18 method is not listed above, has not been approved by FDA for use under the NSSP and, therefore, no criteria have been set for

[12] See U.S. Food and Drug Administration, 2017, National Shellfish Sanitation Program (NSSP): Guide for the Control of Molluscan Shellfish, 2017 Revision, https://www.fda.gov/media/117080/download; the 2019 Revision of the NSSP is now available with the same bacteria criteria, https://www.fda.gov/media/143238/download.

Colilert-18 in the NSSP. EPA is aware of numerous inquiries to FDA about the use of Colilert-18 but is not aware of any pending change to the NSSP Guide by the Interstate Shellfish Sanitation Conference (the group authorized to make changes to the NSSP Guide).

During the Seabrook and Hampton permit reissuances, NHDES expressed concern that the 5-tube method does not meet the minimum turn-around time necessary for the NHDES Shellfish Program to make shellfish harvesting decisions, such as potential zone closures due to elevated discharges of fecal coliform. Therefore, an additional daily fecal coliform monitoring requirement was included in Part III.E.11 of the Draft General Permit (as well as in the Final Permits for Seabrook and Hampton) that allows the use of any EPA-approved analytical method that meets the timeliness requirements of the NHDES Shellfish Program (including the Colilert-18 method). Given that the Permittees subject to this provision in the General Permit (*i.e.*, only Newington, Newfields and Newmarket) must monitor for fecal coliform using two different methods, the frequency of fecal coliform monitoring using the 5-tube method in Part III.A, Table 1 of the Draft General Permit was only required 3 times per week. The results using the 5-tube method (measured 3 times per week) will be used to ensure compliance with the permit limits based on the NSSP Guide as referenced in NH WQS; the results using the Colilert-18 method (measured daily) will be used to ensure timely results for the NHDES Shellfish Program to make shellfish harvesting decisions.

Therefore, this comment does not result in any change to the Final General Permit.

Comment 73

Part III.A. Table 1 Effluent Limitations and Footnote 11 (New Hampshire) -The TRC monitoring frequency references are not clear based on our examination. The Town requests that EPA delete "1/day" from the limitations Table and replace with "See Footnote 11" in the Table.

Response 73

EPA agrees that the table should say “See Footnote 11” for clarity and the Final General Permit has been updated accordingly.

EPA notes that the monitoring frequency indicated in Newington’s facility specific table was a typographical error and, based on footnote 11, should be 2/day. EPA confirms that the 2/day frequency will be included in Newington’s authorization to discharge under the Final General Permit.

Comment 74

Part III.A (New Hampshire) Footnote 15: This Footnote indicates that "Any existing limits in a facility's current NPDES permit that are more stringent than the limitations presented in this table will be included in that facility's authorization to discharge under the General Permit.".

The Town requests that the EPA provide all site-specific Fact Sheet information and/or Permittee specific supplemental information which are typically included in individual permits. The Town

has the right to review site specific supplemental information used for derivation of the "more stringent" limits identified in the permit.

Response 74

EPA notes that this footnote simply means that any limits in a facility's current permit that are not specifically listed in the Draft General Permit will be carried forward. The information used to establish any such limits would have been included in a previous permitting action. This footnote does not imply that any "more stringent" limits may be established in the future based on this footnote that are not already in effect. For Newington specifically, there are no such limits included based on this footnote.

Comment 75

Part III.A (New Hampshire) Footnote 16: This footnote specifies, " ... Toxicity test samples shall be collected, and tests completed during the same weeks each time of the calendar quarters ending ... ". The Town requests clarification of this requirement. Is the "same week" reference in terms of one quarter to the next, or is it in terms of the same quarter from the previous year?

The Town requests that this sampling schedule requirement be removed or at a minimum, the acceptable time period expanded (e.g. same month of the quarter). Permittees agree and understand that all samples shall be collected in a manner to yield representative data, but the requirements in this Footnote do not allow the permittees to adjust sampling in efforts to collect representative data or adjust to unforeseen conditions (i.e., staff availability, laboratory coordination) that necessitate changes to sample collection schedules without additional administrative reporting burden. These rigid sampling protocols do not allow small municipalities any flexibility in an already comprehensive sampling routine.

Response 75

In the context of collecting toxicity test samples, "same week" refers to one quarter to the next. For instance, a facility sampling starting the second week of March would need to sample during the second week of June, September, and December. Allowing the Facility to choose which week during the calendar quarter it will sample gives the Facility flexibility concerning staff availability and coordination with laboratories.

EPA notes that footnote 1 regarding a routine sampling program applies to all monitoring, including WET test monitoring. See Response 25 above for more information on that footnote, which is responsive to the request in this comment for flexibility in sampling based on "unforeseen conditions."

Comment 76

Part III.A Footnote 20 (New Hampshire) -The permit requirement indicates that "A pH and temperature measurement shall be taken of each receiving water sample at the time of collection and the results reported on the appropriate monthly report. These pH and temperature measurements are independent from any pH and temperature measurements required by the WET testing protocols." The Town requests that the EPA provide justification and supplemental information as to the origin and purpose of this new monitoring and reporting requirement.

Response 76

See Response 68.

Comment 77

Part III.D.l.d (New Hampshire) -The permit requires that diffuser inspections reports must be submitted to the EPA and State agency (MassDEP or NHDES) within 60 days of inspection. The Town requests that this timeline is extended from within 60 days to within 120 days based on the following justification:

Marine effluent diffuser inspection and video reports are completed by a 3rd party contractor and are oftentimes not transmitted to the permittees for weeks after the inspection has been completed. This does not allow the permittees adequate time to review the video inspection reports, develop a maintenance plan, and compile a complete report for submission.

If the issues are identified during the initial diffuser inspection, the Town is required to notify the State agencies immediately, so the extended submittal timeline would not change notification of an effluent diffuser system failure.

Response 77

EPA disagrees that the submission of these reports should be extended beyond 60 days. However, EPA acknowledges that there may be unexpected delays and has added a provision in Part II.E.1.d and Part III.D.1.d of the Final General Permit to allow a Permittee to request an extension up to an additional 60 days.

Comment 78

Part III.A (New Hampshire) Table 1 -Effluent Limitations, PFAS Testing Methods: The General Permit includes new effluent, influent, and sludge sampling requirements for PFHxS, PFNA, PFOS, and PFOA. Footnote 14 (NH), this sampling shall take effect the first full calendar quarter beginning 6 months after the EPA notifies the Permittee that a multi-lab validated method of wastewater is available. This approach is not consistent with the NPDES Permit Standard Conditions which stipulate as follows, " *... the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter L subchapter, N or O".*

While the Town understands the need to monitor, assess, limit and regulate PFAS in the effluent of POTWs given it's identification as a contaminant of emerging concern ("CEC"), operative obligations in NPDES permits are premature until such time as the PFAS class are recognized and regulated as toxic pollutants or at least such time as more defined federal guidance and approved testing methods and validated sampling protocols are available. The Town requests that the PFAS monitoring components of the permit be removed until further guidance is available.

Response 78

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 79

Part III.A (New Hampshire) Table 1 -Effluent Limitations, General PFAS Monitoring Requirements: PFAS compounds have been documented as being ubiquitous synthetic compounds whose complete fate at WWTF's is not yet well understood. The current General Permit PFAS testing requirements (quarterly for influent, effluent, and sludge) do not allow for permittees to request for a reduction or elimination of PFAS sampling if historical sampling show stable or declining trends. In the case of small WWTF' s without significant industrial users - the overall impact of PFAS at the WWTF may prove to be minimal based on sampling results. Given the complexity and financial burden anticipated to accompany proper PFAS sampling and testing, the Town requests that the EPA and NHDES should strongly consider the addition of specific PFAS permit mechanisms or "off ramps" to allow for the reduction in PFAS sampling requirements based on regulatory review of historical PFAS testing results, in addition to the general language included in Part IV - Monitoring, Record-Keeping, and Reporting Requirements.

Response 79

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 80

Part IV.C.3. Industrial User PFAS Monitoring. The draft General Permit specifies that the Permittee shall commence annual PFAS sampling for certain types of industries that are known or suspected sources of PFAS on a similar timeline as the influent/effluent/sludge sampling at the WWTF (within 6 months of an EPA approved testing method becoming available).

Commencement of industrial user PFAS Monitoring prior to receiving any influent WWTF PFAS data is proceeding under the assumption that there are collection system PFAS issues. The Town requests that this requirement is removed from this draft permit.

As an alternative, the EPA should consider applying this industrial monitoring only after PFAS has proven to be an issue at specific locations. Only after influent WWTF data has been gathered and analyzed can a reasonable determination be made if additional individual sewer user sampling should be required.

Response 80

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 81

Part IV.C.3. Industrial User PFAS Monitoring. Through State investigations and sampling, many of the major sources of significant PFAS contamination (i.e., specific industrial facilities, petroleum refineries, airfields, firefighting practice areas, etc.) have been identified. It is unreasonable for the EPA to place the regulatory and financial burden on the WWTF's to collect annual PFAS data across an unknown number of private industries. If this requirement remains in the permit, the Town requests that the Permit be revised to require monitoring only those Significant Industrial Users that are known or suspected sources of PFAS and only for a single round of sampling. It is unduly burdensome to place these financial sampling burdens on the sewer rate payers.

Response 81

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 82

III.D (New Hampshire): Additional Requirements for Facilities Discharging to Marine Waters, Note 2c: The new Shellfish Notification procedures set the Town effluent criteria for required notification at > 28 organisms/100 mL. Previous permits set this daily post-disinfection threshold at < 10% of samples at > 43 organisms/100 mL or greater, matching the value used for calculating of the maximum daily values for fecal coliforms in New Hampshire.

The Town requests that this notification threshold is revised to 43 organisms/100 mL based on the bacterial limits for New Hampshire discharges (Table 2 of the Fact Sheet). No backup or Fact Sheet information was provided for NH Water Quality Standard's support of this value being revised to 28 organisms/100 mL.

Response 82

EPA agrees that the notification requirement in Part III.D.2.c of the Draft General Permit should be changed from 28 to 43 organisms per 100 mL to match the fecal coliform criterion applicable to discharges to tidal waters used for shell fishing in New Hampshire. The Final Permit has been updated accordingly.

P. Comments from Sean Grieg, Environmental Services Director, Town of Newmarket

Comment 83

Legal Discussion

The Clean Water Act (CWA) prohibits the "discharge of any pollutant" unless that discharge complies with NPDES permit requirements. 33 U.S.C. §§ 1311(a), 1342. In its Fact Sheet, the EPA notes broadly that "Congress has vested in the Administrator [of EPA] broad discretion to establish conditions for NPDES permits" in order to achieve the statutory mandates of Section 301 and 402. Arkansas v. Oklahoma, 503 U.S. 91, 105 (1992).

The Town of Newmarket is aware that the Court, relying on Chevron USA. Inc. v. Natural Resources Defense Council, Inc., has held that the EPA's interpretation of the Clean Water Act is entitled to "substantial deference." Chevron US.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837 (1984). This discretion, commonly referred to as Chevron deference, has provided the EPA with the ability to mandate effluent limitations and monitoring procedures so long as, under the Administrative Procedure Act, its actions are not "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law." 5 U.S.C. § 706(2)(A).

The "arbitrary and capricious" standard is not an unrestricted license to disrupt entire communities and require compliance to arbitrary and unachievable standards. In evaluating agency action, Courts will consider whether the agency has "relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is

so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Motor Vehicle Mfrs. Ass'n o/US., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). The Supreme Court has further held that an agency "must examine the relevant data and articulate a satisfactory explanation for its action" including a "rational connection between facts and judgment ... to pass muster under the 'arbitrary and capricious' standard." Id.

As it currently stands, the Town of Newmarket believes the Small WWTFs General Permit includes monitoring provisions that are arbitrary or capricious. In particular, the corresponding factsheet contains only generalized information relating to the stringent monitoring requirements, outlined below. In doing so, the factsheet fails to provide adequate support for the draft permit's monitoring requirements. Under 40 C.F.R. § 124.8(a), the fact sheet that accompanies a draft NPDES permit must "set forth the principal facts, and the significant factual, legal, methodological and policy questions considered in preparing the draft permit." As it currently stands, the factsheet fails to meet the requirements of 40 C.F.R. § 124.8(a).

Thus, the Town of Newmarket requests that the EPA appropriately remedy these deficiencies by providing additional clarification and support for the stringent monitoring requirements, and by reopening the public comment period so that the entities authorized under the General Permit may weigh in on the supplemental justifications and analyses supporting the permit. See 40 C.F.R. § 124.14(b) (authorizing the EPA to ... [r]eopen or extend the comment period" if "any data[,] information[,] or arguments submitted during the public comment period . . . appear to raise substantial new questions concerning a permit") .. Doing so is the only way in which the EPA may receive full and meaningful public participation during the permit process.

Response 83

EPA disagrees that the Draft General Permit includes monitoring provisions that are arbitrary or capricious. EPA also disagrees that the Fact Sheet fails to provide adequate support for these requirements and notes that the Fact Sheet at 11 states the following under Part 2.4.1 entitled “Monitoring Requirements”:

> Sections 308(a) and 402(a)(2) of the CWA and the implementing regulations at 40 CFR Parts 122, 124, 125, and 136 authorize EPA to include monitoring and reporting requirements in NPDES permits.
>
> The monitoring requirements included in the Draft General Permit have been established to yield data representative of each Permittee’s discharge in accordance with CWA §§ 308(a) and 402(a)(2), and consistent with 40 CFR §§ 122.41(j), 122.43(a), 122.44(i) and 122.48. The Draft General Permit specifies routine sampling and analysis requirements to provide ongoing, representative information on the levels of regulated constituents in the wastewater discharges. The monitoring program is needed to enable EPA and the State to assess the characteristics of each facility’s effluent, whether facility discharges are complying with permit limits, and whether different permit conditions may be necessary in the future to ensure compliance with technology-based and water quality-based standards under the CWA. EPA and/or the State may use the results of the chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to CWA § 304(a)(1), State water quality

criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including, but not limited to, those pollutants listed in Appendix D of 40 CFR Part 122.

While it is not clear which specific monitoring provision(s) the commenter finds arbitrary or capricious, EPA notes that the monitoring frequency for each parameter is based on State guidance and State review and is deemed necessary to obtain data that is representative of the discharge in order to ensure the protection of WQS. Given that many of the eligible permittees have permits which expired many years ago, EPA acknowledges that there are a variety of 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 a new requirement for everyone. Overall EPA considers these changes to be modest and notes that if these facilities were to receive a reissued individual permit, that individual permit would include these same modest frequency changes deemed necessary for EPA to obtain representative data and to protect WQS.

Finally, as cited in the comment, 40 CFR § 124.8(a) states that "The fact sheet shall *briefly* set forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit." (emphasis added) The comment seems to disregard the word "briefly" by omitting it in their citation of the regulation and by suggesting that EPA did not fulfill this requirement by providing "only generalized information" in the Fact Sheet. EPA disagrees with the comment and confirms that the Fact Sheet included adequate justification for monitoring requirements in accordance with 40 CFR § 124.8(a). EPA does not view this comment or EPA's response regarding EPA's authority and justification to impose monitoring requirements as "substantial new questions concerning a permit" and has determined that reopening the comment period is unnecessary.

Comment 84

The Town of Newmarket underwent considerable effort to submit a NPDES permit renewal application with specific requests for consideration. The EPA' s response to these requests are currently outstanding. The Town requests that EPA provide the permittees with formal responses to any outstanding NPDES permit application questions or requests submitted within the last 5 years.

Timely processing of permit applications is good public policy by ensuring that the EPA has adequate time to make an informed permit decision. Without receiving timely response on the same, the Town of Newmarket has not only wasted valuable resources, but it is estopped from fully evaluating whether to proceed by electing to submit to the General Permit or proceeding with an individual permit application. As such, all regulatory issues with these outstanding permit applications should be addressed prior to proceeding with the General Permit.

Response 84

First, EPA notes that developing a draft permit for the reissuance of an existing General Permit (in this case, the Small WWTF General Permit) does not require the kind of

administrative prerequisite suggested by this comment. EPA is not required to resolve any and all outstanding questions related to potentially eligible facilities before developing a Draft General Permit. Rather, the public process associated with the reissuance of a NPDES permit creates an opportunity for a Permittee to provide such "questions and requests" as it reviews and comments on the proposed draft permit.

Second, EPA notes that it is unclear precisely what "questions or requests" are being referred to in this comment. However, given that the comment references any outstanding NPDES permit application, EPA located Newmarket's most recent permit application submitted on August 11, 2017 and identified one request on the cover letter, as follows:

> "The Town requests that the Average Monthly Flow Limitation of 0.85 mgd in the current permit be changed a Report requirement in the new permit. The new secondary process is sized to treat annual average flow of 0.85 mgd and a max month of 1.54 mgd. The change is consistent with the permits of other Great Bay dischargers including Dover, Durham, Exeter, and Somersworth."

Regarding this request, EPA notes that the flow limit applicable to Newmarket in the Draft General Permit is 0.85 MGD applied as a rolling annual average. See Part III.A Table 1, footnote 5 of the Draft General Permit. While EPA does not agree to remove the flow limit as requested (for reasons specified in Section 2.3 of the Fact Sheet), EPA confirms that the flow limit in the General Permit matches the flow capacity identified in this request (*i.e.*, annual average of 0.85 MGD). Therefore, this request does not result in any change to the Final General Permit.

Comment 85

The Town of Newmarket was previously covered under an individual NPDES permit and maintains the right to request exclusion for coverage under this General Permit in lieu of receiving an updated individual NPDES permit.

Response 85

EPA acknowledges this comment and notes that Part V.C of the General Permit states the following:

> "In accordance with 40 CFR § 122.28(b)(3)(iii), any owner or operator authorized by this General Permit may request to be excluded from the coverage of this General Permit. The owner or operator shall submit an application under § 122.21, with reasons supporting the request, to the Director no later than 90 days after the publication by EPA of the Notice of Availability of the General Permit in the Federal Register. The request shall be processed under Part 124. The request shall be granted by issuing of an individual permit if the reasons cited by the owner or operator are adequate to support the request."

Therefore, Newmarket may submit a request to be excluded within 90 days from the time the Final General Permit is issued, and it will be processed as described above.

Comment 86

Part III.A (New Hampshire) Table 1: The Total Residual Chlorine (TRC) limits for Newmarket were reduced from the 2012 NPDES permit based on a reduction in the dilution factor used for the calculations. Historically, the dilution factor (DF) used for Newmarket was 55 based on CORMIX modeling completed in 2000 when the outfall was reconstructed. However, the draft General Permit Attachment E lists the 2021 dilution factor as 32.8. Based on our review, there is no information provided in the General Permit which provides the backup for such a dilution factor decrease.

The Town requests from NHDES and EPA the Fact Sheet documentation and backup information used to develop the new dilution factor. The Town also requests an extension in the comment period to allow for the Town to complete a quality assurance check of the new proposed CORMIX dilution model, once provided. Per Comment #8 below, the Town requests that any and ALL site specific information and/or Permitee specific supplemental information be included in the Fact Sheet backup to the General Permit for the Town's review and use.

Response 86

See Response 20 regarding the administrative record.

EPA notes that the Town of Newmarket submitted these comments on May 24, 2021. Almost one month earlier, on April 28, 2021, the Town of Newmarket emailed EPA and requested this same back-up information regarding the updated dilution factor. On the same day (April 28, 2021), EPA provided this information to the Town of Newmarket for review. Later, EPA extended the public comment period by 15 days to May 25, 2021. Therefore, EPA deems that the Town has had adequate time to review this information and a further extension of the public comment period is not warranted. The Town did not request any additional information from EPA during the comment period.

Comment 87

Part III.A (New Hampshire) Table 1: Based on historical WET testing results since the new WWTF as completed in 2017, the Town has not failed any WET test. The Town previously requested from EPA a reduction in WET testing monitoring frequency on using this historical track record as a basis. However, at the time, the EPA indicated that a monitoring frequency reduction could not be granted because the NPDES permit had expired. It was implied that the Town may submit this similar request upon renewal of the next NPDES permit. The General Permit (Page 28/50 in the Fact Sheet) indicates that permitees may apply for a less frequent WET testing monitoring frequency in instances where EPA previously authorized so through site specific analysis.

The Town requests that EPA consider and provide a formal response to previous request for WET testing frequency reduction.

Response 87

EPA notes that the comment seems to misunderstand the language on page 28 of the Fact Sheet. The Fact Sheet states the following:

> "EPA acknowledges that some of the WWTFs eligible for coverage under this General Permit have previously been authorized for a reduction in either frequency or number of species, or both, based on a site-specific analysis of most sensitive species, effluent variability, etc. Therefore, EPA will apply the frequency and species listed above based on design flow unless a WWTF's current authorization to discharge (either under the POTW GP or under an individual permit) is less stringent, in which case the less stringent requirements will be carried forward in the authorization to discharge under this General Permit."

In the case of Newmarket, as stated in the comment they may have previously requested a reduction in WET testing frequency but have not been previously authorized for any such reduction. Therefore, the WET testing frequency has not been changed in the Final General Permit.

Also see Response 6 related to WET testing requirements.

Comment 88

Part III.A (New Hampshire) Footnote 1: This footnote specifies that regularly monthly compliance sampling schedules shall "A routine sampling program shall be developed in which samples are taken at the same location, same time and same days of the week each month." This requirement is considered unnecessary and overburdensome on small wastewater treatment facilities based on the following justification:

WWTF Staff are licensed professionals and are required to have the knowledge to know how to collect representative wastewater samples. This new requirement is considered an overreach on the means and methods required of licensed treatment plant operators.

"Small" WWTF's typically have a small operations staff with wide range of tasks to perform to maintain successful operations. Unexpected and unanticipated events occur all the time that necessitate adjusting daily schedules in order to successfully accomplish the prime directive of these WWTFs: protect the waters and environment of New Hampshire. This scenario is especially true on weekends when all employees rotate limited coverage to perform the daily duties. This sampling schedule requirement will place undue burden on the staff if the allowable sampling date/time are required to be unwaveringly rigid. Furthermore, if the WWTF's deviate from the permit criteria, the permittees are required to submit NetDMR documentation explaining sampling schedule variations, which is yet another administrative burden on these small WWTF staffs.

If this requirement is maintained in the final permit, the EPA must define what constitutes "the same time"? Does this requirement mean to the nearest second? Minute? Hour? As written, the requirement is ambiguous. The Town requests that this criterion be revised to be an explicit time window of time that would satisfy the "same time". Without further clarification, the footnote is ambiguous, thereby making it susceptible to future litigation. See, e.g., Piney Run Pres. Ass'n v. Cty. Comm'rs of Carroll Cty., MD, 268 F.3d 255, 269 (4th Cir. 2001) (holding NPDES permit provision was ambiguous, and thus the Court must interpret by applying extrinsic evidence). By

clarifying this provision prior to the execution of a final permit, the EPA will be limiting further dispute and conserving judicial resources.

Response 88

See Responses 25 and 75 regarding the routine sampling program.

Comment 89

Part III.A. Table 1, Footnote 1 indicates that "The Permittee shall report the results to the EPA and the State of any additional testing above that required herein, if testing is in accordance with 40 CFR Part 136." The Town requests that EPA clarify that this Footnote applies only to testing which the Permittee completes and does not encompass testing results which outside entities (i.e., NHDES, Fish and Game, etc.) may complete.

Response 89

EPA clarifies that any sample where the type is in accordance with the permit and it is completed with an EPA approved method should be included. For example, NHDES inspectors will on occasion take samples at the facility, which should be included. No change has been made to the Final General Permit.

Comment 90

Fecal Coliform Testing: Part III.A. Table 1 - Effluent Limitations: Per Footnote 10 and State Condition Part III.E.11, Fecal Coliform testing must be tested using the 5-tube decimal dilution method included in 40 CFR Part 136. Previous permits allowed for the use of the Colilert-18 (IDEXX) method for fecal coliform testing as it has been approved under 40 CFR Part 136 under the Clean Water Act since 2017 and has been recognized as an equivalent coliform testing method by EPA. Based on discussions with EPA and NHDES, this new method requirement is based on interpretation of references in the NH RSA 485-A:8.V and National Shellfish Sanitation Program (NSSP) Manual of Operation (2017). Based on previous comments made in the last 12 months on similar permit conditions (Seabrook and Hampton) the Town would like to reiterate similar requests approval for use of the IDEXX method.

Response 90

See Response 72.

Comment 91

Part III.A. Table 1 Effluent Limitations and Footnote 11 (New Hampshire) - The TRC monitoring frequency references are not clear based on our examination. The Town requests that EPA delete "1/day" from the limitations Table and replace with "See Footnote 11" in the Table.

Response 91

See Response 73.

EPA notes that the monitoring frequency indicated in Newmarket’s facility specific table was a typographical error and, based on footnote 11, should be 2/day. EPA confirms that

the 2/day frequency will be included in Newmarket's authorization to discharge under the Final General Permit.

Comment 92

Part III.A (New Hampshire) Footnote 15: This Footnote indicates that "Any existing limits in a facility's current NPDES permit that are more stringent than the limitations presented in this table will be included in that facility's authorization to discharge under the General Permit.".

The Town requests that the EPA provide all site-specific Fact Sheet information and/or Permittee specific supplemental information which are typically included in individual permits. The Town has the right to review site specific supplemental information used for derivation of the "more stringent" limits identified in the permit. The current requirement references older, oftentimes expired permits and does not provide the permittees with complete NPDES permit packages for review.

Response 92

See Response 20 regarding the administrative record and Response 74 regarding the footnote referenced in the comment.

Comment 93

Part III.A (New Hampshire) Footnote 16: This footnote specifies," ... Toxicity test samples shall be collected, and tests completed during the same weeks each time of the calendar quarters ending ... ". The Town requests clarification of this requirement. Is the "same week" reference in terms of one quarter to the next, or is it in terms of the same quarter from the previous year?

The Town requests that this sampling schedule requirement be removed or at a minimum, the acceptable time period expanded (e.g. same month of the quarter). Permittees agree and understand that all samples shall be collected in a manner to yield representative data, but the requirements in this Footnote do not allow the permittees to adjust sampling in efforts to collect representative data or adjust to unforeseen conditions (i.e., staff availability, laboratory coordination) that necessitate changes to sample collection schedules without additional administrative reporting burden. These rigid sampling protocols do not allow small municipalities any flexibility in an already comprehensive sampling routine.

Response 93

See Responses 25 and 75 regarding the routine sampling program.

Comment 94

Part III.A Footnote 20 (New Hampshire) - The permit requirement indicates that "A pH and temperature measurement shall be taken of each receiving water sample at the time of collection and the results reported on the appropriate monthly report. These pH and temperature measurements are independent from any pH and temperature measurements required by the WET testing protocols." The Town requests that the EPA provide justification and supplemental information as to the origin and purpose of this new monitoring and reporting requirement. Without doing so, the Town of Newmarket argues that this monitoring requirement is both arbitrary and capricious. See Motor Vehicle Mfrs. Ass'n of US., Inc. v. State Farm Mut. Auto.

Ins. Co., 463 U.S. 29, 43 (1983) (holding that an agency "must examine the relevant data and articulate a satisfactory explanation for its action" including a "rational connection between facts and judgment ... to pass muster under the 'arbitrary and capricious' standard").

Response 94

See Response 68 above.

Comment 95

Part III.D.1.d (New Hampshire) - The permit requires that diffuser inspections reports must be submitted to the EPA and State agency (MassDEP or NHDES) within 60 days of inspection. The Town requests that this timeline is extended from within 60 days to within 120 days based on the following justification:

Marine effluent diffuser inspection and video reports are completed by a 3rd party contractor and are oftentimes not transmitted to the permittees for weeks after the inspection has been completed. This does not allow the permittees adequate time to review the video inspection reports, develop a maintenance plan, and compile a complete report for submission.

If the issues are identified during the initial diffuser inspection, the Town is required to notify the State agencies immediately, so the extended submittal timeline would not change notification of an effluent diffuser system failure.

Response 95

See Response 77 above.

Comment 96

Part III.A (New Hampshire) Table 1 - Effluent Limitations, PFAS Testing Methods: The General Permit includes new effluent, influent, and sludge sampling requirements for PFHxS, PFNA, PFOS, and PFOA. Footnote 14 (NH), this sampling shall take effect the first full calendar quarter beginning 6 months after the EPA notifies the Permittee that a multi-lab validated method of wastewater is available. This approach is not consistent with the NPDES Permit Standard Conditions which stipulate as follows, " *... the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter, N or O*".

While the Town understands the need to monitor, assess, limit and regulate PFAS in the effluent of POTWs given it's identification as a contaminant of emerging concern ("CEC"), operative obligations in NPDES permits are premature until such time as the PFAS class are recognized and regulated as toxic pollutants or . at least such time as more defined federal guidance and approved testing methods and validated sampling protocols are available. The Town requests that the PFAS monitoring components of the permit be removed.

Response 96

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 97

Part III.A (New Hampshire) Table 1 - Effluent Limitations, General PFAS Monitoring Requirements: PFAS compounds have been documented as being ubiquitous synthetic compounds whose complete fate at WWTF' s is not yet well understood. The current General Permit PFAS testing requirements (quarterly for influent, effluent, and sludge) do not allow for permittees to request for a reduction or elimination of PFAS sampling if historical sampling show stable or declining trends. In the case of small WWTF's without significant industrial users - the overall impact of PFAS at the WWTF may prove to be minimal based on sampling results. Given the complexity and financial burden anticipated to accompany proper PFAS sampling and testing, the Town requests that the EPA and NHDES should strongly consider the addition of specific PFAS permit mechanisms or "off ramps" to allow for the reduction in PFAS sampling requirements based on regulatory review of historical PFAS testing results, in addition to the general language included in Part IV - Monitoring, Record-Keeping, and Reporting Requirements.

Response 97

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 98

Part IV.C.3. Industrial User PFAS Monitoring. The draft General Permit specifies that the Permittee shall commence annual PFAS sampling for certain types of industries that are known or suspected sources of PFAS on a similar timeline as the influent/effluent/sludge sampling at the WWTF (within 6 months of an EPA approved testing method becoming available). Commencement of industrial user PFAS Monitoring prior to receiving any influent WWTF PF AS data is proceeding under the assumption that there are collection system PFAS issues. The Town requests that this requirement is removed from the permit.

As an alternative, the EPA should consider applying this industrial monitoring only after PFAS has proven to be an issue at specific locations. Only after influent WWTF data has been gathered and analyzed can a reasonable determination be made if additional individual sewer user sampling should be required.

Response 98

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 99

Part IV.C.3. Industrial User PFAS Monitoring. Through State investigations and sampling, many of the major sources of significant PFAS contamination (i.e., specific industrial facilities, petroleum refineries, airfields, firefighting practice areas, etc.) have been identified. It is unreasonable for the EPA to place the regulatory and financial burden on the WWTF's to collect annual PFAS data across an unknown number of private industries. If this requirement remains in the permit, the Town requests that the Permit be revised to require monitoring only those Significant Industrial Users that are known or suspected sources of PFAS and only for a single round of sampling. It is unduly burdensome to place these financial sampling burdens on the sewer rate payers.

Response 99

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 100

III.D (New Hampshire): Additional Requirements for Facilities Discharging to Marine Waters, Note 2c: The new Shellfish Notification procedures the Town of Newmarket set effluent criteria for required notification at > 28 organisms/100 mL. Previous permits set this daily post-disinfection threshold at< 10% of samples at> 43 organisms/100 mL or greater, matching the value used for calculating of the maximum daily values for fecal coliforms in NH.

The Town requests that this notification threshold is revised to 43 organisms/100 mL based on the bacterial limits for New Hampshire discharges (Table 2 of the Fact Sheet). No backup or Fact Sheet information was provided for NH Water Quality Standard's support of this value being revised to 28 organisms/100 mL. Thus, under 40 C.F.R. § 124.8(a), the fact sheet is currently deficient in this regard as it fails to "set forth the principal facts, and the significant factual, legal, methodological and policy questions considered" when revising this notification threshold.

Response 100

See Response 82.

Q. Comments from Isaac Golding, Wastewater Superintendent, Town of Northfield

Comment 101

The increase in testing requirements will be detrimental to the limited budget of a small wastewater plant like Town of Northfield. Northfield is small, mainly residential system with limited funds. There is also no industry in town. I would request that Total Nitrogen, TKN and Nitrate + Nitrite testing remain quarterly. Ambient characteristic requirements removed since it's a repeat of WET Testing.

Response 101

Regarding nitrogen monitoring, the Fact Sheet at 26 specified the following:

> "[T]he draft General Permit includes year-round monitoring and reporting requirements for total nitrogen for all discharges covered under the WWTF GP. The frequency of such monitoring is based on the design flow of the facility. Facilities with design flow less than 100,000 gpd will receive quarterly monitoring; facilities with design flow greater than or equal to 100,000 gpd will receive monthly monitoring."

Given that the design flow of the Northfield WWTF is above 100,000 gpd (*i.e.*, 275,000 gpd), EPA has determined that monthly monitoring is necessary to adequately characterize the impact of this discharge on the downstream receiving water (i.e., the Long Island Sound) throughout the year.

Regarding ambient characteristics being a repeat of WET testing, EPA notes that the ambient reporting merely requires the permittees to report the results of the WET tests within their DMR. Other than the pH and temperature monitoring (See Response 68 regarding those), these do not represent new monitoring outside the current scope of the WET tests.

Comment 102

I would request all PFAS testing removed or reduced. Northfield is a small mainly residential system. The plant is already conducting PFAS testing on sludge for disposal. At the request of the disposal site. I have included the most recent sample collected.

[EPA note: Attachment was reviewed but not reproduced here.]

Response 102

See the General Response Regarding PFAS Monitoring in Appendix A.

R. Comments from Robert Wilson, Superintendent, Oxford-Rochdale Sewer District

Comment 103

Whole Effluent Toxicity (WET) Testing - A review of Table 1 of the draft permit for the Oxford Rochdale Sewer District (ORSO) indicates the District is required to sample and perform WET testing four (4) times per year. On page 11, item 14 of footnotes to Table 1, it states that the District may request for a reduction in toxicity testing if they show this reduction is warranted. The ORSO believes that they have not received any negative results from toxicity testing since the last permit renewal period over 10 years ago and therefore we hereby request that the requirement for WET testing for the treatment plant be reduced to two (2) times per year.

Response 103

Contrary to the comment, EPA notes that footnote 14 on page 11 of the Draft General Permit does not include any allowance to request a reduction in WET testing frequency. Therefore, the frequency has not been changed for this facility in the Final General Permit.

Also see Response 6.

Comment 104

Total Recoverable Aluminum - Table 1 of the draft permit indicates the plant effluent must have monthly average total recoverable aluminum concentrations of less than 123 ug/1. Page 43 of the General Permit, subpart E, subsection 3, Aluminum Compliance Schedule allows for a 3 year compliance schedule after the effective date of the Permit. Page 43 also states that the State (MassDEP) will be preparing revised criteria for WWTP effluent Aluminum limits. The District hereby requests that the permit include language that allows suitable time for piloting, design, and construction of plant improvements if the ORSO facility is unable to comply with the new limits. The District also requests that Table 1 Aluminum limits refer to "Total Dissolved Aluminum" in place of "Total Recoverable Aluminum".

Response 104

Regarding the request to lengthen the compliance schedule beyond 3 years, 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." Based on the ongoing efforts by MassDEP to revise the aluminum criteria within 3 years, EPA considers the current schedule to be "appropriate." Given that the facility may be able to comply with the limit (if it becomes effective) through optimization, any extension of the schedule would not ensure that the schedule requires compliance "as soon as possible." Therefore, the compliance schedule in the Final General Permit has not been changed. However, if the limit becomes effective and the Permittee is unable to comply with the limit, they may contact EPA's Enforcement and Compliance Assurance Division (ECAD) to discuss a potential administrative order with additional time to achieve the aluminum limit through alternate means.

Regarding dissolved aluminum, see Response 54.

Comment 105

Total Recoverable Copper - Table 1 of the draft permit includes limits for Total Recoverable Copper. The ORSO facility does not treat for removal of copper. The new effluent limits of 10.4 ug/1 (Ave. Monthly); 15.4 ug/1 (Max. Daily) are still within the current reported plant effluent concentrations measured for 2020. However, the reduction in the total recoverable copper for the facility seems to be unjustified. The District hereby requests EPA's/MassDEP's reasoning for lowering the total recoverable copper limits for the treatment facility. The District also requests that Table 1 Copper limits refer to "Total Dissolved Copper" in place of "Total Recoverable Copper".

Response 105

Based on this comment, EPA reevaluated the copper analysis for Oxford-Rochdale conducted in the development of the Draft General Permit and found that EPA did not properly account for the site-specific copper criteria for this receiving water found in the MA WQS at 314 CMR 4.06 (Table 28 for the French River). Applying these site-specific criteria, EPA confirms that the existing copper limits in the Oxford-Rochdale individual permit continue to be protective of WQS. Therefore, EPA has removed the more stringent copper limits from Attachment E of the Final General Permit and the corresponding compliance schedule in Part IV.E.1 of the Final General Permit. EPA notes that the existing copper limits for Oxford-Rochdale in their current individual permit will be carried forward in their authorization to discharge based on footnote 13 of Part II.A in the Final General Permit.

Regarding total dissolved copper, see Response 54.

Comment 106

In summary, the District is requesting the following changes/ explanations relative to the draft permit:

1. Revise the Whole Effluent Toxicity (WET) testing from four (4) times per year to two (2) times per year.
2. Allow for adequate time to pilot test, design and construct plant improvements should Aluminum limits require plant improvements.
3. Revise the Total Recoverable Aluminum limit to Total Dissolved Aluminum.
4. Revise Total Recoverable Copper limit to Total Dissolved Copper.

Response 106

EPA notes that each of these have been addressed in the respective responses above.

S. Comments from Paulette Malo, Operations Director, Pembroke Sewer Commission

Comment 107

The Town of Pembroke is pleased to comment on the 2021 Draft National Pollutant Discharge Elimination System (NPDES) General Permit for Small Wastewater Treatment Facilities in New Hampshire and Massachusetts ("Draft Permit") issued by the United States Environmental Protection Agency ("EPA"). This permit applies to small wastewater treatment facilities ("WWTFs") that treat domestic waste and discharge the treated wastewater to certain surface waters in Massachusetts and New Hampshire. The Town of Pembroke currently discharges to the Suncook WWTF (also referred to as "Allenstown WWTF") which is currently authorized to discharge under the existing small Publicly Owned Treatment Works General Permit ("Small POTW GP") and, pursuant to the Draft Permit, will continue to be eligible for coverage despite having a design flow that exceeds 1 million gallons per day ("MGD").

The Suncook WWTF is jointly used by Pembroke and Allenstown, which are both co-permittees under the POTW GP. However, the Draft Permit incorrectly lists the Suncook WWTF with a design flow of 1.05 MGD. The Suncook WWTF capacity is actually 1.5 MGD. See January 25, 2016 Letter from S. Rivard, New Hampshire Department of Environmental Services ("NHDES") to Allenstown Wastewater Treatment Facility (Attachment 1). NHDES thus rescinded the moratorium on sewer connections.

In November 2015 Suncook WWTF submitted an application for an individual NPDES permit to reflect this design flow capacity of 1.5 MGD. EPA accepted this application as complete and administratively continued Suncook WWTF coverage under the Small POTW GP pending review and issuance of the individual permit in a duo of letters dated April 12 and 14, 2016 (Attachments 2 and 3).

Since April, 2016, EPA has not taken any action on the individual permit for the Suncook WWTF. Consequently, given the anticipated replacement of the administratively continued Small POTW GP with the Draft Permit, the Town of Pembroke respectfully requests that the Draft Permit be updated in its final form to reflect the upgraded facility's current capacity of 1.5 MGD, or that EPA issue the individual NPDES permit.

The Towns of Pembroke and Allenstown engaged in comprehensive planning over the past two decades that led to the understanding that Suncook WWTF needed additional capacity to serve

each community's long-term planning and development needs. As a result, the 2011 BioMag upgrade was implemented to expand the capacity of the Suncook WWTF. The Town of Pembroke has fully utilized its capacity allocation, which is based on the historic facility design flow and permit flow limit of 1.05 MGD. Under the existing permit flow there is no unallocated capacity that can accommodate additional sewered growth in Pembroke. EPA's failure to increase the Allenstown WWTF discharge flow limit to 1.5 MGD will cause commercial and residential development in the Town of Pembroke to be curtailed, industries will be unable to expand, and the underlying purpose of the upgrade will not be realized. Failure of EPA to timely act on Suncook WWTF's application for an individual permit causes the unintentional effect of thwarting development and economic progress in these towns. Existing users of the Allenstown WWTF will also be economically harmed because the financial planning assumed significant new users in the future would help to recoup the costs of the 2011 Upgrade and other necessary capital improvements.

The Town of Pembroke is currently in the planning process for a significant number of new housing units that, but for the need to update the design flow in the Final SWTF GP or in the issuance of a final individual permit with the correct design flow, could be and should be approved for construction. The consequences of being unable to permit any further development due to the inadequacy of the currently permitted capacity of the Suncook WWTF will be both economic and environmental in nature.

Specifically, failure to update the design flow in the Final SWTF GP or act on the individual permit application will unintentionally promote urban sprawl, along with its attendant higher infrastructure and environmental costs. Because the BioMag upgrade was conducted to allow Suncook WWTF to accommodate the development needs of the communities it serves, this expected development will likely shift to more rural areas outside of the Suncook WWTF service area if the Suncook WWTF permitted flow limit is not increased. This will be accompanied by a demand for new infrastructure in these outlying areas, which is likely to result in a higher cost for these infrastructure services than if the development occurred in more densely settled areas, as well as an increase in impervious surfaces and associated runoff.

In addition to environmental considerations, Pembroke will lose the real estate tax revenue that was anticipated based upon its development projections and plans. Further, by unintentionally causing the underutilization of Pembroke's existing sewer infrastructure, which was planned given certain development expectations, costs to Pembroke and its residents will be higher due to lower revenues from fees and property taxes and increased unit operation costs spread over a smaller user base. As a result, Pembroke will be unable to achieve its economic development, redevelopment, housing, and service goals for its residents.

We recognize that EPA's administrative continuance procedures, see 40 CFR § 122.6, were created for situations such as this, where an applicant's permit is not finalized before its current permit expires. See, e.g., Natural Resources Council of Maine v. International Paper Co., 424 F. Supp. 2d 235, 257 (2006) ("[t]his regulation expressly allows the conditions of an expired permit to continue in force 'until the effective date of a new permit'"); United States v. Zenon-Encarnacion, 387 F.3d 50, 63 (2004) (the expired permit continues in force due to EPA' s failure to act after a timely and complete application was submitted). Administrative continuance is

supposed to avoid due process concerns by allowing the operations of law-abiding permittees while EPA timely processes permit applications. Natural Resources Council of Maine v. International Paper Co., 424 F. Supp. 2d 235,257 (2006). In Suncook WWTF's situation, the lack of action on its individual permit is creating a situation not dissimilar to that which EPA was hoping to avoid - lack of timely action on a permit is disrupting the operations of law abiding permittees.

We appreciate that EPA has numerous responsibilities and is not able to process all permit applications in an expeditious fashion. Accordingly, we respectfully request that EPA make feasible continuing coverage under the agency's general permitting authority by updating the design flow for the Suncook WWTF to 1.5 MGD with a note limiting general permit coverage at that level to the period of administrative continuance- or, in other words, until EPA issues an individual permit for the Suncook WWTF.

Due process requires that the Towns of Pembroke and Allenstown have the opportunity to have Suncook WWTF's complete individual permit application reviewed, with the opportunity for public comment, in accordance with EPA's regulations. Perpetual delay does not offer these municipalities the certainty that they need to sufficiently plan for their and their citizens' needs. Objective 3.4 of U.S. EPA Strategic Plan FY 2018-2022, recognizes these very real consequences of delay on the regulated community- here a delay of well over five years:

Delays in the approval of permits and modifications by federal, state, or tribal permitting authorities can postpone or prevent manufacturers from building, expanding, or beginning operations, even if the affected operations ultimately may be deemed suitable as proposed. Delays can also impact construction of major infrastructure projects. EPA is committed to speeding up the processing of permits and modifications to create certainty for the business community, leading to more jobs, increased economic prosperity, and streamlined permit renewals, which incorporate up-to-date information and requirements more quickly, thereby improving environmental protection.

For the reasons detailed herein, the Town of Pembroke respectfully requests that EPA update Suncook WWTF's permitted capacity to 1.5 MGD in the Final SWTF GP or in a new individual NPDES permit to accurately reflect the facility's actual current design capacity. This update to the Final SWTF GP could readily be tied to the period of administrative continuance in order to avoid the due process concerns associated with the length of that period.

[EPA note: Attachments were reviewed but not reproduced here.]

Response 107

See Response 1.

T. Comments from Jason Randall, Water & Wastewater Superintendent, Plymouth Village Water and Sewer District

Comment 108

Part III.A (New Hampshire) Footnote 1: This footnote specifies that regularly monthly compliance sampling schedules shall "A routine sampling program shall be developed in which samples are taken at the same location, same time and same days of the week each month." This requirement is considered unnecessary and overburdensome on small wastewater treatment facilities based on the following justification:

District staff are licensed professionals and are required to have the knowledge to know how to collect representative wastewater samples. This new requirement is considered an overreach on the means and methods of operators.

The District has a small operations staff with wide range of tasks to perform to maintain successful operations. The District does not have one single staff that performs all sampling activities. Unexpected and unanticipated events happen all the time that necessitate adjusting daily schedules in order to successfully accomplish the prime directive of the District WWTF: protect the waters and environment of New Hampshire. This situation is especially true on weekends when operations employees rotate limited coverage to perform the daily duties. The District's weekend coverage consists of one operator reporting to the WWTF including holidays to conduct NPDES chlorine and pH analysis and inspect the District's Drinking Water facilities at different times that do not conflict with other operations tasks and emergencies as well as their personal obligations. Therefore, consistent weekend sample collection times are not possible given current staffing.

The District does contract some NPDES sample permit required analysis to an outside laboratory, and relys on coordinating the sample hold times with the schedules of the laboratory's staff and couriers which are beyond a Small WWTF's control. Additional monitoring requirements of the Draft Facility-Specific Permit Table will require additional outside dependency for coordination and scheduling.

EPA must define what constitutes "the same time"? Does this requirement mean to the nearest second? Minute? Hour? As written, the requirement is ambiguous. There would need to be an explicit window of time that would satisfy the "same time" requirement if this footnote was to be finalized.

Compliance with this requirement will result in onerous and environmentally unnecessary compliance requirements on the limited available staff at the District. Every month the District will have to submit NetDMR documentation explaining sampling schedule variations, which is in addition to other administrative requirements dictated by the NPDES permits (i.e., CMOM annual report).

Response 108

See Responses 25 and 75 regarding the routine sampling program.

Comment 109

Part III.A (New Hampshire) Footnote 16: This footnote specifies, "…Toxicity test samples shall be collected, and tests completed during the same weeks each time of the calendar quarters ending…". The District requests clarification of this requirement. Is the "same week" reference in terms of one quarter to the next, or is it in terms of the same quarter from the previous year? In addition, any deviation from this sampling procedure requires the Permittee to document the deviation in the monthly reports. This requirement has not been included in past NPDES permits. The District provides the following comments:

The District requests that this requirement be removed or expand the time period (e.g. same month of the quarter) to allow for potential coordination issues that can occur in the completion of WET testing including staff availability and coordination with the laboratory. The rigid sampling protocols do not allow small municipalities, who oftentimes have part time operations staff, any operator flexibility in an already burdensome sampling routine.

The District agrees and understand that all samples shall be collected in a manner to yield representative data, but the requirements in this Footnote do not allow the permittees to adjust sampling times or locations in efforts to collect representative data or adjust to unforeseen conditions that necessitate changes to sample collection schedules without additional administrative reporting burden, which is seen as unnecessary.

Response 109

See Responses 25 and 75 regarding the routine sampling program.

Comment 110

Part III.A (New Hampshire) Footnote 15: This Footnote indicates that "*Any existing limits in a facility's current NPDES permit that are more stringent than the limitations presented in this table will be included in that facility's authorization to discharge under the General Permit*.". The District requests that any "more stringent limits" within the General Permit, be it existing or new, have the associated site specific Fact Sheet information and/or Permittee specific supplemental information which are typically included in individual permits. The District has the right to review site specific supplemental information used for derivation of the "more stringent" limits identified in the permit. The current requirement references older, oftentimes expired permits and does not provide the District with complete NPDES permit packages for review.

Response 110

See Response 20 regarding the administrative record and Response 74 regarding the footnote referenced in the comment.

Comment 111

Part III.A Footnote 20 (New Hampshire) – This new Draft General Permit requirement indicates that "A pH and temperature measurement shall be taken of each receiving water sample at the time of collection and the results reported on the appropriate monthly report. These pH and temperature measurements are independent from any pH and temperature measurements required by the WET testing protocols." The District requests that the EPA provide supplemental

information as to the origin and purpose of this requirement. This Footnote places additional ambient water quality monitoring efforts on the District, which diverts resources from the operation and maintenance of the District's WWTF.

Response 111

See Response 68.

Comment 112

Part III.A. Table 1 Effluent Limitations and Footnote 11 (New Hampshire) – The TRC frequency references are confusing. The District requests that EPA delete "1/day" from the limitations Table and replacing with "*See Footnote 11*".

Response 112

See Response 91.

Comment 113

Part III.A. Table 1 Effluent Limitations and Footnote 13 (New Hampshire) – The monitoring frequency is either 1/quarter or 1/month depending on WWTF size. The limitations Table specifies reporting the average monthly and maximum daily values. At the specified monitoring frequencies, the average monthly and maximum daily values are the same and the District requests deleting one of the monitoring requirements as they are duplicative.

Response 113

EPA agrees that given the frequency of nitrogen monitoring being either once per month of once per quarter it is duplicative to report both average monthly and daily maximum Therefore, EPA has removed the daily maximum reporting requirement for total nitrogen, total Kjeldahl nitrogen and nitrate + nitrite in Part II.A and Part III.A of the Final General Permit.

Comment 114

Part II.A (Massachusetts) and Part III.A (New Hampshire) Table 1 – Effluent Limitations, PFAS Testing Methods: The General Permit includes new effluent, influent, and sludge sampling requirements for PFHxS, PFNA, PFOS, and PFOA. Per Footnote 12 (MA) and Footnote 14 (NH), this sampling shall take effect the first full calendar quarter beginning 6 months after the EPA notifies the Permittee that a multi-lab validated method of wastewater is available. This approach is not consistent with the NPDES Permit Standard Conditions which stipulate as follows, "…the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter, N or O". Although the need to monitor, assess, limit and regulate PFAS in the effluent of POTWs is desirable since it is a contaminant of emerging concern ("CEC"), operative obligations in NPDES permits are premature until such time as the PFAS class are recognized and regulated as toxic pollutants or at least such time as more defined federal guidance and approved testing methods and validated sampling protocols are available.

Response 114

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 115

Part II.A (Massachusetts) and Part III.A (New Hampshire) Table 1 – Effluent Limitations, General PFAS Monitoring Requirements: PFAS compounds have been documented as being ubiquitous synthetic compounds whose complete fate at WWTF's is not yet well understood. The current General Permit PFAS testing requirements (quarterly for influent, effluent, and sludge) do not allow for permittees to request for a reduction or elimination of PFAS sampling if historical sampling show stable or declining trends. In the case of the District without significant industrial users – the overall impact of PFAS at the WWTF may prove to be minimal based on sampling results. Given the complexity and financial burden anticipated to accompany proper PFAS sampling and testing, the District requests that the EPA and NHDES strongly consider the addition of specific PFAS permit mechanisms or "off ramps" to allow for the reduction and/or a waiver for PFAS sampling requirements based on regulatory review of historical PFAS testing results, in addition to the general language included in Part IV – Monitoring, Record-Keeping, and Reporting Requirements.

Response 115

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 116

Part IV.C.3. Industrial User PFAS Monitoring. The draft General Permit specifies that the Permittee shall commence annual PFAS sampling for certain types of industries that are known or suspected sources of PFAS on a similar timeline as the influent/effluent/sludge sampling at the WWTF (within 6 months of an EPA approved testing method becoming available). Commencement of industrial user PFAS Monitoring prior to receiving any influent WWTF PFAS data is proceeding under the assumption that there are collection system PFAS issues. At minimum, the District requests that EPA stagger the requirements for industrial user monitoring to begin after a set period of influent WWTF data has been gathered and analyzed and then a determination should be made if additional individual sewer collection system user sampling is needed.

An educational and technical assistance component provided by EPA and NHDES is needed prior to sampling requirements within a NPDES permit as users and operators need to fully understand the impact that this may have on their system, upstream and downstream systems, and the background levels within a sewer collection system, private septic systems, and natural ecosystem.

It is important to note that through State investigations and sampling, many of the major sources of significant PFAS contamination (i.e., specific industrial facilities, petroleum refineries, airfields, fire-fighting practice areas, etc.) have been identified. It is unreasonable for the EPA to place the regulatory and financial burden on the WWTF's to collect annual PFAS data across an unknown number of private industries. We request that the Permit be revised to require monitoring only those Significant Industrial Users that are known or suspected sources of PFAS and only for a single round of sampling.

Response 116

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 117

Part III.B (New Hampshire) - Note 9.c: The General Permit has slightly modified requirements with respect to chlorination and dechlorination system alarming and notification procedures. The new requirement indicates that "Chlorination and dechlorination systems shall include an alarm system for indicating system interruptions or malfunctions." The previous general permit required continuous record and notification if there was any lapse in interruption of normal disinfection system operations.

Response 117

EPA acknowledges this comment and notes that it does not request any change to the General Permit.

Comment 118

Part III.A. Table 1, Footnote 1 indicates that "The Permittee shall report the results to the EPA and the State of any additional testing above that required herein, if testing is in accordance with 40 CFR Part 136." The District requests that EPA clarify that this Footnote applies only to testing which the Permittee completes, and does not encompass testing results which outside entities (i.e., NHDES, Fish and Game, District Users, etc.) may complete.

Response 118

See Response 89.

Comment 119

The Draft General Permit includes a new "Rolling Effluent Annual Average" limitation which includes the District's 0.682 MGD average design flow. This new criteria is slightly smaller than the 2011 NPDES General Permit where the 0.70 MGD was listed as the facility design flow. This slight adjustment results in slightly smaller loading limitations for BOD and TSS. Given the 2021 Pemigewassett River 7Q10 Flow, the facility's dilution ratio was increased from 98.4 to 109, impact appears to be insignificant. The District requests EPA and NHDES provide justification for a reduction in average design flow under this Draft General Permit.

Response 119

EPA agrees that the design flow of the facility should be 0.70 MGD, as specified in the 2011 NPDES General Permit, and it appears the lower flow limit was merely a typographical error. As indicated in the comment, this update is insignificant related to the dilution factor and any other limit in the General Permit (other than the flow limit itself). Therefore, EPA has updated Attachment E of the Final General Permit to indicate a design flow of 0.70 MGD. EPA confirms that the authorization to discharge for this facility will also indicate a flow limit of 0.70 MGD.

Comment 120

The draft General Permit includes new effluent sampling report requirements for Total Nitrogen, TKN, and Nitrate and Nitrite. The District understands that precedent has already been set and these requirements are consistent with EPA recent individual NPDES permit renewals throughout New Hampshire and are not unique to the District. The District will be responsible

for the burden of this additional sampling and requests that EPA and NHDES provide justification for new effluent sampling report requirements.

Response 120

EPA notes that the justification for nitrogen monitoring and reporting requirements was provided in the Fact Sheet at 26 as follows:

> "EPA is also concerned about nitrogen discharges to other estuaries, such as Great Bay, the Merrimack River estuary and Narragansett Bay, that are not subject to TMDLs but may be experiencing nitrogen enrichment. To address this concern, the draft General Permit includes year-round monitoring and reporting requirements for total nitrogen for all discharges covered under the WWTF GP. The frequency of such monitoring is based on the design flow of the facility. Facilities with design flow less than 100,000 gpd will receive quarterly monitoring; facilities with design flow greater than or equal to 100,000 gpd will receive monthly monitoring."

Comment 121

The draft General Permit includes new influent composite sampling requirements for BOD and TSS and includes an effluent limitation of greater than 85% removal for BOD and TSS. Similar to the Nitrogen effluent limitations, the District understands that precedent has already been set and these requirements are consistent with EPA recent individual NPDES permit renewals throughout New Hampshire and are not unique to the District. The District will be responsible for the burden of this additional sampling which may become problematic for the District without a reliable means of influent composite sampling at the WWTF without facility recycle, return, and side stream flows. The District requests that EPA and NHDES provide justification for new influent sampling report requirements.

Response 121

As described in the Fact Sheet (on page 17),

> "In accordance with the provisions of 40 CFR §§ 133.102(a)(3), (a)(4)(iii) and (b)(3), the draft General Permit requires that the 30-day average percent removal for BOD5 (or CBOD5) and TSS be not less than 85%."

Therefore, the influent monitoring is necessary to confirm compliance with the percent removal requirement.

EPA notes that these influent monitoring and percent BOD_5/$CBOD_5$ and TSS removal limits are not new. The 2011 General Permit included a requirement in Part III.A.5 that,

> "The permittee's facility shall maintain a minimum of 85% removal of total suspended solids and either five-day biochemical oxygen demand (BOD_5) or five-day carbonaceous biochemical oxygen demand ($CBOD_5$). The percent removal shall be calculated from the average monthly influent and effluent concentrations."

Further, the 2016 Plymouth Village individual permit included a requirement in Part I.A.1.e that,

> "The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand. The percent removal shall be based on monthly average values."

The only new requirement is that the data be reported.

Comment 122

The General Permit maintains a similar Whole Effluent Toxicity (WET) testing requirements and monitoring frequency from the previous 2011 NPDES General Permit, except for the removal of chromium testing from the parameters list. The District requests that EPA and NHDES provide justification for the removal of chromium from the WET parameters list.

The Acute LC50 discharge limitation was revised from 100% in the 2011 General Permit to greater than or equal to 50% as a percentage of effluent flow, but is consistent with the increase in the Merrimack River dilution factor from 98.4 to 109. The District requests that EPA and NHDES provide justification for the revision of the Acute LC50 as a percentage of effluent flow.

Total Organic Carbon is a new testing requirement, both in the WWTF effluent and Ambient, and Dissolved Organic Carbon a new reporting requirement for the Ambient. While these requirements appear to be new for all NH facilities, the District understands that EPA has historically made this a permitted reporting requirement in southern New England states, sometimes to better determine metals toxicity resiliency of receiving streams. The District requests that EPA provide clarification and justification for these new requirements, including EPA's intention for both the effluent sampling and Ambient in NH.

The District trusts the above submitted comments will be considered as part of the EPA's finalized version of the NPDES Small Wastewater Treatment Facility General Permit.

Response 122

Regarding the removal of chromium, EPA notes that chromium monitoring is no longer included in the Whole Effluent Toxicity protocols found in Attachments A through D of the General Permit so reporting the chromium on the monthly DMR submission is not required.

Regarding the WET limit, EPA notes that in this case the existing LC50 limit of 100% should be carried forward based on footnote 15 on page 26 of the General Permit and in accordance with anti-backsliding requirements found at CWA §§ 402(o) and 303(d)(4) and 40 CFR § 122.44(l). Therefore, the limit of 100% will be included in the authorization to discharge for Plymouth Village under the Final General Permit.

Regarding organic carbon monitoring, see Response 70.

U. Comments from Alison Cullity, Chair of Board of Commissioners, Rollinsford Water and Sewer District

Comment 123

I am writing on behalf of the Rollinsford Water and Sewer District (RWSD). While we are very committed to (and certainly understand the importance of) maintaining compliance with the Clean Water Act, we do have concerns about the recently issued draft NPDES Permit No. NHG580000. It is our understanding that this is the first NPDES permit issued in New Hampshire with PFAS requirements. We are especially concerned with the inclusion of PFAS testing requirements of influent, effluent and sludge, for the following reasons:

1. The draft permit states that PFAS sampling takes effect after EPA notifies the permittee that an EPA multi-lab validated method for wastewater is available, rather than after approval under 40 CFR Part 136, which is the standard for all wastewater analysis for NPDES reporting. We feel it would be more appropriate to include PFAS testing in a future permit, after 40 CFR 136 test methods are approved.

2. It is our understanding that there currently are no in-state commercial laboratories accredited for PFAS analysis. Out-of-state turn-around time for PFAS analysis could be more than three weeks, which could create difficulties for NPDES reporting. It would be more appropriate to include PFAS testing in a future permit when New Hampshire commercial labs have had a sufficient amount of time to become accredited.

Thank you for the opportunity to comment on this permit and for hearing our concerns.

Response 123

See the General Response Regarding PFAS Monitoring in Appendix A.

V. Comments from Daniel Fleuriel, Chief Operator, and Lisa Provencher, Assistant Chief Operator, Shelburne Falls Wastewater Treatment Facility

Comment 124

As operators representing the towns of Buckland and Shelburne MA, we offer the following comments, within the allowable Public Comment Period and specific to the proposed changes to the pH ranges in proposed draft Permit MAG 580000.

Shelburne Falls Wastewater Facility (SFWWF) presently has a discharge limitation of 6.0 to 9.0 in its existing MAG 580002. The draft revised permit MAG 580000 developed by EPA proposes a pH discharge range of 6.5 to 8.3.

River pH has been ranging from 6.5-7.4 over the past month and a half according to data we voluntarily collected. The treatment plant effluent ranges from 6.0-7.4. With the new minimum limit our plant would violate during the colder months. Because of the cold temperatures during the winter months, the high dissolved oxygen of the influent and the mixed liquor the process does not go anoxic in the clarifiers keeping the pH above 6.5. The aeration cannot be lowered

during the winter because mixing in the aeration tanks must be maintained. The rest of the year we do achieve that limit.

SFWWF requests at this time that EPA and MassDEP retain our existing effluent pH limit of 6.0 in the newest forthcoming version of MAG 580000.

From review of the recent January 2021 Individual NPDES Permit # MA 0101257 issued to the Orange MA wastewater treatment facility, SFWWF is aware of the "alternative pH limit" of 6.0 to 8.3 approved for Orange, with the stipulation that Orange perform a pH Study during the term of that permit. For our facility to retain its effluent pH limit of 6.0, we understand that it may also be required to perform its own pH Study during the term of the newest forthcoming version of MAG 580000.

Please contact SFWWF as soon as possible as to what we need to do to initiate its pH Study if such pH Study is necessary.

Response 124

EPA appreciates the voluntary collection and submission of ambient pH data. EPA notes that the updated dilution factor as presented in Attachment E of the Draft General Permit is 514. Based on this extremely high dilution afforded by the receiving water even under critical flow conditions (*i.e.*, 7Q10 and design flow) and the fact that the receiving water (*i.e.*, the Deerfield River) is not impaired for pH, EPA and MassDEP agree that a discharge of 6.0 S.U. is highly unlikely to impact the receiving water and cause or contribute to a violation of water quality standards. Therefore, the pH limit in the authorization to discharge for this facility will be 6.0 to 8.3 S.U. However, in order to continue the pH limit of 6.0 – 8.3 S.U. in future permits, the Shelburne Falls WWTF shall be required conduct a study to demonstrate that the pH in the receiving water does not exceed the range of 6.5 – 8.3 S.U. This revised pH limit for Shelburne Falls and associated requirement for future permits are included in Part II.A.1 footnote 7 of the Final General Permit.

Comment 125

The Shelburne Falls being the towns of Buckland and Shelburne MA offer the following comments, within the allowable Public Comment Period and specific to the proposed additional PFAS monitoring and analysis in proposed draft Permit MAG 580000.

Shelburne Falls is willing to take 1 Influent wastewater, 1 sludge, 1 cake and 1 Effluent wastewater PFAS samples per year proposed in new MAG # 580000 (not 4 said samples per year/5 years), in order to assist EPA and DEP in their PFAS data collection efforts. However, Shelburne Falls asks that EPA and/or DEP pay the annual cost for analyzing such PFAS samples.

Background:
Shelburne Falls wastewater discharge is presently covered under MA general Permit MAG 580002, which allows a permitted discharge of 250,000 gallons per day (equivalent to 0.25 Million Gallons per Day) to the Deerfield River. Average daily flow of the SFWWF to the

Deerfield River is approximately 0.175 MGD. Under the existing MA General Permit #580002, SFWWF is not required to sample and analyze for PFAS.

The SFWWF annual operating budget is approximately $270,778 fiscal year not including capital expenditures. The new proposed general Discharge Permit MAG 580000 proposes that the WWTP's (including SFWWF) pay the entire cost of the laboratory analysis cost for the 12 PFAS samples each year. At a price of $275/sample analysis, this would cost SFWWF an extra $3,300 per year, in addition to extra labor time to take these samples. Over 5 years of the Permit, this would be at over $16,500 spent by SFWWF. This additional expenditure of $3,300 per year is significant relative to other high priority cost that will present themselves over time such as funds going towards CMOM.

To be fair we feel testing PFAS in the water is important and are keen to know the levels in our process and the effect our process has on these chemicals. To that end we agree to test one round, but we question the necessity of quarterly testing from that point forward. If EPA and/or DEP pay the annual cost for analyzing such PFAS samples we will provide the samples and time to collect and send out for analysis. We will certainly consider incorporating an option for our facility to do some sampling but reduce monitoring if the received PFAS results are non-detects consistently if EPA and/or DEP comes up with the funding.

Response 125

See the General Response Regarding PFAS Monitoring in Appendix A.

W. Comments from Justin Frazier, Superintendent, Town of Troy Water/Sewer

Comment 126

I am writing this letter as a response to The Town of Troy, New Hampshire Wastewater Treatment Facility's draft permit No. NHG580000.

There are a couple concerns we have regarding the draft permit.

The first is regarding the PFAS quarterly sampling on the influent, effluent and the sludge. At this time we feel that it is unrealistic cost increase to our already tight budget as this is going to increase the budget by $4,080 per year. We feel that a yearly test is a more acceptable sampling frequency. Also where should we collect the sample from the sludge as we have a lagoon system with 2 lagoons and 2 cells per lagoon?

The second concern is, we would like an explanation as to why we are being made to sample upstream from the outfall for Total Phosphorus? This is an added expense for something we have no control over.

The Town of Troy fully supports the EPA and ensuring that The United States has a clean and healthy environment.

Response 126

Regarding PFAS, see the General Response Regarding PFAS Monitoring in Appendix A.

The new upstream phosphorus monitoring requirement, which is applicable to permittees, such as the Troy WWTF, discharging to freshwater with a dilution factor less than 20, is intended to better characterize the receiving water. This will inform the evaluation as to whether there is reasonable potential for the discharge to cause or contribute to a violation of water quality standards in the next permit issuance. See 40 CFR § 122.44(d)(1). The authority to require that permittees provide such information is derived from CWA Section 308(a).

X. Comments from Robert Larson, Public Works Director, Town of Whitefield, and Michael Curry, Wright-Pierce Engineering, on behalf of the Town of Whitefield

Comment 127

A quick question on the draft General Permit phosphorus limitations as they relate to Whitefield NH. In 2019 the Town submitted a NPDES permit renewal application requesting that the current concentration-based limit be revised to a mass-based limit to allow the Town greater operational flexibility. I see that the draft General Permit still has total P limits as concentration based. Will EPA be considering updating these to mass-based to reflect similar conditions at NH plants such as Pittsfield, Sunapee, and Jaffrey?

Response 127

EPA acknowledges that converting phosphorus limits from concentration-based to mass-based in some cases can provide greater operational flexibility while remaining fully protective of water quality standards. Based on this comment, EPA evaluated the phosphorus limit for the Whitefield WWTF to see whether this conversion should be made in this case. The updated analysis is presented below.

To ensure a mass-based limit is protective under reasonable worst-case conditions, the limit is calculated using the lowest expected receiving water flow and effluent flow. Hence, the upstream 7Q10 receiving water flow (1.37 MGD, as presented in Attachment E of the General Permit) and the lowest monthly average effluent flow during the growing season within the review period (0.054 MGD, October 2016) are used. Also, an updated median upstream phosphorus concentration of 0.0244 mg/L was used (based on 3 samples taken in June, July and August of 2014 at station 03T-JHN approximately 300 feet upstream of the outfall). The numeric mass-based limit is determined based on the following equations:

$$Q_E C_E + Q_S C_S = Q_D C_D \times (0.90)$$

and

$$M_E = Q_E C_E \times 8.34$$

Substituting ($Q_E C_E$) with ($M_E/8.34$) into the first equation and solving for M_E results in:

$$M_E = (Q_D C_D \times (0.90) - Q_S C_S) \times 8.34$$

Where:

M_E = mass-based phosphorus limit in lb/day
Q_E = effluent flow (lowest effluent monthly average flow = 0.054 MGD)
C_E = effluent phosphorus conc. in mg/L
Q_S = upstream 7Q10 flow (1.37 MGD)
C_S = upstream river phosphorus conc. (0.0244 mg/L)
Q_D = downstream low flow ($Q_E + Q_S = 0.054 + 1.37 = 1.424$ MGD)
C_D = downstream river phosphorus conc. (Gold Book target = 0.100 mg/L)
0.90 = factor to reserve 10% assimilative capacity
8.34 = factor to convert from (MGD x mg/L) to lb/day

Solving for M_E gives the maximum allowable load the facility may discharge to ensure the protection of WQSs. This allowable discharge load is 0.79 lb/day.

Comparing this potential mass-based limit to the current concentration-based limit of 0.5 mg/L, EPA notes that the WWTF would have greater operational flexibility for all monthly average flows below 0.189 MGD. Given that this flow is approximately the same as the design flow of the WWTF (*i.e.*, 0.185 MGD), EPA agrees that the mass-based limit would provide more operational flexibility most of the time. However, EPA also notes that some recent flows from the WWTF have exceeded the design flow (as high as a monthly average of 0.249 MGD in April 2019). At this higher effluent flow of 0.249 MGD, the WWTF would have to achieve a concentration of 0.38 mg/L (more stringent than the current limit of 0.5 mg/L) to meet the mass-based limit of 0.79 lb/day. Based on this analysis, EPA highlights that a mass-based limit would ensure the protection of WQS under all potential effluent flows and would provide greater operation flexibility under most effluent flows. Therefore, the Final General Permit includes a mass-based monthly average phosphorus effluent limit of 0.79 lb/day (rather than the current limit of 0.5 mg/L) effective from April 1 through October 31, with sampling at 2/month.

Comment 128

The Town of Whitefield, NH would like to comment on the NPDES General Permit No. NHG580000 for the PFAS sampling requirement quarterly for the Influent, Effluent, and sludge. New Hampshire Department of Environmental Services (NHDES) has already conducted PFAS sampling for Influent, Effluent, and sludge at many of the wastewater treatment plants throughout the state. The results have found the issues with PFAS at the locations where they predicted that it would be an issue. Has the EPA considered only sampling the plants with a PFAS issue? The annual estimated cost for the PFAS sampling is around $3,300 and this wasn't part of the Town's annual budget. We are just now finishing construction of a new facility with a startup date of June, 2021. The financial burden for the additional testing would be prohibitive and it's an assumption that EPA and NHDES doesn't have funding for this sampling. We are requesting a provision to allow for sampling reduction to 1/year if the initial test results are low. Also; We are requesting that sampling of sludge for lagoons only be conducted when the sludge is removed. If sampling needs to be conducted in the lagoons quarterly, we have safety concerns

in the winter months using a boat in case someone falls in. We are requesting that sampling not be required during the winter months.

Response 128

See the General Response Regarding PFAS Monitoring in Appendix A.

Y. Comments from Kevin Shelton, Administrator, Woodsville Fire District

Comment 129

The Precinct of Woodsville in the Town of Haverhill would like to comment on the NPDES General Permit No. NHG580000 for the PFAS sampling requirement quarterly for the Influent, Effluent, and sludge. New Hampshire Department of Environmental Services (NHDES) has already conducted PFAS sampling for Influent, Effluent, and sludge at many of the wastewater treatment plants throughout the state. The results have found the issues with PFAS at the locations where they predicted that it would be an issue. Has the EPA considered only sampling the plants with a PFAS issue? The annual estimated cost for the PFAS sampling is around $3,300 and this wasn't part of the Woodsville Fire District's annual budget. The current budget for sampling is $3,000, and this would double the costs associated with sampling, and it's an assumption that EPA and NHDES doesn't have funding for this sampling. We are requesting a provision to allow for sampling reduction to 1/year if the initial test results are low.

Response 129

See the General Response Regarding PFAS Monitoring in Appendix A.

Z. Comments from Anette Lewis

Comment 130

At the outset, I notice that the General Permit will be available only to "Wastewater treatment facilities, including publicly owned treatment works and other treatment works, that treat domestic sewage." See page 1 of the Draft General Permit. And, at page 18 of 21 of the NPDES PART VIII STANDARD CONDITIONS (April 26, 2018), the term "domestic sewage" is defined as "waste and waste water from humans or household operations that are discharged to or otherwise enter a treatment works." So, if the regulated discharge is from a treatment facility that accepts something other than domestic sewage, it appears that the effluent from that facility is not eligible to fall under the proposed General Permit.

Response 130

EPA disagrees with this comment's interpretation of page 1 of the Draft General Permit. Rather, this reference indicates that the Small WWTF General Permit is intended to authorize the discharge of all wastewater from eligible WWTFs that treat domestic sewage. However, there is acknowledgement in the permit that such facilities may also accept industrial wastewater through specific requirements related industrial users. See Part IV.C of the Final General Permit. Further, EPA acknowledges that some amount of wet weather flow may be treated as long as infiltration and inflow (I/I) is properly controlled based on Part IV.A.3 of the Final General Permit.

Comment 131

In reading through the April 8, 2021 Federal Register Notice as well as the actual draft General Permit and accompanying Fact Sheet, it is unclear how already existing, site-specific discharge limits, sampling requirements and their frequency, and flow limits will be enforced once a facility falls under the NPDES General Permit.

a. Are you relying only on footnote 13 at page 11 of 49 in the 2021 Draft General Permit that states "Any existing limits in a facility's current NPDES permit that are more stringent than the limitations presented in this table will be included in that facility's authorization to discharge under the General Permit"? That note only refers to actual limits and not sampling frequency, which in the case of some of the existing individual permits, differ considerably from what is listed in the proposed General Permit.

b. As to sampling frequency, does the General Permit govern or does the facility look to its existing requirements?

c. As to effluent and flow limits, how long would you expect the existing facility specific criteria to remain in existence and be applicable to that one facility?

d. In future, how would a facility go about getting permission to increase its flow or to drop a site-specific sampling requirement? Aren't those issues to be addressed through individual NPDES permits?

Response 131

EPA notes that footnote 13 at page 11 of the Draft General Permit only applies to effluent limits and does not apply to monitoring frequencies. EPA agrees that existing permits have varying monitoring requirements and this General Permit intends to make those monitoring requirements consistent for similar small WWTFs. Therefore, the monitoring frequency specified in the General Permit supersedes the monitoring frequencies in the various existing permits.

Regarding how long EPA expects existing limits to apply, EPA notes that (based on footnote 13 referenced in the comment) these limits in the General Permit will be effective at least through this permit term. Once this General Permit is ready to be reissued in the future, EPA will reevaluate these limits to ensure they continue to meet WQS and any proposed changes will be subject to public review and comment.

In the future, if a facility wishes to increase design flow or request a sampling change, they may submit a formal request to EPA Region 1. EPA will consider and process all requests and, if appropriate, apply them through a permit modification or permit reissuance, either of which would be subject to public review and comment.

Comment 132

In the draft General Permit, there also appear to be quite a few additional effluent characteristics required to be sampled for over and above those that individual facilities have been called upon heretofore to test.

a. Why is this necessary in all cases?

b. That really increases the analytical costs and could encourage facilities to apply for individual site-specific permits rather than just accept the terms of a General Permit.

Response 132

While it is not clear to which specific effluent characteristic the comment refers, EPA confirms that all monitoring requirements are included for the purpose of gathering sufficient data to inform the evaluation as to whether there is reasonable potential for the discharge to cause or contribute to a violation of water quality standards in the next permit issuance. See 40 CFR § 122.44(d)(1). The authority to require that permittees provide such information is derived from CWA Section 308(a). EPA also notes that many of the effluent and ambient characteristics (metals, hardness, etc.) that are required to be monitored and reported are included in the Whole Effluent Toxicity (WET) test water chemistry analysis. This water chemistry analysis has always been required as part of each WET test and the only new aspect is that these results are now required to be reported in NetDMR.

The monitoring frequency for each parameter is based on state guidance and state review. Given that many of the eligible permittees 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. Overall EPA considers these changes to be modest and notes that if these facilities were to receive a reissued individual permit, that individual permit would include these same modest frequency changes. EPA recognizes that in some cases this monitoring has a moderate increase in the analytical costs, but nevertheless requires such data gathering to effectively carry out the CWA.

Also see Response 83.

Comment 133

How does the EPA determine when to drop or add some of the generic effluent characteristics to the General Permit?

Response 133

EPA requires the characterization of the effluent for all pollutants of concern which may have the reasonable potential to cause or contribute to a violation of WQS. Based on EPA's knowledge of typical wastewater effluent and applicable WQS, EPA has included the effluent monitoring requirements presented in the General Permit to ensure compliance with the CWA.

Comment 134

What is the frequency that EPA will review the established effluent characteristics?

Response 134

As stated on page 1 of the General Permit, the permit expires 5 years from the effective date. After it expires, EPA will review and reissue the General Permit with updated requirements. During the permit term, EPA routinely evaluates effluent monitoring data to ensure compliance with applicable effluent limits.

AA. Comments from Andrea Donlon, River Steward, Connecticut River Conservancy

Comment 135

I am submitting very brief comments on the 2021 Draft General Permit for Small Wastewater Treatment Facilities in MA and NH.

In general, we found the Fact Sheet helpful, and Attachment E and Appendix B helpful for explaining the nitrogen limits for Long Island Sound.

The proposed permit will potentially cover 19 facilities in the MA portion and 14 facilities in the NH portion of the CT River watershed.

My main comments have to do with public access to information and applicability of the general permit.

As shown on Attachment E, list of eligible facilities, most of the eligible facilities in MA currently have expired individual permits; some expired over 10 years ago. Once they are covered under the general permit, there is no posting to that effect under https://www.epa.gov/npdespermits/massachusetts-final-individual-npdes-permits, and no way to see what specific limits may be placed on the facility under an authorization letter. CRC requests that EPA consider updating its tables for MA and NH facilities so that the public could find out more information about limits on facilities listed in Attachment E as time goes on. Whether this is appropriate under a separate page or an expansion of the idea of this table (so that it would include individual and general permittees) would be EPA's call. But it would be helpful to have access to the information.

Section V of the permit indicates that an operator may request to be covered under the general permit or EPA may simply send the operator a letter saying they are covered. Part V(B) indicates that an individual permit may be required for any facility that is violating water quality standards. A check of several facilities in the ECHO database indicates that there have been violations of permit limits at facilities (one example: Woronoco pH limit violations). Other facilities seem to have many quarters in noncompliance, perhaps not filing DMRs or required I/I reports. Will facilities be inspected or required to come into compliance in order to be covered under the general permit?

Response 135

EPA agrees with the comment that it would be valuable for the public to have access to the facility-specific requirements for those WWTFs authorized by this General Permit. Therefore, EPA will upload all authorization letters to EPA's website for this permit. These authorization letters will include all facility-specific requirements.

Regarding Part V.B, EPA notes that this provision simply indicates that a discharger who violates WQS "may" be required to obtain an individual permit. This does not indicate that a discharger who violates WQS "must" obtain an individual permit. In such cases, it would be under EPA's discretion as to whether that discharger could be more effectively permitted under an individual or general permit. In general, EPA notes that dischargers authorized under this General Permit would be equally subject to EPA enforcement action as dischargers under an individual permit. Therefore, EPA does not see any reason to automatically require individual permits based solely on permit violations.

Comment 136

I'll re-iterate our request that all nitrogen optimization reports submitted to EPA under individual or general permit requirements be posted online so that the public does not need to obtain them through a FOIA request.

Response 136

EPA agrees that these reports should be available for review by any interested party. However, EPA is not aware of significant public interest in these reports such that posting them online is warranted. Rather, EPA will make these reports available upon request and notes that an official request under the Freedom of Information Act (FOIA) is unnecessary. Specific requests may be made via email to R1NPDESReporting@epa.gov.

BB. Comments from Rob Lauricella, Area Manager, H2O Innovation

Comment 137

My company contracts out the operation of a couple wastewater plants in NH that just received the new general permit with PFAS sampling requirements in them. I called your number and left you a message to contact me but I thought an email would be fine. The State of NH sampled many of the treatment plants for PFAS and found some with issues that they knew may be a problem. Did EPA consider just having PFAS sampling for the treatment plants with these issues instead of a blanket permit for all treatment plants? The estimated cost I just received from the lab is approximately $3,300 in PFAS sampling per year for the treatment plants. Many of the small communities have limited budgets and I'm assuming EPA is not providing any funding for this sampling. Has there been any discussions on reduced sampling if a year worth of testing comes out with low numbers? Many of the treatment plants are lagoons and sampling sludge will be quite difficult and near impossible safely in the winter months. I'm not sure if the thought for lagoon sludge sampling is only when the sludge is removed?

Thanks for your help and just wanted to provide my thoughts on this new testing requirements.

Response 137

See the General Response Regarding PFAS Monitoring in Appendix A.

CC. Comments from Mickey Nowak, MA Water Environment Association

Comment 138

The frequency of PFAS testing for small facilities. I will use Monroe as an example. The design flow is 15,000 gallons per day. The actual flow is under 10,000 per day. I fully understand that PFAS compounds in wastewater are important and that the MA DEP is still trying to wrap their arms around the issue but I also doubt that cutting Monroe's in testing half to every six months would cause any harm to the US EPA's or MA DEP pursuit of PFAS knowledge. They need to be at the same testing frequency as a GLSD, or UBCW? The testing adds significant costs to a small facilities budget for very little in return.

Response 138

See the General Response Regarding PFAS Monitoring in Appendix A.

DD. Comments from Christopher Perkins, NH Water Pollution Control Assocation

Comment 139

I am writing on behalf of the Permit Committee of the New Hampshire Water Pollution Control Association (NHWPCA). The NHWPCA has the following stated purpose and represents hundreds of wastewater professionals from across the state:

1. The acquisition and dissemination of knowledge concerning the nature, collection, treatment and disposal of water-carried wastes and the design and operation of wastewater systems.

2. The promotion of good public relations and sound legislation relating to wastewater control systems.

3. The advancement of the status of personnel engaged in the control of water pollution.

4. The improvement of wastewater collection and treatment and thereby the quality of New Hampshire's water resources.

The Permit Committee, working through the NHWPCA Board of Directors, works to identify ways and means to offer guidance to membership relative to new or modified NPDES permit-related issues, trends, water quality standards, and/or associated rulemaking. This may include training or articles on permit-related issues and water quality standards, comments prepared related to specific draft permits, and other actions that advance the interests of membership.

Response 139

EPA acknowledges this comment.

Comment 140

Many of the permittees named in the above referenced permit have put forth significant effort and funds to complete and submit NPDES permit renewal applications with specific requests for consideration which are currently outstanding. It is requested that EPA provide the permittees

with formal responses to any outstanding NPDES permit application questions or requests submitted within the last 5 years.

Response 140

EPA notes that it is unclear precisely what "questions or requests" this comment refers to as the comment does not provide any specific reference. Therefore, EPA is unable to provide any specific feedback or response to anything outside the scope of the comments submitted herein.

Also see Response 84.

Comment 141

Part III.A, Footnote 1 specifies that regular monthly compliance sampling schedules shall "…be developed in which samples are taken at the same location, same time and same days of the week each month." These rigid requirements are unnecessary and particularly overburdensome on small wastewater treatment facilities. It is requested that these requirements be modified to enable licensed operations staff to manage their routine sampling programs as appropriate for their facility.

Response 141

See Responses 25 and 75 regarding the routine sampling program.

Comment 142

Part III.A, Footnote 15 indicates that "Any existing limits in a facility's current NPDES permit that are more stringent than the limitations presented in this table will be included in that facility's authorization to discharge under the General Permit." It is requested that permittees that receive "more stringent limits" within the General Permit, be it existing or new, have the associated site-specific Fact Sheet information and/or permittee-specific supplemental information typically included in individual permits. Permittees have the right to review site-specific supplemental information used for derivation of the "more stringent limits" identified in the permit. The current requirement references older, administratively continued or otherwise expired permits and does not provide permittees with complete NPDES permit packages for their review and comment.

Response 142

See Response 20 regarding the administrative record and Response 74 regarding the footnote referenced in the comment.

Comment 143

It is requested that EPA and NHDES regulate the use of PFAS compounds in consumer products. The elimination of PFAS from consumer goods and industrial products would be the most effective method of reducing the concentration of these compounds in wastewater and ultimately the environment.

We recognize the value of data collection, particularly related to the recently regulated series of the PFAS compounds listed under Part III.A. Without a robust data set of properly collected and

tabulated sample results, it is difficult to ascertain the degree to which wastewater treatment facilities may be discharging concentrations of these compounds to New Hampshire receiving waters.

However, these small facilities generally have fewer resources to accommodate additional cost burdens associated with new regulatory requirements such as these. It is therefore requested that every effort be made to identify sources of funding that could be made available to permittees that will seek coverage under this general permit and be required to monitor and report on the PFAS compounds.

Given the purpose of the monitoring requirements for the PFAS compounds, and in recognition of the cost burden this requirement represents, we request that there be consideration for a reduced measurement frequency for facilities with a design flow of less than 1 MGD. We propose a measurement frequency of 2/year for these facilities.

The introduction of new monitoring requirements for the PFAS compounds is understood to determine whether the compounds are present in facility discharges and not to collect data that will be used to establish future numerical concentration or mass-based permit limits in their effluent or sludge. It is important to the NHWPCA membership that this be made explicitly clear in the final permit and associated response to draft permit comments.

The requirement to monitor the PFAS compounds in sludge is also a concern. Many of the facilities that can seek coverage under this general permit are lagoon plants that do not regularly process sludge. Lagoon plants and others that do not regularly process or remove waste sludge from their facilities warrant a different set of requirements. A single background sample taken following general permit coverage, with subsequent samples only taken in advance of sludge removal, processing, and disposal would be more appropriate.

The reporting requirement for the PFAS compounds does not allow for a reduction in measurement frequency. It is requested that a permittee be provided a means of seeking and securing a reduced measurement frequency should the facility demonstrate PFAS compound concentrations below the New Hampshire AGQSs for four (4) consecutive monitoring events.

Response 143

See the General Response Regarding PFAS Monitoring in Appendix A.

EE. Comments from Alison Field-Juma, Executive Director, OARS

Comment 144

OARS, the watershed organization for the Sudbury, Assabet and Concord Rivers, submits these comments on the draft Small Wastewater Treatment Facility General Permit. Founded in 1986, OARS' mission is to protect, improve and preserve the Sudbury, Assabet and Concord Rivers, their tributaries and watersheds, for public recreation, water supply, and wildlife habitat. OARS has operated a quality-controlled in-stream water quality monitoring program for over 20 years. Our data are uploaded to WQX and used by DEP for the Integrated List of Waters, among other uses by municipal, state and federal entities. This permit will cover three "minor" wastewater

treatment facilities in the SuAsCo watershed: Middlesex School, MCI-Concord, and Wayland Town Center. OARS has commented on the individual permits for these facilities in the past, and two—MCI-Concord and Wayland Town Center—discharge directly into the Assabet and Sudbury Wild and Scenic Rivers directly.

We are glad to see that the current conditions in the individual permits for these facilities remain substantially unchanged or strengthened and are incorporated into the proposed General Permit, in particular regarding phosphorus limits and flow limits.

We support the proposed reduction in Total Phosphorus from the 0.2 mg/L Average Monthly concentration in the current (2011) NPDES permit for Middlesex School. In Ecoregion IV, the recommended instream Total Phosphorus criterion is 31.25 µg/L (Fact Sheet p. 24) in order to avoid eutrophication. Particularly due to the very small size of the receiving water, Spencer Brook, a discharge limit of 0.05 should be put in place instead of the proposed 0.16 mg/L TP in order to protect water quality. Note that: "Specifically, the Gold Book recommends in-stream phosphorus concentrations of no greater than . . . 0.1 mg/L for any stream not discharging directly to lakes or impoundments . . ." (p. 24). Hence 0.1 mg/L should be the maximum possible discharge concentration for this plant if a lower concentration is not technologically possible. As stated in the Fact Sheet (p. 23) regarding phosphorus: ". . . [a] protective approach is appropriate because, once begun, the cycle of eutrophication can be difficult to reverse due to the tendency of nutrients to be retained in the sediments."

Response 144

EPA notes that since the 2011 Middlesex School Permit already contained a limit for phosphorus, EPA used the mass balance equation presented in Appendix A to determine if a more stringent limit would be required to continue to meet WQS under current conditions. The limit was determined to be the more stringent of either (1) the existing limit or (2) the calculated effluent concentration (Cd) allowable to meet WQS based on current conditions.

Regarding the use of the ecoregion criterion, EPA considered several options (including ecoregion values and Gold Book thresholds) for translating the narrative nutrient criteria into a numeric target. See Fact Sheet pages 23-25. Regarding the ecoregion values specifically, EPA noted on page 24 of the Fact Sheet "While reference conditions reflect in-stream phosphorus concentrations that are sufficiently low to meet the requirements necessary to support designated uses, they may also represent levels of water quality beyond what is necessary to support such uses." EPA opted rather to apply the Gold Book recommended value, as quoted in the comment above and repeated here: "Specifically, the Gold Book recommends in-stream phosphorus concentrations of no greater than…0.1 mg/L for any stream not discharging directly to lakes or impoundments." Contrary to the comment, this does not imply that the effluent phosphorus limit should be no greater than 0.1 mg/L but that the in-stream phosphorus concentration should be no greater than 0.1 mg/L.

Accordingly, EPA applied 0.1 mg/L as an in-stream threshold that should not be exceeded even under critical flow conditions. Using a median ambient concentration of 0.058 mg/L (ambient phosphorus data reported by the Permittee), the upstream 7Q10

flow of 0.11 cfs, and the design flow of the Facility of 0.052 MGD, the mass balance equation presented in Appendix A of the Fact Sheet was used to determine that an effluent value of 0.16 mg/L would ensure protection of the target concentration of 0.1 mg/L under critical conditions. Based on EPA's evaluation of the site-specific data for the Middlesex School, a more stringent limit of 0.16 mg/L is necessary to protect WQS and a more stringent limit of 0.05 mg/L (as proposed in the comment) is not warranted.

Comment 145

We note that the dilution factor for the Middlesex school is extremely low, at 2.4, due to discharging into a small stream (Spencer Brook). Any upsets to the school's plant operation or changes in flows could have a significant influence on water quality, particularly if this occurs during the summertime (e.g., during summer camp). While the other two facilities have greater dilution, we are well aware that low flows in the Assabet and Sudbury Rivers are becoming more severe (note that the draft Westborough NPDES permit has a new dilution factor of zero) due to increasing incidence of drought, and rising air temperatures and evaporation rates. All three rivers in the SuAsCo system experience very sluggish flow during the summer which has serious negative impacts on aquatic life and recreation, threatening the rivers' designated uses. Additionally, many segments remain impaired for eutrophication and low DO, both of which could be exacerbated by the pollutants from these facilities.

Due to the relative infrequency of sampling and averaging of concentrations, a peak discharge of pollutants could occur that coincides with low flow conditions, when the aquatic life is already stressed and it might not be detected. The draft permit requires that "All samples shall be collected in a manner to yield representative data. A routine sampling program shall be developed in which samples are taken at the same location, same time and same days of the week each month," this merely prevents a discharger from purposefully collecting data in a way that avoids lowest flow conditions. While we support a standardized routine sampling program, we ask that permittees also specifically design their sampling to include low flow conditions when they occur to prevent inadvertent problems with the data's utility during very low flows. Regarding the 5-year renewal cycle for the General Permit: will new calculations of discharge limits and 7Q10 be carried out each time and a new Fact Sheet developed for each covered facility? We are concerned that with increasingly severe droughts the 7Q10 of the receiving waters may change (as cited above) and thus new discharge concentrations will be warranted. It is essential that the General Permit take these changes in flow into consideration just as it takes into consideration new pollutants of concern such as PFAS.

Response 145

EPA's intention in collecting monitoring data is to collect representative data to properly characterize the discharge. These data are then used for a variety of purposes based on a presumption that they are representative of normal operating conditions. To ensure protection of WQS under critical conditions, EPA incorporates reasonable worst-case assumptions, such as 7Q10 flow, design flow, etc. into its analyses of the discharger's impact on the receiving water. Therefore, EPA does not agree that it is necessary to specifically require monitoring during worst-case conditions because EPA can use representative data to model pollutant concentrations during low-flow conditions. Given that EPA's analysis is based on reasonable worst-case conditions, it is highly unlikely

that "a peak discharge of pollutants could occur that coincides with low flow conditions" beyond the level of EPA's analysis in a manner that would both comply with the permit and violate WQS, as suggested by the comment.

Regarding future renewals of the General Permit, EPA confirms that any future reissuance of the Small WWTF General Permit will include a review of the 7Q10 flows for each facility and an evaluation of reasonable potential based on current conditions will be calculated as needed based on each facilities dilution factor. Each facility covered under the General Permit will not have an individual Fact Sheet but instead will be included in the General Permit Fact Sheet.

Also see Response 25 regarding the routine sampling program.

Comment 146

We support the new requirements for PFAS monitoring. We are concerned about discharges of PFAS into surface waters and their impact on aquatic life, as well as on the public water supply of Billerica, which depends solely on the Concord River downstream of all three facilities. As soon as surface water standards for PFAS are adopted, they should be applied to these discharges, and the rivers.

Response 146

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 147

Should any permit modifications be requested by the three covered facilities in our watershed we will want to review and comment on the draft modification. We will be particularly interested in any increase in discharge volume since this affects the dilution calculations. We also request that the individual permit conditions be uploaded with the General Permit to the Region 1 NPDES website so that we may access the details for each plant covered by the general permit going forward.

Response 147

Regarding future modifications, EPA confirms that any future permit modification (such as any increase in discharge volume) or any future reissuance of the Small WWTF General Permit will include another public notice opportunity to review and comment on the draft General Permit at that time.

Regarding the request to make all permit conditions publicly available, see Response 135.

FF. Comments from Anne Slugg, Chair, Sudbury, Assabet, and Concord Wild and Scenic River Stewardship Council

Comment 148

In 1999, Congress designated twenty-nine miles of the Sudbury, Assabet, and Concord Rivers as a component of the National Wild and Scenic River System. This designation recognizes the rivers' free-flow and nationally significant outstanding scenic, ecological, recreational, historical

and literary values. Comprised of representatives from local, state and federal governments, and local non-profits, the SuAsCo River Stewardship Council coordinates the protection and enhancement of the Wild and Scenic River segments and their associated outstandingly remarkable values.

This general permit will include three small wastewater treatment facilities in the SuAsCo watershed: Middlesex School, MCI-Concord, and Wayland WWMDC. The RSC has been very involved in the individual permit for the Wayland WWMDC plant which discharges directly into the Wild & Scenic Sudbury River, as well as the MCI-Concord facility which discharges directly into the Wild & Scenic Sudbury River.

We are glad to see that the current conditions in the individual permits for these facilities remain substantially unchanged and are incorporated into the proposed General Permit, in particular regarding phosphorus limits and flow limits. We note that the dilution factor for the Middlesex School is extremely low due to discharging into a small stream (Spencer Brook), of 2.4. Any upsets to their plant's operation or changes in flows could have a significant influence on water quality, particularly if this occurs during the summertime (e.g., during summer camp), that could potentially reach the Assabet River. While the other two facilities have greater dilution, the Assabet and Sudbury Rivers are experiencing more extreme low flow conditions due to increasing incidence of drought and rising air temperatures. All three rivers in the SuAsCo system experience very sluggish flow during the summer which has serious negative impacts on aquatic life and recreation, threatening the Outstandingly Remarkable Values—particularly Recreation, Ecology and Scenery—for which these rivers were designated "Wild & Scenic."

Due to the relative infrequency of sampling and averaging of concentrations, a peak discharge of pollutants could occur that coincides with low flow conditions, when the aquatic life is already stressed and it might not be detected. The draft permit requires that "All samples shall be collected in a manner to yield representative data. A routine sampling program shall be developed in which samples are taken at the same location, same time and same days of the week each month." This merely prevents a discharger from purposefully collecting data in a way that avoids lowest flow conditions. We ask that permittees specifically design their sampling to include low flow conditions when they occur to prevent inadvertent problems with the data's utility.

Response 148

See Responses 25 and 145.

Comment 149.

We also support the new requirements for PFAS monitoring. We are concerned about discharges of PFAS into surface waters and their impact on aquatic life, as well as on the downstream public water supply of Billerica, which depends solely on the Concord River.

Response 149

See the General Response Regarding PFAS Monitoring in Appendix A.

Comment 150

Should any permit modifications be requested by the three covered facilities in our watershed we will want to review and comment on the draft modification. We will be particularly interested in any increase in discharge volume since this affects the dilution calculations. We confirm that the design flow of 0.052 MGD is the flow limit for the Wayland facility. In addition, when the General Permit expires after 5 years, we would like to be able to comment on the subsequent permit before it is finalized and reissued.

Response 150

See Response 147.

Appendix A – General Response Regarding PFAS Monitoring

EPA received several comments regarding the PFAS monitoring requirements proposed in the Draft General Permit, as presented throughout the Response to Comments document. For clarity, EPA has decided to develop this appendix as a complete response to all of the related comments. This appendix includes a brief summary of the rationale for these monitoring requirements, a response to each of the related issues or concerns raised in the comments, and a summary of the changes in the Final General Permit based on the comments received.

EPA has broad authority under the CWA and NPDES regulations to prescribe the collection of data and reporting requirements in NPDES Permits. See, e.g., CWA § 308. As discussed in the Fact Sheet at 31, the purpose of this monitoring and reporting requirement is "to better understand potential discharges of PFAS from this facility and to inform future permitting decisions, including the potential development of water quality-based effluent limits on a facility-specific basis." These permitting decisions may include whether there is reasonable potential to cause or contribute to a violation of the State water quality standards in the next permit reissuance, and if there is, to inform the development of numeric effluent limits or pollutant minimization practices, or some combination.

EPA received a number of questions or concerns related to this monitoring, as described below.

First, several commenters were concerned about the cost of PFAS monitoring given that the WWTFs authorized by this General Permit are all "small" and have limited budgets. EPA recognized that this new monitoring requirement includes a moderate cost. As with all NPDES permits, the cost of monitoring is the responsibility of the Permittee; 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. 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. Overall EPA considers these changes to be modest and notes that if these facilities were to receive a reissued individual permit, that individual permit would include these same modest frequency changes. While one comment characterized PFAS monitoring as a "low priority" when compared to other maintenance and operational items, EPA disagrees and notes that the EPA must protect all WQS and gather data deemed necessary to ensure we can continue to protect current WQS related to toxic pollutants generally and anticipated WQS specific to PFAS in the future. As cited in Section 4.11 of the Fact Sheet, both Massachusetts WQS and New Hampshire WQS include narrative requirements to prevent the discharge of toxic pollutants in toxic amounts. See MA WQS at 314 CMR 4.05(5)(e) and NH WQS at (N.H. RSA 485-A:8, VI and the N.H. Code of Administrative Rules, PART Env-Wq 1730.21(a)(1)).

Having said that, EPA agrees that it is appropriate to reconsider the minimum level of PFAS monitoring frequency necessary to yield sufficient data, given the relatively low environmental impact of smaller WWTFs. Accordingly, EPA and the States agree to reduce the monitoring frequency from once per quarter to twice per year (*i.e.*, in the third and fourth calendar quarters).

This reduction in frequency applies to influent, effluent and sludge monitoring. The third and fourth calendar quarters were chosen as they correspond to times of lower ambient flow when the WWTFs typically have a larger environmental impact compared to times with higher levels of stormwater, snowmelt, etc. Additionally, these quarters were also chosen based on comments requesting that EPA not require testing of lagoons in potentially dangerous conditions during the cold winter months.

Second, some commenters expressed that certain aspects of the sludge PFAS monitoring were unnecessary. Some suggested that only monitoring sludge at "larger" POTWs could provide enough data. Others suggested that sludge in lagoons has less variability and does not require frequent monitoring. Still others questioned how to sample the sludge in a lagoon in a representative manner. EPA disagrees that sampling sludge at these "small" WWTFs is unnecessary and confirms that each WWTF has a unique composition and treatment which must be analyzed specifically in order to properly characterize the fate of PFAS. However, EPA agrees that the variability of the sludge at lagoon facilities is much lower than for other types of treatment. Therefore, EPA and the States agree that sludge sampling for lagoon facilities is only necessary once during the permit term. The Final General Permit has been updated to indicate that lagoon facilities are only required to monitor sludge during the first full third calendar quarter that occurs at least 6 months after EPA notifies the Permittee that a multi-lab validated method is available. Further, the Final General Permit has been revised to include more specific instructions, consistent with State guidance, for how these lagoon facilities must conduct this single sampling event in a representative manner.

Third, some commenters expressed that the industrial users identified in the Draft General Permit should not be required to monitor for PFAS once per year. Rather, EPA should allow permittees to review WWTF data and if necessary incorporate requirements on industrial users (with known or suspected sources of PFAS) through local limits, pretreatment programs, industrial discharge permits, and/or sewer use ordinances. EPA agrees that annual monitoring should only be required for certain industrial users with known or suspected sources of PFAS. Accordingly, EPA included monitoring for certain types of industrial users listed in Part IV.C.3 of the Draft General Permit. EPA recognizes that permittees have other regulatory avenues (as listed in the comments 26 and 40) to require such monitoring and the annual monitoring requirement may be implemented through any of those regulatory avenues. Thus, the permittee may transfer all or part of the monitoring cost associated with this monitoring to the industrial user, as it deems appropriate. EPA does not agree that this monitoring should only be done at the volition of the permittee and maintains these requirements in the Final General Permit.

Fourth, some commenters expressed that influent monitoring is not necessary to "better understand potential discharges" of PFAS or that influent is not important if a facility is not designed to treat PFAS. EPA finds that effluent and sludge monitoring are necessary to characterize discharges 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 high levels of PFAS in a lagoon's sludge and effluent are based on PFAS loadings from many years ago and the current influent does not have significant PFAS. Conversely, 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. As one commenter indicated, it is possible that certain treatment processes break down PFAS into more (or less) persistent chemicals in the environment. For these reasons, EPA confirms that influent monitoring is necessary in combination with effluent and sludge monitoring and it will remain in the Final General Permit.

Fifth, some commenters suggested that PFAS monitoring required outside the scope of the NPDES permit was sufficient. EPA agrees that monitoring conducted for any other reason may also be used to fulfill the monitoring requirement under the Final General Permit so long as the timing and other details (sampling location, parameters, etc.) conform to the permit requirements.

Sixth, some commenters suggested that EPA incorporate an "off ramp" to reduce or remove PFAS sampling if initial results are below a certain level. Given the reduction in frequency described above, 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, EPA considers this level of sampling to be the minimum to fully characterize the discharge. 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.

Seventh, some commenters suggested that EPA should wait to require PFAS monitoring either until PFAS is recognized as a toxic pollutant or until an analytical method is approved or until an analytical method is included in 40 CFR Part 136 or until local labs become accredited to reduce processing time. Relatedly, some commenters noted that the permits for Hampton and Seabrook were issued in New Hampshire after the NH Maximum Contaminant Levels (MCLs) and Ambient Groundwater Quality Standards (AGQSs) became effective on July 23, 2020, implying that this was done based on a determination by EPA to wait for one or more of these issues to be resolved. EPA disagrees that any of these reasons justify waiting to collect PFAS data. As described in the Fact Sheet at 29-30, the States have established MCLs and/or AGQSs for PFAS. EPA and the States intend to use the PFAS monitoring data to continue to protect downstream drinking water, recreational and aquatic life uses.

Regarding method approval and availability, EPA notes that these monitoring requirements indeed to 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. However, EPA notes that this should not result in any challenges to timely reporting given that the monitoring can take place early in a given quarter and the results must be submitted by the 15th of the month following the end of the quarter. In other words, sampling during the third calendar quarter can be done as early as July and results are not due until October 15th. Likewise, sampling during the fourth calendar quarter can be done as early as October and results are not due until January 15th. 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.

Regarding the reference to the Hampton and Seabrook permits, EPA notes that those permits were drafted and went to public notice on June 23, 2020. As this was before the NH MCLs and AGQs became effective on July 23, 2020, those Draft Permits did not include any PFAS monitoring requirements. EPA did not receive any comments related to PFAS during the public comment period for either permit, so EPA did not include PFAS requirements in the Hampton and Seabrook final permits even though they were issued after July 23, 2020. Therefore, contrary to the comment, the exclusion of PFAS requirements in these two permits was not based on a determination by EPA to wait before beginning to incorporate PFAS monitoring requirements.

Eighth, some commenters suggested that PFAS monitoring is not necessary for marine dischargers as there is little risk of drinking water contamination. EPA agrees that the eligible dischargers to marine waters have little risk of drinking water contamination but notes that this is not the only environmental concern. As stated in the Fact Sheet at 29, "EPA is collecting information to evaluate the potential impacts that discharges of PFAS from wastewater treatment plants may have on **downstream drinking water, recreational and aquatic life uses**." (emphasis added) As noted, EPA is also concerned about potential impacts on recreational and aquatic life uses. EPA has determined that the eligible dischargers to marine waters may impact downstream recreational uses (*e.g.*, swimming and fishing) and/or aquatic life uses (*e.g.*, potential bioaccumulation of PFAS in fish tissue). Therefore, PFAS monitoring for marine dischargers with a design flow greater than 0.1 MGD will remain in the Final General Permit. However, EPA notes that very small dischargers with design flow below 0.1 MGD pose a very low risk for this type of exposure and it is not necessary for them to sample for PFAS. In this General Permit, this only includes the USCG Boston Light WWTF with a design flow of 0.0005 MGD which discharges to the Boston Harbor and the Shorecliff – Deaconess Retirement Home WWTF with a design flow of 0.004 MGD which discharges to Massachusetts Bay (Atlantic Ocean). Monitoring of PFAS in not required for these two WWTFs in the Final General Permit.

Ninth, some commenters suggested that EPA focus on reducing PFAS "at the source" rather than requiring WWTFs to bear the cost. EPA agrees that the concern regarding PFAS is a much broader issue than the scope of this NPDES permit and EPA is taking steps to address it, as outlined in EPA's 2019 PFAS Action Plan and the 2020 PFAS Action Plan Update[13]. As suggested in the comment, much work still needs to be done beyond the scope of this permit related to studying the impact to the environment, the impact to human health, and addressing source control of PFAS compounds. EPA agrees that reducing the source of PFAS (much of which has already been done) is a necessary aspect of addressing the overall environmental impact, but not the only aspect. Given that PFAS has been in use since the 1940s and has been used in a wide array of consumer and industrial products, mere source reduction will not fully resolve the persistent impact of PFAS chemicals already in the environment. Therefore, in addition to source reduction EPA must also assess the potential environmental impact where PFAS may accumulate, such as at WWTFs.

In conclusion, EPA appreciates the significant public interest regarding PFAS and the comments submitted on the Draft General Permit regarding EPA's proposed approach to PFAS monitoring. As described above, in Part II.A and Part II.A of the Final General Permit the influent, effluent

[13] Available at https://www.epa.gov/pfas/epas-pfas-action-plan.

and sludge monitoring have been reduced to twice per year (in the 3rd and 4th calendar quarters) and the sludge monitoring for lagoon facilities has been further reduced to once per permit term with details regarding how to sample the lagoon sludge in a representative manner. Finally, PFAS monitoring is not required for marine dischargers with a design flow below 0.1 MGD. These changes are reflected in the Final General Permit.

The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

June 4, 2021

Lynn Jennings, Chief
Water Permits Branch
Water Division
EPA New England
5 Post Office Square, Suite 100 (06-1)
Boston, MA 02109-3912

Subject: Small Wastewater Treatment Facility General Permit
Certification of NPDES Permit No. NHG580000

Dear Ms. Jennings:

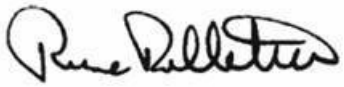
By letter dated April 8, 2021, the U.S. Environmental Protection Agency (EPA) requested state certification, in accordance with Section 401 of the Clean Water Act, of the draft Small Wastewater Treatment Facility General Permit (WWTF GP).

EPA gave public notice of the availability of the draft permit, including the fact sheet, on April 8, 2021. The public notice provided a public comment period until May 25, 2021, and stated that the draft permit and fact sheet could be obtained at the EPA New England website at https://www.epa.gov/npdes-permits/region-1-draft-small-wastewater-treatment-facilities-general-permit.

After review of the draft permit, state certification is hereby granted pursuant to Section 401 of the Clean Water Act with the condition that EPA complete a reasonable potential analysis and develop permit limits for each New Hampshire facility that is eligible for coverage under the WWTF GP, regardless of dilution factor.

The draft permit, with the condition noted, will ensure that the requirements in Title L RSA 485-A and New Hampshire Code of Administrative Rules Env-Wq 1700 (Surface Water Quality Standards) are met. Per EPA's April 8, 2021 correspondence, EPA has given NHDES only 60 days to certify this permit. As such, NHDES is required to provide this certification without the opportunity to view the responses to public comments or final permit. Therefore, this certification is for the above-referenced draft permit provided during the public comment period only. This certification does not pertain to any modified draft or final permit that may be created later or to any modifications to the draft permit created in response to public comments or otherwise, including, but not limited to, any modifications to the draft permit limits or monitoring requirements.

Sincerely,



Rene Pelletier, P.G., Assistant Director
Water Division

cc: Ellen Weitzler, EPA-Region 1
Tracy Wood, P.E., Administrator, NHDES WD-WWEB
Ted Diers, Administrator, NHDES WD-WMB