RESPONSE TO COMMENTS
NPDES PERMIT NO. MAG590000
MEDIUM WASTEWATER TREATMENT FACILITY GENERAL PERMIT

The U.S. Environmental Protection Agency's New England Region (EPA) is issuing a Final National Pollutant Discharge Elimination System (NPDES) General Permit for Medium Wastewater Treatment Facilities (WWTFs) located in Massachusetts. 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 # MAG590000 ("Draft General Permit"). The Response to Comments explains and supports EPA's determinations that form the basis of the Final General Permit. From February 8, 2022, through April 26, 2022, EPA solicited public comments on the Draft General Permit.

EPA received comments from:

- Town of Wareham, dated March 9, 2022
- Town of Marshfield, dated March 30, 2022
- MFN Regional Wastewater District, dated March 30, 2022
- Town of Bridgewater, dated April 4, 2022
- City of Greenfield, dated April 8, 2022
- Town of Sturbridge, dated April 18, 2022
- Town of Uxbridge, dated April 19, 2022
- Town of Maynard, dated April 20, 2022
- Town of Adams, dated April 20, 2022
- Spencer Sewer Commission, dated April 21, 2022
- Town of Milford, dated April 21, 2022
- City of Gardner, dated April 22, 2022
- MWRA, dated April 25, 2022
- Hull Sewer Department, dated April 25, 2022
- City of Easthampton, dated April 25, 2022
- Town of Scituate, dated April 19, 2022
- Town of Sturbridge, dated April 25, 2022
- Town of Northbridge, dated April 25, 2022
- Town of Belchertown, dated April 26, 2022
- Town of Pepperell, dated April 26, 2022

- Town of Ware, dated April 26, 2022, with an additional comment dated April 27, 2022[1]
- Town of Fairhaven, dated April 26, 2022
- Town of Grafton Board of Sewer Commissioners, dated April 26, 2022
- Town of Concord, dated April 26, 2022
- Town of Scituate, dated April 26, 2022
- Town of Southampton, dated February 10, 2022
- Wastewater Advisory Committee to the MWRA, dated March 29, 2022
- MWRA Advisory Board, dated April 25, 2022
- Upper Blackstone Clean Water, dated April 26, 2022
- Massachusetts Water Environment Association, dated April 26, 2022
- National Association of Clean Water Agencies, dated April 26, 2022
- Massachusetts Coalition for Water Resources Stewardship, dated April 26, 2022
- Massachusetts Rivers Alliance, dated April 26, 2022
- OARS, dated April 21, 2022
- Taunton River Watershed Alliance, dated April 22, 2022
- Connecticut River Conservancy, dated April 25, 2022
- Charles River Watershed Association, dated April 26, 2022
- North and South Rivers Watersheds Association, dated April 26, 2022
- Buzzards Bay Coalition, dated April 26, 2022
- Hoosic River Watershed Association, dated March 29, 2022
- IDEXX Laboratories, Inc., dated April 14, 2022
- Curt McCormick, dated April 11, 2022

Although EPA's knowledge of the facilities 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.

[1]EPA notes this comment was untimely under 40 C.F.R. § 124.13. *See also id.* at § 124.19(a)(2). EPA is nevertheless exercising its discretion to provide a response to this comment for the benefit of the public given that it was submitted only a few hours late and was a very minor omission to their prior submittal.

A copy of the Final General Permit may be also obtained by writing or calling Michele Duspiva, USEPA, 5 Post Office Square, Suite 100 (Mail Code: 06-4), Boston, MA 02109-3912; Telephone: (617) 918-1682; Email duspiva.michele@epa.gov.

Table of Contents

I. Summary of Changes to the Final General Permit

1. Table 1 of Part II.A of the Final General Permit has been updated to indicate 130 cfu/100 ml for discharges of enterococci into Class SA or SB waters. See Response 6.

2. A line has been added to footnote 7 of Table 1 of Part II.A of the Final General Permit indicating that continuous pH monitoring fulfills the pH monitoring requirements. See Response 11.

3. Part III.F.3 of the Draft General Permit (aluminum compliance schedule) has been removed from the Final General Permit. See Response 26.

4. The list of six PFAS analytes listed in Table 1 of Part II.A of the Draft General Permit (repeated for effluent, influent and sludge monitoring) has been removed the and replaced in the Final General Permit with one line (repeated for effluent, influent and sludge monitoring) that says "PFAS Analytes" which references the same footnote 12 that refers to the complete list of 40 analytes in Attachment H of the Final General Permit. Parts III.C.3 and III.D.7 have also been clarified to reference Attachment H. See Response 48.

5. A typographical error in Part II.C.1 of the Draft General Permit which refers twice to "Part II.D.1.e" and should refer to "Part VII.D.1.e" is corrected in the Final General Permit. See Response 54.

6. The pretreatment annual report due date for MWRA Clinton in Part III.D.3 of the Final General Permit has been changed to October 31st. See Response 58.

7. The term "notifications" is replaced with "notices" in Part V.6 of the Final General Permit, consistent with Part VII.B.4.c. See Response 59.

8. The new or more stringent ammonia limits in Attachment E have changed for Northbridge, Belchertown, MFN Regional and Bridgewater, as described in Response 61.

9. The monthly average aluminum limits for Northbridge, Uxbridge, Milford, Adams, Ware, Gardner, and Ayer have been revised, as described in Response 75.

10. Outfall 002 for Easthampton has been added to footnote 7 of Part II.A Table 1 of the Final General Permit, allowing for a pH study. See Response 79.

11. The last sentence of Part VI.A of the Final General Permit has been changed to say "Completed and signed NOTs shall be submitted to EPA at R1NPDESReporting@epa.gov and to MassDEP at MassDEP.NPDES@mass.gov." See Response 82.

12. Scituate has been removed from Section II.E.1 of the Final General Permit. See Response 92.

13. For Northbridge, the 7Q10 flow, dilution factor, and limits for ammonia, aluminum and cadmium have been updated in Attachment E. See Response 101.

14. Part II.B.3 of the Final General Permit has been changed to: "The discharge shall be free from pollutants in concentrations or combinations that adversely affect the physical or chemical nature of the bottom, interfere with the propagation of fish or shellfish, or adversely affect populations of non-mobile or sessile benthic organisms." See Response 108.

15. For Belchertown, the 7Q10 flow, dilution factor, and limits for ammonia and aluminum have been updated in Attachment E. See Response 122.

16. For Pepperell, the copper limits in Attachment E have been revised to 73.6 µg/L (maximum daily) and 40.6 µg/L (monthly average) and Pepperell has been removed from the list of compliance schedules in Part III.F.1. See Response 127.

17. For Grafton, the 7Q10 flow, dilution factor, and limits for TRC and C-NOEC have been updated in Attachment E. See Response 163.

18. The term “Contaminated Sites” has been changed to “Known or Suspected PFAS Contaminated Sites” in Sections III.C.3 and III.D.7 of the Final General Permit. See Response 169.

19. Southampton has been removed from Attachment E as an eligible Co-permittee. See Response 179.

20. Total phosphorus monitoring frequency for April through October has been changed from 2/month to 1/week. See Response 226.

21. EPA has created a new attachment (*i.e.*, “Attachment I – Facility-Specific Permit Terms”) which contains all of the facility-specific permit terms contained in the Draft Authorizations. See Response 227.

    EPA notes that changes based on this Response to Comments are either changes to the Draft General Permit itself (including Attachment E) or are changes that only apply to a single Draft Authorization (mostly based on typographical errors) without any change to the General Permit itself. The first type of changes are summarized in this list of changes. The second type of changes are described in Responses 22 (Sturbridge), 64 (MWRA Clinton), 149 (Fairhaven), 226 (Hudson), 249 (Athol), 259 (Spencer), and 265 (Warren). Both types of changes are included in Attachment I and will be reflected in the final authorizations for each facility.

22. Erving Center WWTP 2 has been removed from Attachment E in the Final General Permit and is not eligible for coverage. The reference to Erving Center WWTP 2 in Part II.A footnote 5 has also been removed. See Response 241.

23. The Final General Permit includes a new provision at Part III.H (Submittal of Facility-Specific Information) that requires the collection and submission of three full pollutant scans (consistent with the requirements of NPDES Application Form 2A, Tables B and C) conducted once per quarter in the final 3 full calendar quarters of the 5-year permit term as well as additional facility-specific information. See Response 272.

24. The Final General Permit has been updated to require 3/week monitoring for fecal coliform for all dischargers to Class SA and SB waters. See Response 279.

25. The exclusion in Part I.C regarding Massachusetts Ocean Sanctuaries has been changed to “Discharges inconsistent with the Massachusetts Ocean Sanctuaries Act, in accordance with 301 CMR 27.00;” and the exclusion in Part I.C regarding the territorial sea has been removed. See Response 286.

26. Industrial Pretreatment Program Development requirements have been added as Attachment J to the Final General Permit and will apply only to Northbridge as noted in Attachment E of the Final General Permit. See Response 295.

II. General Response to Comments on Benefits and Appropriateness of General Permit Approach

EPA received several comments regarding the appropriateness and benefits of the general permit approach. Accordingly, and after consideration of those comments, EPA provides the following overview of the general permit approach, the significant environmental benefits and administrative efficiencies gained by employing this approach for medium WWTFs, and the consistency of this approach with EPA's general permit regulations.

A. Background on General Permit Program

A "general permit" is defined at 40 C.F.R. § 122.2 to mean "an NPDES 'permit' issued under § 122.28 authorizing a category of discharges under the CWA within a geographic area." The general permit program arose out of the broad grant of authority in section 402(a) of the Clean Water Act (CWA) and the decision of *NRDC v. Train*, 396 F.Supp. 1393, 1402 (D.D.C. 1975), aff'd, Nat. Res. Def. Council, Inc. v. Costle, 568 F.2d 1369, 1381 (D.C. Cir. 1977) ("The [Clean Water] Act allows such [area-wide or general permits]. Area-wide regulation is one well-established means of coping with administrative exigency."). Under the general permit program, the permitting authority may issue a permit to cover a class of similar dischargers or treatment works treating domestic sewage in a defined geographic area with the same effluent limitations.

In 1996, EPA proposed to amend its general permit regulations to "improve administration and operation of the general permit program and *encourage more widespread use of general permits*." 61 Fed. Reg. 65268, 65272 (Dec. 11, 1996) (emphasis added). EPA's decision to amend its regulations was intended to correct a misunderstanding that general permits must be limited to stormwater, or only one category of non-storm water dischargers, and could not include water quality-based effluent limits (WQBELs). In order to encourage expanded use of general permits, EPA clarified that "a general permit for non-storm water dischargers may cover more than one category or subcategory of sources or treatment works treating domestic sewage." *Id*. EPA explained this change would "enable greater permit drafting flexibility and would allow the Director to write a general permit covering (as separate categories) permittees whose discharges or sludge use or disposal practices differ substantially, for example, regarding flow or pollutant load, as well as for those permittees with similar discharges or sludge use or disposal practices (a single category)." *Id*.

EPA also encouraged expanded use of general permits by adding a new paragraph, (a)(3), to 40 C.F.R. § 122.28 "in part to clarify that general permit categories can be used to impose water quality-based limitations as well as technology-based limitations." *Id.* EPA further explained:

> Because the proposal would allow issuance of a single general permit to cover multiple categories of facilities, it would facilitate the use of general permits in areas with differing water quality requirements or standards. It may allow the permitting authority to issue general permits on a watershed or geographic basis to facilities with the same water quality requirements. The proposal would allow a permit drafted to cover a single category of dischargers or treatment works treating domestic sewage to cover different subcategories subject to different effluent limitations, standards, or conditions. This should reduce the burden on the permitting agency by decreasing the number of general permits issued. The proposal intends to provide flexibility to deal with the variations

> between the different dischargers or treatment works treating domestic sewage (or water quality based stream segments) covered under a single general permit."

Id.

The Agency has elsewhere described the benefits and utility of general permits as:

> "Where a large number of similar facilities require permits, a general permit allows the permitting authority to allocate resources in a more efficient manner and to provide more timely permit coverage than issuing an individual permit to each facility. In addition, using a general permit ensures consistent permit conditions for comparable facilities."

NPDES Permit Writer's Manual at 3-2. In short, the Agency has recognized that general permits encourage widespread permit coverage, yield environmental benefits through widespread and up-to-date permit coverage, and enhance permitting efficiency and thus has structured its regulations in order to facilitate expansion of their use, subject to the limitations contained at 40 C.F.R. §122.28.

For purposes of this response, the operative limitations contained at 40 C.F.R. § 122.28 are as follows:

> "(2) *Sources.* The general permit may be written to regulate one or more categories or subcategories of discharges or sludge use or disposal practices or facilities, within the area described in paragraph (a)(1) of this section, where the sources within a covered subcategory of discharges are either:
>
> > (i) Storm water point sources; or (ii) One or more categories or subcategories of point sources other than storm water point sources, or one or more categories or subcategories of "treatment works treating domestic sewage", if the sources or "treatment works treating domestic sewage" within each category or subcategory all:
> >
> > > (A) Involve the same or substantially similar types of operations;
> > > (B) Discharge the same types of wastes or engage in the same types of sludge use or disposal practices;
> > > (C) Require the same effluent limitations, operating conditions, or standards for sewage sludge use or disposal;
> > > (D) Require the same or similar monitoring; and (E) In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.
>
> (3) *Water quality-based limits.* Where sources within a specific category or subcategory of dischargers are subject to water quality-based limits imposed pursuant to § 122.44, the sources in that specific category or subcategory shall be subject to the same water quality-based effluent limitations."

Section II.C of this response details this General Permit's consistency with § 122.28.

B. Significant Environmental Benefit and Administrative Efficiency to General Permit Approach

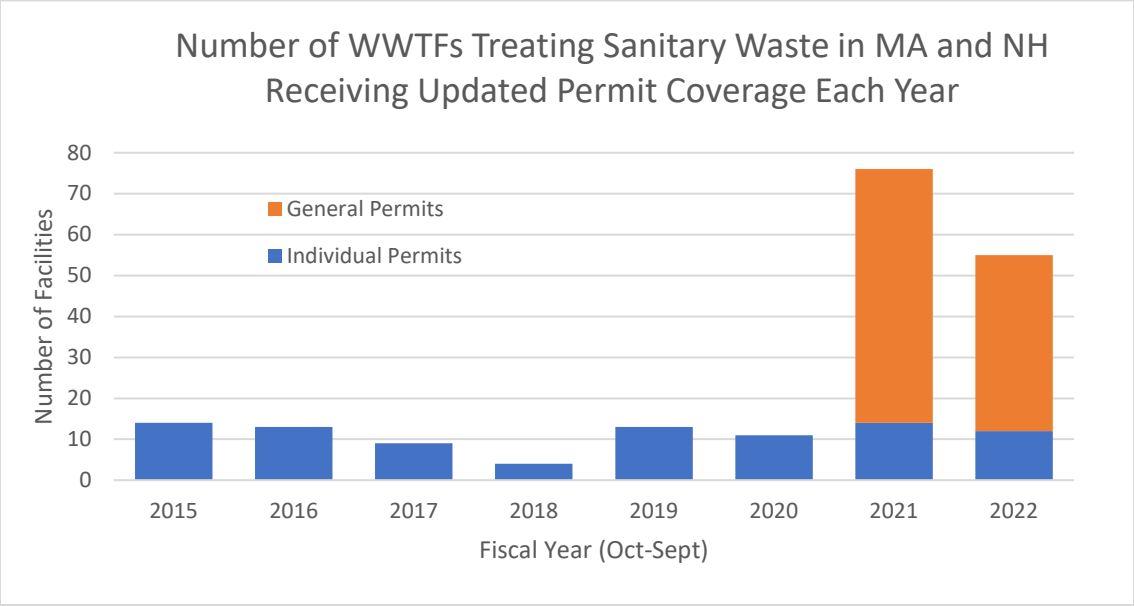
Consistent with the benefits anticipated in EPA's promulgation of the general permit regulations, the Region has identified significant environmental benefits and administrative efficiencies that will result by employing a general permit for medium WWTPs. These benefits include: (1) more timely, comprehensive permit coverage, that can be consistently updated at regular 5-year intervals; (2) imposition of any necessary provisions that may need to be imposed on a site-specific basis, including those required to ensure compliance with state water quality standards and to maintain consistency with the assumptions and requirements of any available TMDL wasteload allocation; and (3) administrative efficiencies in permitting dischargers by category, which will allow scarce permitting resources to be reallocated to other dischargers, including larger sources within these same watersheds.

Under the general permitting scheme EPA expects to have a much smaller permit backlog resulting in more frequent permit reissuances for this general permit as well as all other NPDES permits in MA. While it is hard to determine the precise schedule of future reissuances, and notwithstanding limited resources, EPA prioritizes reissuance of general permits given their broad scope compared to individual permits. Historically, the 44 facilities identified for coverage were issued individual permits. Currently, 27 individual permits are expired and some have been expired for nearly 10 years. The most recent issuances of these permits span from 2008 to 2021; in other words, in the ordinary course, it took approximately 14 years to cycle through these reissuances under the individual permitting scheme.

Given EPA's currently available resources, EPA anticipates that reissuance of these individual permits could likely take at least 14 years to reissue again. Based on that timeline, many of these facilities will be subject to the current issuance of this General Permit and as many as two subsequent reissuances of this General Permit, inclusive of new, necessary environmental protections, in roughly the same timeframe it would take for a single reissuance of their individual permit under the individual permitting approach.

The significant improvement in permitting efficiency through the general permitting approach can also be understood by comparing the number of facilities that received updated permit coverage each fiscal year (*i.e.*, October 1 through September 30). In 2021, EPA began a shift from individual permit coverage to general permit coverage for municipal WWTFs. The first step in this shift was to expand coverage under the Small WWTF General Permit (MA-NHG580000) for small WWTFs (< 1 MGD) in MA and NH. Previously, that General Permit covered approximately 22 WWTFs in MA and NH combined. In 2021, EPA reissued this General Permit with greatly expanded coverage for approximately 62 WWTFs, including approximately 40 WWTFs that were previously covered by an individual permit. The second step in this shift is the development of this Medium WWTF General Permit, designed to cover 44 medium WWTFs (1 to 5 MGD) in MA that are currently all covered by an individual permit. Comparing the overall number of facilities in MA and NH (*i.e.*, the two states where EPA Region 1 issues permits directly) that obtained updated permit coverage in recent years highlights this drastic improvement in permitting efficiency. The table below presents this

comparison, including the issuance of the Small WWTF General Permit in 2021 and the Medium WWTF General Permit in 2022.[2]



Improved permitting efficiency will result in more frequent permit reissuances for each facility, expediting many substantive environmental benefits. The substantive environmental benefits of more frequent permit reissuances are made abundantly clear by this General Permit, which establishes the following improvements in water quality protection and accountability:

- a variety of new or more stringent limits for half of the WWTFs (Attachment E),
- nitrogen limits for all facilities in the Long Island Sound watershed (Attachment E),
- public notifications related to unauthorized discharges such as SSOs (Part II.C),
- notification of downstream drinking water systems of any emergency condition, plant upset, bypass or other system failure (Part II.D),
- new PFAS monitoring for the facility as well as specific industrial users (Parts II.A, III.C and III.D),
- improved O&M and mapping of the collection systems (Part III.A),
- increased ambient monitoring (Part II.A),
- chlorination-related alarms (Part II.B.9), and
- improved oversight of industrial users (Parts III.C and III.D).

One illustrative example of the benefits of the general permit approach, and the greater number of permits that will be issued under it, is with regard to new PFAS monitoring for POTWs as well as specific industrial users (Parts II.A, III.C and III.D). For many of the dischargers covered, PFAS was not an identified issue at the time of their last permit issuance. EPA is now

[2] EPA notes that there are over 200 WWTFs treating sanitary waste in MA and NH that have a NPDES permit. Given that EPA has issued approximately 10 individual permits for such facilities per year, it would take approximately 20 years to cycle through them all as individual permits assuming no significant change in resources going forward. However, the Small and Medium WWTF General Permits are designed to cover over 100 facilities combined, resulting in permit reissuances for all facilities at least twice as often under this permitting approach.

able to account for this pollutant and our emerging understanding of the risks associated with it for this entire class of dischargers at one time. In reissuing the general permit more frequently, EPA will once again be able to account for significant changes in the environment and understanding, like PFAS, in a timely manner.

Additionally, this General Permit does not sacrifice any of the meaningful site-specific protections needed for the various dischargers. It is notable that while several commenters raised *procedural* objections to using a general permit, these commenters did not object to the substantive permit limits included in the General Permit but rather supported them. This is the result of EPA conducting individualized analysis for each of the 44 facilities identified for coverage and including all necessary facility-specific permit terms. For TMDLS, this General Permit will more efficiently regulate applicable dischargers through frequent permit reissuance and, therefore, more opportunities to implement the adaptive management approach often articulated in TMDLs. Given that EPA conducts a site-specific analysis on each WWTF (including an evaluation of relevant TMDLs), this General Permit will incorporate more precise and effective implementation of TMDLs than the current individual permitting approach.

In contrast, it would take many years for these same permit updates to be incorporated into 44 individual permits with no obvious environmental benefit linked with that less efficient approach. The additional time and resources spent in issuing those 44 individual permits would diminish the time and resources that could have been directed toward updating permit coverage for other, larger WWTFs in Massachusetts that have an even greater environmental impact. Additionally, EPA anticipates a significant reallocation of permitting resources to address stormwater permitting in the coming years, which is enabled, in part, by this transition to this General Permit. In other words, by implementing this general permit approach EPA not only achieves environmental benefits from the medium WWTF dischargers through more timely, up to date permitting, but also through the ability to issue more timely, up to date permits for other, larger dischargers, including stormwater dischargers. Given this, maximizing permit coverage under this General Permit also maximizes environmental protection and compliance with the CWA throughout Massachusetts.

EPA also views this general permit as providing the same necessary and meaningful public comment opportunities as the individual permit approach. The Draft GP and Fact Sheet contained all the necessary information to understand the proposed permit limits and the methodologies used to derive them, as would be contained in a draft individual permit. To account for the expanded reach of this General Permit vs a single facility, EPA allotted 78-days for public comment rather than the typical 30 days. Additionally, given the significant overlap of the facilities, types of discharges, and environmental issues presented, a single comment period creates a more streamlined and focused public review and comment and a more efficient process for EPA in reviewing those comments. Rather than duplicating the effort to review a certain permit requirement as it applies to one facility after another individually and submitting comments again and again, an interested party can review that same permit requirement as it would apply to several similar facilities and submit a single comment. Further, if that comment has merit, EPA may then respond and implement a change that would apply to all such facilities immediately.

Nevertheless, in response to several commenters' expressed desire for more procedural time to consider the general permit, EPA commits, in its discretion, to two additional procedural

mechanisms for the next iteration of this general permit: (1) EPA will publish an advanced notice of its preparation of a new draft general permit at least 30 days prior to the publication of the new draft general permit to allow stakeholders to plan to allocate necessary resources during the public comment period; and (2) EPA will provide a 90-day public comment period on the next reissuance of the Medium WWTF General Permit to allow ample time for all stakeholders to review and comment.

With regard to administrative efficiency, EPA has concluded based on its experience as permitting authority in two New England states for 50 years that addressing 44 facilities in one permitting action is far more efficient than developing 44 separate permits. EPA views this as not only a short-term efficiency gain which will help eliminate the permit backlog, but an approach that will realize this same gain in efficiency with each permit reissuance. The result will be that all eligible dischargers will maintain, going forward, more updated permit coverage than under an individual permitting scheme. As stated, this efficiency is crucial to allow the Region to dedicate resources to update and reissue other NPDES permits, including for many large WWTFs which discharge to the same waterbodies as facilities covered under this General Permit.

C. Consistency with General Permit Regulations

In addition to being consistent with the animating policy behind the general permit regulations (creating clear environmental and administrative benefits), this General Permit is also consistent with the regulations themselves. Several commenters asserted that this GP is inconsistent with EPA's regulations as a result of the site-specific WQBELs included. These comments are rooted in two regulatory requirements:

- 40 C.F.R. § 122.28(a)(2)(ii)(C), which requires that each source "within each category or subcategory … [r]equire the same effluent limitations, operating conditions, or standards for sewage sludge use or disposal," and

- 40 C.F.R. § 122.28(a)(3) which states that "[w]here sources within a specific category or subcategory of dischargers are subject to water quality-based limits imposed pursuant to § 122.44, the sources in that specific category or subcategory shall be subject to the same water quality-based effluent limitations."

The purpose behind the requirement to impose uniform WQBELs was two-fold: first to encourage wider use of general permits by making clear they can include WQBELs, and, second, to clarify that "general permits should not be used to provide permit coverage to loosely grouped categories of dissimilar discharges." 61 Fed. Reg at 65273. It was not intended to curtail EPA's ability to identify a category of sources (POTWs) and to then further subcategorize that group based on attributes of the facility and constituents in the discharge. Id. ("To improve administration and operation of the general permit program and to encourage more widespread use of general permits, the Agency is proposing to amend the general permit regulations to allow general permits to cover multiple categories of dischargers."). In so fashioning the regulation, EPA identified permitting flexibility and efficiency as one rationale for such an approach:

> The proposal would allow a permit drafted to cover a single category of dischargers or treatment works treating domestic sewage to cover different subcategories subject to

> different effluent limitations, standards, or conditions. This should reduce the burden on the permitting agency by decreasing the number of general permits issued.

Id. Neither the text of the general permitting regulation nor its preamble preclude EPA from establishing a subcategory of one, so long as the WQBELs applied to that discharger are consistent with the requirements of the Act. This reading of the regulation is consistent with EPA's intent to provide maximum flexibility under the general permit regulations to facilitate administration of the NPDES program, as detailed in the preamble to the rule. 61 Fed. Reg. 65268, 65272 (December 11, 1996) ("EPA's NPDES general permit program arose out of the broad grant of authority in section 402(a) of the CWA and the decision of NRDC v. Train, 396 F.Supp. 1393, 1402 (D.D.C. 1975), aff'd, NRDC v. Costle, 568 F.2d 1369 (D.C. Cir. 1977)), which recognized EPA's authority to employ administrative mechanisms, such as area (general) permits, to assist the Agency in the practical administration of the NPDES permit program."). As is clear, the commenters' objections to EPA's approach are misguided, centered as they are on purported inconveniences to certain NGOs. EPA disagrees with the commenter's objections, but more fundamentally observes that the thrust of EPA's general permit regulation is intended in the first instance to provide convenience and flexibility to the permit issuer, as it carries out its responsibilities to administer and implement the Act.

The substantive, environmentally protective lynchpin of this approach is that where there are different WQBELs they must ensure, as all WQBELs must, that the discharge will achieve the applicable water quality standards. In order to do so, a permit-writer must conduct a site-specific analysis. The ability to conduct this site-specific analysis for multiple facilities in a general permit may be prohibitively complex depending on the scope of the general permit. Thus, the two examples provided by the Agency in encouraging use of general permits with WQBELs are situations where the site-specific analysis is easily implemented: "where a general permit is developed in close coordination with a total maximum daily load (TMDL) and/or a wasteload allocation" and for facilities which "must meet water quality standards at the point of discharge" due to prohibitions on mixing zones. 65 Fed. Reg. at 30890-91. In both of those situations, there is likely not a need to conduct further site-specific analysis beyond identifying the applicable WLA or WQS and incorporating that value as the WQBEL. The regulations are not so constrained, however, as to prohibit a general permit from incorporating WQBELs where more complex site-specific analysis is needed, so long as that site-specific analysis is conducted to ensure the substantive, requisite environmental protection is achieved, and the requirements of the Clean Water Act are met. While admittedly more complex than the examples provided, that is exactly what EPA has accomplished with this General Permit. For each facility, EPA has conducted site-specific analysis to ensure protective WQBELs where appropriate.

A contrary reading of the regulations to require identical, end-of-pipe WQBELs for each facility covered under a general permit is form over substance, unnecessarily constraining the scope of general permits based on a hyper-technical reading lacking a substantive, environmental rationale. It also renders provisions relating to categorization and subcategorization superfluous. The preamble to the final rule confirms that the "same effluent limitations" language and the categorization provisions were intended to be applied in conjunction with one another. 65 Fed. Reg. at 30890 (May 15, 2000). This General Permit appropriately implements this subcategorization framework. Of the 44 facilities considered under this general permit, EPA has identified the following subcategories: freshwater & marine dischargers (applying the same criteria and methodology for metals, ammonia, and phosphorus within each subcategory); Long

Island Sound dischargers (ensuring all facilities in this subcategory have nitrogen limits based on the same methodology); Dilution Factor subcategories between ≥ 1 and < 20, ≥ 20 and < 100, and ≥ 100 (establishing acute and/or chronic WET limits using the same methodology within each subcategory); and lastly facilities that implement chlorine disinfection (ensuring all facilities in this subcategory have TRC limits based on the same methodology).[3] The identical methodologies applied for each facility within a subcategory (using site-specific information for each facility) to derive WQBEL pursuant to § 122.44 are clearly described in the relevant sections of the Fact Sheet. EPA could have issued separate general permits for each subcategory of facilities, but the intent of EPA's amendments to its general permit regulations was to allow for one general permit to cover a broader group of sources (*i.e.*, categories and subcategories) and not necessitate multiple general permits. *See* 61 Fed. Reg at 65273.

In summary, this General Permit is consistent with EPA's general permit regulations both because it appropriately implements site-specific WQBEL analysis where appropriate, thus ensuring necessary water quality protection, and where disparate site-specific analyses were required, those analyses are consistent and identical within their applicable subcategories.

[3] EPA recognizes that many facilities additionally have unique effluent limits in their existing individual permits and the application of anti-backsliding regulations results in these unique limits being carried forward under the General Permit. EPA views these anti-backsliding-based limits as being applied using the same methodology (*i.e.*, anti-backsliding) within this subcategory of facilities that have such limits. To assert that facilities with disparate permit limitations due to anti-backsliding are ineligible for coverage under a general permit would be to assert, in effect, that general permits may not be used for any facilities with existing individual permit coverage. EPA does not agree that the scope of general permits was intended to be so limited and sees no environmental rationale for such constraint. Indeed, where efficiency gains are a key rationale to the general permit regime, allowing for a transition from multiple, existing individual permits to one general permit is the epitome of efficiency gains and thus squarely within the intended scope of the general permit program.

III. Responses to Comments

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

A. Comments from Guy Campinha, Director, Wareham Water Pollution Control Facility, Town of Wareham, on March 9, 2022:

Comment 1

We have reviewed draft General Permit No. MAG590000 for the Town of Wareham (Authorization# MAG59005). The town has reviewed this permit and raises the following concerns:

The new permit requires that various types of PFAS testing be conducted on sludge as follows:

- Perfluorohexanesulfonic acid (PFHxS)
- Perfluoroheptanoic acid (PFHpA)
- Perfluorononanoic acid (PFNA)
- Perfluorooctanesulfonic acid (PFOS)
- Perfluorooctanoic acid (PFOA)
- Perfluorodecanoic acid (PFDA)

The town has a serious concern about this new testing requirement. Since there has been inadequate guidance and regulation with regard to PFAS in sludge, facilities that test their sludge and find PFAS in the sludge experience an unfair burden with regard to disposal of the sludge; this is because there have been limited outlets who will take the sludge and the sludge is more costly to dispose of. Will towns experience an increase in disposal costs simply due to testing for PFAS? What is EPA doing to mitigate this issue? Please provide a comprehensive plan to demonstrate that the towns who are now subject to this permit will not face a new cost burden to dispose of their sludge, simply because of the new testing requirement.

In addition, the town hereby expresses a concern with the inclusion of these same PFAS testing parameters in the influent and effluent testing for the same reasons listed above.

Due to the unknown impacts that discovering PFAS in sludge, influent of effluent will have on costs of disposing of the sludge and thus on the residents of this Town, we request that this testing requirement be removed.

Response 1

In EPA's judgment, PFAS monitoring is necessary to better understand the level of PFAS in sludge and, additionally, these data may be used to inform future decisions regarding appropriate sludge disposal practices. Influent and effluent testing are also necessary to better understand the level of PFAS in wastewater and any associated impacts on human health and the environment. *See* CWA § 308(a). The commenter has not disputed that PFAS deposition is a cause for environmental concern but bases its objections on possible increases in cost and the potential that disposal will become more difficult. Both these concerns are speculative. EPA appreciates the hardship of potential rising costs and disposal logistics but notes that simply ignoring the likely presence of PFAS

contamination in sludge is not appropriate under the Act. While in some cases EPA might reasonably balance issues like costs and logistics against the utility of data yielded by a particular monitoring regime—to inform future permit limits, for example—the commenter has not provided any specific information that would allow EPA to do so.

Additionally, and as described in the Fact Sheet at 31-33, this monitoring is necessary to better understand discharges from the facilities and inform future permitting decisions, including the potential development of water quality-based effluent limits. Although Massachusetts does not currently have numeric criteria for PFAS, the state does have narrative criterion for toxic substances at 314 Code of Massachusetts Regulations ("CMR") 4.05(e). Additionally, the State has developed a drinking water standard for six PFAS at 310 CMR 22.00. Finally, this monitoring is consistent with EPA's *October 2021 PFAS Strategic Roadmap*[4].

Comment 2

Part III A. Operation and Maintenance of the Sewer System. The Town expresses a concern with the deadlines for these new requirements. The pandemic has created a labor backlog as well as personnel shortages that will make it impossible to meet this deadline in such a short period of time.

Response 2

Based on EPA's experience as a permitting authority, EPA has concluded that the relevant schedules in the Draft General Permit are reasonable. EPA has been including these requirements in municipal permits for WWTFs in Massachusetts for more than 10 years and permittees and co-permittees have been able to fulfill these requirements within this timeframe, even given personnel constraints. The Town has also been on notice since publication of the Draft General Permit in February 2022 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. Further, EPA notes that the schedules do not begin until the effective date of the authorization for each specific WWTF, which incorporates several additional months from the time the General Permit is finalized until the authorization is effective.

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 a longer compliance schedule in an administrative order.

Comment 3

Part III E 7. Sludge conditions. The Town expresses a concern with this portion of the permit. Can this requirement be restated in plain language and can an explanation be provided for its purpose to be included in the permit.

Response 3

This portion of the General Permit is provided to describe the Permittee's responsibilities under 40 CFR § 503.9(r). In plain language, the provision states that either the Permittee

[4] https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf

or a contractor is responsible to ensure compliance with Part 503 depending on whether the Permittee or a contractor is the entity that uses or disposes of the sludge. If the Permittee does not use a contractor "who derives a material from sewage sludge" then it remains responsible for compliance with applicable requirements in Part 503. It is unclear from the comment if there is a more specific question, but the Permittee is welcome to contact EPA for any more specific clarification.

B. Comments from Clint Stetson, Chief Operator, Town of Marshfield Wastewater Treatment Facility, on March 30, 2022:

Comment 4

We have reviewed draft General Permit No. MAG590000 for the Town of Marshfield (Authorization # MAG590003). The Town has reviewed this permit and raises the following concerns:

The new permit requires that various types of PFAS testing be conducted on sludge as follows:

- Perfluorohexanesulfonic acid (PFHxS)
- Perfluoroheptanoic acid (PFHpA)
- Perfluorononanoic acid (PFNA)
- Perfluorooctanesulfonic acid (PFOS)
- Perfluorooctanoic acid (PFOA)
- Perfluorodecanoic acid (PFDA)

The Town has a serious concern about this new testing requirement. Since there has been inadequate guidance and regulation with regard to PFAS in sludge facilities that test their sludge and fin PFAS in the sludge experience an unfair burden with regard to disposal of the sludge; this is because there have been limited outlets who will take the sludge and the sludge is more costly to dispose of. Will town experience an increase in disposal costs simply due to testing for PFAS? What is EPA doing to mitigate this issue? Please provide a comprehensive plan to demonstrate that the towns who are now subject to this permit will not face a new cost burden to dispose of their sludge simply because of this new testing requirement.

In addition, the Town hereby expresses a concern with the inclusion of these same PFAS testing parameters in the influent and effluent testing for the same reasons listed above.

Due to the unknown impacts that discovering PFAS in sludge, influent or effluent will have on costs of disposing of the sludge and thus on the residents of this Town, we request that this testing requirement be removed.

Response 4

See Response 1.

Comment 5

Part lll A. Operation and Maintenance of the Sewer System. The Town expresses a concern with the deadlines for these new requirements. The pandemic has created a labor backlog as well as

personnel shortages that will make it impossible to meet this deadline in such a short period of time.

Response 5

See Response 2.

Comment 6

The enterococci limit has changed for our facility. Our facility was not designed to treat to the new levels in the permit and we request a waiver from this requirement or a Demonstration of why this changed. If the limit needs to stay in place, the Town will require time to meet this new limit.

Response 6

The Massachusetts WQS with respect to bacteria were approved by EPA on March 31, 2022. This approval resulted in a change in the Statistical Threshold Value (STV) from 104 to 130 cfu/100 ml. The corresponding December 2021 *Surface Water Quality Criteria for Bacteria: Implementation Guidance for the Protection of Human Health in Waters Designated for Primary Contact Recreation*[5] indicates, "MassDEP anticipates that the bacteria criteria will be implemented in permits such that the monthly average effluent limit will be equal to the appropriate geomean, and the maximum daily effluent limit will be equal to the corresponding STV."

In the Fact Sheet at 18, EPA noted that the STV was less stringent than the previous bacteria WQS so the more stringent value (*i.e.*, 104 cfu/100 ml) would be carried forward in the authorizations under the General Permit based on anti-backsliding requirements. However, the previous WQS allowed for implementation of a less stringent single sample maximum value of 276 cfu/100 ml in some permits, rather than applying the 104 cfu/100 ml directly. Therefore, the implementation of daily maximum permit limits based on the new WQS is more stringent than the previous WQS for any permits with a current limit of 276 cfu/100 ml (listed below). Accordingly, the Final General Permit has been updated to indicate 130 cfu/100 ml for discharges of enterococci into Class SA or SB waters.

The corresponding authorizations for WWTFs that previously had a limit of 276 cfu/100 ml (*i.e.*, Dartmouth, Wareham, Fairhaven, Hull, Marshfield, and Scituate) will be made more stringent to 130 cfu/100 ml in accordance with the new WQS. The remaining WWTFs that previously had a limit of 104 cfu/100 ml (*i.e.*, Amesbury, Newburyport, Ipswich, and Plymouth) will remain at 104 cfu/100 ml as described in the Fact Sheet.

EPA notes that during the review period the commenter (Marshfield) only had a single excursion of 130 cfu/100 ml, even though their limit was 276 cfu/100 ml. Therefore, EPA has concluded that the facility is able to consistently achieve this more stringent limit and a compliance schedule is not necessary.

[5] https://www.mass.gov/doc/bacteria-surface-water-quality-criteria-for-bacteria-implementation-guidance-for-the-protection-of-human-health-in-waters-designated-for-primary-contact-recreation-cn-5630/download

Comment 7

The outfall inspection in E l b presents a hardship to the Town with regard to its need within 12 months of the permit becoming effective and we request an extension to 24 months.

Response 7

Based on EPA's experience working with facilities that have diffusers (including several under this General Permit that are amenable to the 12-month schedule), EPA has determined that the schedule in the Draft General Permit is sufficient and will allow all inspections under the General Permit to remain consistent for all facilities. EPA notes that some outfalls proposed for coverage under this General Permit have not been inspected for many years and further delay of proper maintenance may result in environmental harm. Further, EPA notes that the schedule does not begin until the effective date of the authorization for each specific WWTF which incorporates several additional months from the time the General Permit is finalized until the authorization is effective. Finally, the commenter has not identified any impediment to completing the outfall inspection other than a generic reference to "hardship."

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.

C. Comments from Lee Azinheira, Executive Director, MFN Regional Wastewater District, on March 30, 2022:

Comment 8

For your consideration are the following comments based on draft permit MAG590043. A PDF is attached in reference to comment / section location.

Permit number is new (MAG590043). Our facility is currently reporting under NET DMR MA0101702. Will the NET DMR permit number be changed to transition existing facility data (data since 2015 available) and continuity to roles (signatory, edit, view, etc) assigned to current users?

The facility's sludge data via NET BIO is accessible as a component under the existing NET DMR permit number, as well.

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

Response 8

The commenter is correct that the authorization number is new. Therefore, as suggested the facility will need to set up the roles (signatory, edit, and view) in NetDMR under the new authorization number. When EPA sends each facility a copy of their final authorization, we will include instructions on how to set up the NetDMR account under the new authorization number. Once authorized under the General Permit the permittee will submit their data to NetDMR using this new authorization number, including sludge data.

The facility's historical data will not transfer in NetDMR to the new authorization number; however, they will remain available under the old individual permit number.

Comment 9

Total Phosphorus concentration should be 0.17 mg/L as it was in the previous permit, as the listed 0.16 mg/L limit is incorrect.

When calculated from the listed loading limit of 4.45 lbs/day, given the flow limit of 3.14 mgd, this would result in a value of 0.1699 mg/L therefore, when rounded correctly, should be 0.17 as it had been previously.

Response 9

As part of the development of the General Permit, EPA performed an analysis of all existing limits to determine whether they need to be more stringent to remain protective of water quality standards. *See* Fact Sheet at 27 and Appendix A. The details of this site-specific analysis are included in the Reasonable Potential Analysis and Limits Calculations for this facility. Based on this site-specific analysis, the phosphorus limit has been reduced from 0.17 mg/L to 0.16 mg/L, as noted in Attachment E of the Draft General Permit. Therefore, this change is not a rounding error. This comment does not result in any change to the Final General Permit.

D. Comments from Helen Gordon, PE, BCEE, MCPPO, Senior Program Manager, Environmental Partners Group, On behalf of the Town of Bridgewater, on April 4, 2022:

Comment 10

On behalf of the Town of Bridgewater, the design engineer Stantec Consulting Services Inc., and Environmental Partners, the OPM (Owner s Project Manager) for the Phase 1 Upgrades project, we send the following public comments in response to the Draft General Permit. Many items which are included in the general permit as proposed are either included as a part of Phase I improvements or are expected to be completed as part of Phase II Design and Construction, which has not yet started. Construction for Phase I is expected to begin in July 2022 and continue for approximately 24 months (about 2 years).

Response 10

EPA acknowledges this comment.

Comment 11

pH Monitoring Requirement (Part II.A. Table 1): The pH must be within a range of 6.5-8.3 S.U. Monitoring consists of 5 grab samples however, per note 7, "The pH shall be always within the specified range. The minimum and maximum pH sample measurement values for the month shall be reported in standard units (S.U.)."

a. *We ask that compliance in pH monitoring be in alliance with our Phase I upgrades, when a pH sensor is going to be installed on the effluent discharge. At that time, upper and lower set points can be set in SCADA to alarm should pH go out of the*

acceptable range. Construction is expected to begin in June 2022 and continue through May 2024.

Response 11

EPA notes that the pH monitoring frequency in the Draft General Permit is a minimum frequency. Therefore, any additional monitoring is allowable. EPA has added a line to footnote 7 of the Final General Permit indicating that continuous pH monitoring fulfills this requirement.

Comment 12

Total Phosphorus Discharge Limitation (Part II.A. Table 1): The phosphorus limit of 0.12mg/l is near the limit of technology for many removal technologies. Considering the removal process will have to reliably remove phosphorus to below the limit (typically 25% margin of safety), actual treatment goal is <0.1mg/l. This will be a challenging limit to reach as it's dependent on the phosphorus characteristics and speciation. Since the draft permit was issued in 2016, the Town has been advancing with the anticipated phosphorus limit of 0.2 mg/l; the change in phosphorus limit in the most recent permit will require additional engineering, and pilot testing that cannot take place until completion of the Phase I upgrades.

a. *We request that the new Phosphorus permit limit be extended to May 1, 2028. We are currently in Phase I of construction to address our nitrogen removal requirement, and we plan to pilot the phosphorus removal technology identified in the Basis of Design when Phase I construction is substantially complete, in order to get the most accurate speciation profile for phosphorus.*

Response 12

As noted on page 27 of the Fact Sheet, given the complexity associated with an ongoing administrative order combined with a more stringent limit for Bridgewater, EPA has not proposed a compliance schedule for this facility in the General Permit but rather encourages Bridgewater to reach out to EPA's Enforcement and Compliance Assurance Division (ECAD) to discuss a new administrative order with a schedule to achieve the proposed phosphorus limit. This comment does not result in any change to the Final General Permit.

Comment 13

PFAS/PFOA Influent and Sludge Reporting Requirements (Part II.A. Table 1): Bridgewater does not have any industrial users as classified under 40 CFR 403.3(v)(1). Recent monitoring data has not shown that there are any concentrations of Toxic Pollutants under 40 CFR 401.15 of concern at this time. Therefore, the implementation of an added monitoring program will add significant costs to the annual operating budget of the treatment plant. PFAS/PFOA testing is estimated at $500 per test, which could lead to a 300% increase in laboratory costs alone. With the added costs of construction upgrades over the next ten years to achieve nutrient compliance, this places an undue burden on ratepayers for a monitoring system which is not applicable to Bridgewater.

a. *We ask that the testing for PFAS/PFOA compounds be reduced from quarterly to semi-annually (2 tests per year). We understand the importance of monitoring for*

emerging contaminants to protect the Taunton River Watershed but are concerned about the 300% increase in laboratory processing costs.

Response 13

EPA recognizes that this new PFAS monitoring requirement entails increased cost. However, EPA maintains that the monitoring frequency should be at least quarterly to ensure that there are adequate data to assess the presence and concentration of PFAS in discharges. These data will enable EPA to obtain comprehensive and representative information on the sources and quantities of PFAS discharges and EPA will use these data in the future to inform its actions.

See Response 97.

Comment 14

Chlorination and Dechlorination Alarm System (Part II.B. Item 9.d.): Bridgewater currently chlorinates seasonally using chlorine gas. Their current chlorination system is proposed to be switched to a UV system as part of Phase II upgrades to the treatment facility.

a. *We ask for continuation of disinfection of the discharge on a seasonal basis.*

b. *We ask for a compliance timeline consistent with our ACO for supplying upgrades to our existing chlorination and dechlorination systems, which are planned to be implemented during Phase II of our upgrades (see Table 1 below). Compliant alarms are planned as a part of the disinfection system upgrade.*

Response 14

Regarding the request for seasonal disinfection, EPA notes that the seasonal bacteria limit has been carried forward under the Draft General Permit. Therefore, seasonal disinfection is allowed both before and after any switch to a UV system.

Regarding compliance with the alarm system, EPA encourages the Permittee to contact EPA's Enforcement and Compliance Assurance Division (ECAD) to explore the possibility of an administrative order. *See* Response 12.

Comment 15

Unauthorized Discharges Notifications (Part II.C.2.): The Permittee is working towards compliance with obtaining the MassDEP untreated sewage notification protocol by July 2022, which is consistent with the EPA requirements as listed.

a. *We request that the timeline for compliance with this line item be consistent with the MassDEP requirement for notification and setup, to be able to implement the webpage and notification systems by July 2022.*

Response 15

Given that this MassDEP requirement is already effective before the date the General Permit is finalized, this comment does not result in any change to the Final General Permit.

Comment 16

Notification Requirements (Part II.D.): Under this requirement, Bridgewater will be required to notify all downstream community water systems within four hours of any emergency conditions, plant upset, bypass or other system failures. The notification format, contact information, and extent of notification are not indicated.

a. *We ask EPA to provide a specific list of the extent of water systems that would need to be notified under this requirement. As Bridgewater discharges to a tributary of the Taunton River, there are many communities and departments that could be notified on the list and we seek clarification on exactly who needs to be notified (e.g., how are community water systems defined and how many miles downstream of notification does EPA expect to be notified).*

Response 16

Given the significant impact any emergency conditions, plant upsets, bypasses or other system failures may cause to human health, EPA confirms that this requirement should apply to all downstream communities, whose waters may be affected by discharges from the Permittee. While EPA recognizes that the distance downstream may be difficult to determine, EPA recommends compiling a broad list of contacts (*e.g.*, email addresses) who can be notified in a single message, even if the impact farther downstream may be minimal. This comment does not result in any change to the Final General Permit

Comment 17

Alternate Power Source (Part III.B): References "Part VII.E.1 of this permit" not included in the draft permit.

a. *Please clarify if there are other parameters which need to be met under this section.*

Response 17

Part VII (Standard Conditions) of the Draft General Permit was posted on EPA's website as a separate link for review during the public comment period.

Comment 18

Industrial Users (Part III.C): The Town must report any industrial users (IU) who fall under the federal categorical pretreatment standards in addition to reporting any significant industrial users (SIUs) to DEP. The Town currently serves three commercial car washes that are considered IUs but are not considered SIUs.

a. *We request a waiver for sampling users as Bridgewater does not have any SIUs as categorized under 40 CFR 403.3(v)(1). There are no other Industrial Users within Bridgewater which meet this requirement and testing of the wastewater effluent will supply more information as to which PFAS/PFOA constituents are present prior to the added investment in time spent testing these industries.*

Response 18

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 31-33, 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.

With regards to industrial users, EPA notes that testing likely sources of PFAS is an important step to inform future decisions regarding source reduction. Given that "commercial car washes" are listed specifically in Part III.C, the three industrial users identified in the comment must be tested annually for PFAS. Therefore, this comment does not result in any change to the Final General Permit.

Comment 19

Schedules of Compliance (Part III.F.): The Town must send a status report within 24 months (about 2 years) documenting the process improvements necessary to achieve the permit limits. No issue with this, however there is no discussion of when phosphorus limits are effective.

a. *We would like EPA Region 1 to coordinate with the Compliance unit to review the draft permit with consistency against our existing ACO deadlines. The phosphorus limit was pre-negotiated as part of the ACO and changing the limit would significantly affect the design basis of Phase II improvements at the WWTF. Table 1 below shows the ACO deadlines as negotiated and effective in 2017.*

For reference, we have supplied a copy of our ACO deadlines as negotiated in May 2017 in Table 1 below.

Table 1: Bridgewater WWTF ACO Deadlines

Item #	Required Item	Deadline (Effective 5/1/17)	Due Date	Anticipated Date
4.	Nitrogen Pilot Testing	+ 3.5 yrs.	10/31/20	Completed 10/3/19
4.	Preliminary & Final Design of WWTP Upgrades for N Removal	+ 3.5 yrs.	10/31/20	Completed 1/31/22
5.	Construction of WWTP Upgrades for N Removal	+ 5 yrs.	5/1/22	**5/1/24**
5.	Obtain operational levels & comply with effluent limits for TN (Total Nitrogen) (60 lb./day)	+ 5 yrs.	5/1/22	**5/1/24**
6.	Phosphorus Pilot Testing	+ 8.5 yrs.	10/31/25	**5/30/24**
6.	Preliminary & Final Design of WWTP Upgrades for P Removal	+ 8.5 yrs.	10/31/25	**12/16/25**
7.	Construction of WWTP Upgrades for P Removal	+ 10 yrs.	10/31/27	**7/22/27**
7.	Obtain operational levels & comply with effluent limits for P (200 ug/l)	+ 10 yrs.	10/31/27	**10/31/27**

We look forward to discussion and conversation around these comment items as the NPDES permit is finalized. Please feel free to reach out to us if you have additional questions or need clarification.

Response 19

As noted in the Fact Sheet at 27, the General Permit does not propose a schedule of compliance for the facility's more stringent phosphorus limit. Therefore, this limit will become effective on the effective date of the facility's authorization under the Final General Permit. Therefore, as mentioned in Response 12, EPA encourages Bridgewater to reach out to EPA's ECAD to discuss a new administrative order with a schedule to achieve the proposed phosphorus limit. This comment does not result in any change to the Final General Permit.

E. Comments from Mark Holley, Water Facilities Superintendent, City of Greenfield, on April 8, 2022:

Comment 20

Please find herein the public comments or requests from Permittee ID# MA0101214, Greenfield Water Pollution Control Facility.

While it may seem contrary to logic we are objecting to the reduced schedule for Bio Chemical Oxygen Demand (BOD5) and Total Suspended Solids (TSS) reporting, even in light of the additional testing required in new parameters. The reduced schedule for BOD testing in our mind does not allow to fully represent the performance on the facility in its entirety. Reducing the number of Effluent BOD samples to once per week allows only a tiny window into the performance of the plant, while our current schedule of three samples per week provides a much better picture of plant performance. Reducing the Influent sampling to only twice per month reduces that mathematically and practically. Having only one sample per week to calculate the "high week average" is mathematically impossible, there must be at least two inputs to make this calculation. We would ask to continue to report three Influent and three Effluent BOD results per week for each month to provide a much more accurate portrayal of plant performance.

The reporting requirements for TSS would also generate the very same objections, reducing the representation of actual plant performance.

Response 20

See Response 275. EPA notes that the monitoring frequencies in the General Permit are minimum frequencies and the commenter is welcome to monitor more frequently at their discretion.

Further, EPA clarifies that if only one sample is taken during the week, the weekly average is the value of that one sample.

Comment 21

Sampling for PFAS has become a common place requirement, while we are especially sensitive to presence of these compounds due to our water treatment responsibilities, we understand the

costs involved in this testing. We have done some preliminary testing and found very low levels in our Effluent and sludge. We would ask to have a reduced sample schedule once low levels of these compounds have been fully demonstrated. We would ask to eliminate testing once the reduced testing demonstrates a further declining presence. The reduction of these compounds at their source would support the reduction of them on wastewater and further support reduced or eliminated testing.

Response 21

The comment suggested that EPA incorporate an off ramp to reduce or remove PFAS sampling if initial results are below a certain level. Given that limited PFAS data for WWTFs are available and that this is a new monitoring requirement for all of the facilities, 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 PFAS monitoring for some or all of the facilities depending on updated information and any water quality criteria that may be in effect at that time.

F. Comments from Joshua Earnest, Assistant Project Coordinator, Town of Sturbridge on March 29, 2022:

Comment 22

Our current permit limits for total zinc are as follows: 0.0459 **mg/l** and 0.5087 **lbs/day** (maximum daily). The draft authorization for our facility lists our new potential permit limits as follows: 0.0469 **ug/l** and 0.5087 **ug/l** (maximum daily). We would like to point out two possible (and likely) typographical errors regarding potential permit limits for total zinc:

- Should 0.5087 be listed in **lbs/day** instead of in **ug/l**? Both values included in the draft authorization are defined in ug/l, which creates some confusion as there can only be one daily maximum limit.
- Are the units stated in the draft authorization correct to be in **ug/l** instead of in **mg/l** (mg/l is the unit that our current permit lists states for total zinc)? The values on the draft authorization are exactly the same as the values on our current permit, except for the fact that the units have changed, which leads us to believe that there are two typographical errors here.

Response 22

EPA confirms that the units for zinc in the Draft Authorization number MAG590026 for the Sturbridge WWTF were typographical errors and will be corrected in the final authorization as indicated in this comment. EPA also notes that the comment above contains a typographical error indicating that the current permit limit is 0.0459 mg/L, when it is actually 0.0469 mg/L. The correct values with the correct units (*i.e.*, 0.0469 mg/L and 0.5087 lbs/day) will be carried forward under the General Permit.

G. Comments from Christopher Welch, Operations Supervisor, Wastewater Division, Town of Uxbridge, on April 19, 2022:

Comment 23

We have reviewed draft General Permit No. MAG590000 for the Town of Uxbridge (Authorization # MAG590003). The town has reviewed this permit and raises the following concerns:

The new permit requires that various types of PFAS testing be conducted on sludge as follows:

- Perfluorohexanesulfonic acid (PFHxS)
- Perfluoroheptanoic acid (PFHpA)
- Perfluorononanoic acid (PFNA)
- Perfluorooctanesulfonic acid (PFOS)
- Perfluorooctanoic acid (PFOA)
- Perfluorodecanoic acid (PFDA)

The town has a serious concern about this new testing requirement. Since there has been inadequate guidance and regulation with regard to PFAS in sludge, facilities that test their sludge and find PFAS in the sludge experience an unfair burden with regard to disposal of the sludge; this is because there have been limited outlets who will take the sludge and the sludge is more costly to dispose of. Will towns experience an increase in disposal costs simply due to testing for PFAS? What is EPA doing to mitigate this issue? Please provide a comprehensive plan to demonstrate that the towns who are now subject to this permit will not face a new cost burden to dispose of their sludge, simply because of this new testing requirement.

In addition, the Town hereby expresses a concern with the inclusion of these same PFAS testing parameters in the influent and effluent testing and for industrial users for the same reasons listed above.

Due to the unknown impacts that discovering PFAS in sludge, influent, effluent and industrial users will have on costs of disposing of the sludge and thus on the residents of this Town, we request that this testing requirement be removed.

Response 23

See Response 1.

Comment 24

Part III A. Operation and Maintenance of the Sewer System. The Town expresses a concern with the deadlines for these new requirements. The pandemic has created a labor backlog as well as personnel shortages that will make it impossible to meet this deadline in such a short period of time.

Response 24

See Response 2.

Comment 25

Part III E 7. Sludge Conditions. The Town expresses a concern with this portion of the permit. Can this requirement be restated in plain language and can an explanation be provided for its purpose to be included in the permit.

Response 25

See Response 3.

H. Comments from Michelle Murphy, Project Manager, Maynard WWTF, Town of Maynard, on April 20, 2022:

Comment 26

The Town of Maynard hereby requests a modification to the proposed General, site specific NPDES Permit MAG590000. Our pre-existing NPDES Permit MA0101001 has a current permitted Aluminum limit of 274 ug/l based on an 87 ug/l criteria and it is subject to Special Conditions stated in Part G. Part G. Special Conditions for Aluminum includes a three-year schedule of compliance and the ability for the final effluent limit of 274 ug/L to be modified prior to the end of the three-year compliance schedule if warranted by the new Aluminum criteria adopted in the New Water Quality Standards of Massachusetts. The State of Massachusetts recently adopted new Massachusetts Surface Water Quality Standards for Aluminum. Based on the USGS Aluminum study, an Aluminum criteria of 394 ug/l was established. The Maynard WWTF was one of the sampling sites used in the USGS study. The calculations used to establish the water quality criteria were determined using sampling data from the Maynard treatment plant effluent discharging into the Assabet River. Modifying the Aluminum permit based off of the new 394 ug/l criteria per the water quality study data continues to protect the Assabet River and its aquatic habitat and allows the treatment plant to continue its current mode of operation while reducing the risk of a violation of the NPDES permit discharge limits. It is for these reasons that I would like to apply on behalf of the Town of Maynard for a modification of either an extension on compliance time until the EPA makes a decision whether to accept the Massachusetts Surface Water Quality Standards for Aluminum, or of an issuance of a new Aluminum limit based off of the 394 ug/l criteria.

Response 26

At the time of issuance of this General Permit, the revised 2021 Massachusetts WQS for aluminum have been approved by EPA. Therefore, as explained in the Fact Sheet Section 4.7.3, there are four eligible WWTFs (i.e., Athol, Winchendon, Lee, and Maynard) that currently have an aluminum limit with a 3-year compliance schedule that will not be carried forward under this General Permit because the limits are not necessary to protect the updated water quality standards.

Comment 27

I would like to clarify in regards to sampling frequencies. Do I follow my current NPDES Permit as we go forward if the sampling frequencies are more numerous than the Site Specific General Permit or do I follow the new Site Specific General Permit requirements? For instance the Site Specific General Permit has me testing TSS/BOD 1/week while the existing NPDES permit MA0101001 has a measurement frequency of 2/week.

In addition, when the Site Specific General Permit has a measurement of 5/Week for a parameter that is currently monitored as 2/day (for instance the pH range), could you confirm that it would mean pH measurement would not be required on Saturdays and Sundays under the General Permit?

In comparing the overall General Permit subject to this review to my Site Specific General Permit, when there is something in the General Permit and it is not reflected in the Site Specific Permit, do I simply follow the site specific permit? For instance the overall General Permit has COD testing listed in the list of parameters and my Site Specific Permit has no COD testing requirement.

Response 27

The monitoring frequencies included in each currently effective individual permit remain effective until a facility is authorized under the General Permit. After the Final General Permit is issued EPA will send each permittee an authorization that will include the monitoring frequencies that apply once that authorization becomes effective.

This also applies to all other permit conditions. Each permittee should follow the terms of their individual permit until the effective date of an authorization under the General Permit, at which time the individual permit will be terminated.

Comment 28

My sludge is trucked out to the Greater Lawrence Sewer District. It is there that they perform the testing on our sludge applicable under 40 C.F.R. 503. I report the Annual Biosolids Report and Greater Lawrence reports concerning any sludge testing. Up until now we have not tested the sludge here. Is Maynard now responsible for doing the PFAS testing on the sludge?

Response 28

Yes, Maynard is responsible for PFAS testing on sludge under the General Permit. This testing is independent from any requirements under 40 CFR Part 503.

Comment 29

In the current NPDES Permit, Effluent Nitrite and Nitrate testing is listed as two separate tests. In the Site Specific General permit, the monitoring requirement is for combined Nitrate + Nitrite. This will change the reporting to a single result. Could you confirm that Effluent Nitrate and Nitrite will not need to be reported as separate parameters under the General Permit?

Response 29

Yes, nitrate and nitrite should be reported as the sum of those two parameters. Certain analytical methods measure Nitrate + Nitrite directly and other analytical methods measure each parameter separately. The Permittee may use either option to measure these pollutants and then should report the sum of both pollutants.

I. Comments from Jay R Green, Town Administrator, Town of Adams, on April 20, 2022:

Comment 30

Thank you for the opportunity to provide comments on the 2022 DRAFT National Pollutant Discharge Elimination System Medium Wastewater Treatment Facility General Permit (NPDES) for the Town of Adams. In addition to this letter, the Town is respectfully requesting a meeting at your convenience to discuss the proposed changes in the draft NPDES permit. We can arrange for an in-person meeting or a remote meeting; whichever is convenient for your staff. Taking into consideration the challenges and potential impact to our facility that some of these proposed

changes in the draft permit will have on our community, we feel a meeting will be beneficial to both parties.

Response 30

EPA has provided responses to the comments below. The Town of Adams is welcome to contact EPA if any further clarification is needed.

Comment 31

The Town's most critical concern is the proposed reduction in the Total Phosphorus limit from 0.4 mg/L to 0.36 mg/L. Our Wastewater Treatment Plant (WWTP) was commissioned in 1970 and was partially refurbished in 2005-2006. It is now scheduled for another five-million-dollar SRF funded improvement project to begin this summer/fall. Despite those capital upgrades, both projects did not address phosphorus removal and the plant is essentially being operated at or beyond the capability of our existing equipment and tank capacity to meet the current Total Phosphorus limit. The proposed, new lower limit will be a monumental challenge for our plant to meet without substantial construction. Thankfully, our plant operators have had success meeting the current limit due to chemical dosing optimization and the plant's large clarifiers. Based on the physical design of the plant, this small incremental decrease in the phosphorus limit will make it extremely challenging for Adams to meet by current conventional means. It should be noted that the Total Phosphorus limit was reduced from 1 mg/L to 0.4 mg/L in the last permit cycle. The Town is concerned that the limited environmental benefits of a 0.04 mg/L reduction in Total Phosphorus will require an approximate $15-$20 million-dollar project in a low-income community already facing other economic challenges to construct an advanced tertiary treatment system in order to meet the reduced limit.

Response 31

EPA notes that permit limits must be established to protect water quality standards. In this case, EPA's site-specific analysis determined that a limit of 0.36 mg/L is necessary. Comparing the phosphorus data from the Adams WWTF over the review period, EPA found that the discharge is mostly in compliance with the new limit but has had a few exceedances in the past 3 years. Therefore, EPA included a 2-year compliance schedule in the Draft General Permit to allow adequate time for the Permittee to both evaluate and implement either optimization or minor process changes to ensure consistent compliance with the more stringent limit.

However, 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.

Comment 32

Relatedly, the proposed lower Total Aluminum limit may also affect the plant's ability to meet a lower Total Phosphorus limit. Adams' WWTP relies on aluminum-based coagulants for phosphorus removal. The proposed lower Total Aluminum limit will make compliance with the proposed lower Total Phosphorus limit that much more challenging. It will be important to discuss with EPA/MADEP staff this correlation so that we can find compromise between the plant's ability to effectively process and the desire to remove these materials from the effluent.

Response 32

At the time of issuance of this General Permit, the revised 2021 Massachusetts WQS for aluminum have been approved by EPA. Therefore, the limits indicated in Attachment E of the Draft General Permit under the heading "Modified Limit(s) if new WQS approved before issuance" will apply. EPA notes that the modified phosphorus limit is subject to a 24-month compliance schedule, allowing ample time for the facility to optimize the treatment process to achieve the more stringent phosphorus limit and the existing aluminum limit.

Comment 33

In the event that the proposed reduced Total Phosphorus and/or Total Aluminum limits are included in the final permit, Adams will be requesting additional time beyond the proposed 24 months indicated in the proposed schedule of compliance to comply with new limits. At a minimum, Adams will need 24 months to attempt to optimize our existing system to meet the proposed limit. Although Adams intends to make every attempt to meet a new limit, should construction of any new treatment systems ultimately be required to meet this limit, then Adams will not be able to comply within 24 months. If optimization of our current system is not successful, then we will need an additional 60 months beyond the 24-month optimization period to plan, design, determine financing sources, construct and test a new tertiary treatment system. This will be a significant undertaking for the Town of Adams.

Response 33

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 may result in compliance within 24 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 24 months through optimization or minor process changes, 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 ECAD to discuss a potential administrative order with additional time to achieve the phosphorus limit through alternate means.

Comment 34

In addition to the possibility of having to construct a new treatment system to meet the proposed Total Phosphorus limits, there are additional important plant upgrades that will still be required of us to take on in the coming years, but which were not able to be included in the current project because of affordability concerns. The fiscal challenge of managing the previous improvement project debt, current $5 million improvement project and future needed capital improvements, plus the potential for another $15M-$20M tertiary treatment system is an overwhelming possibility for this community. I reiterate our significant concern that the limited environmental benefits of a 0.04 mg/L decrease in our Total Phosphorus limit does not seem to justify the major

financial burden to our low-income community that very well may result from this permit change.

Although our improvements have not addressed phosphorus, they have addressed other aspects of the treatment process including the collection system, chlorination monitoring/alarms, plant redundancy, sustainability, efficiency and standby power. Although we know that more work is needed, the Adams WWTP is meeting the current permit requirements and is investing in the WWTP. We are grateful for the Massachusetts State Revolving Fund program that has funded our capital improvements. The Town is also grateful for EPA and DEP' s consideration and understanding of our community's needs.

Response 34

See Response 31. EPA acknowledges and appreciates the Town's efforts and commitments to address a wide variety of requirements under its permit.

J. Comments from Adam Higgins, Project Engineer, Wright-Pierce and the Spencer Sewer Commission, on April 21, 2022:

Comment 35

Part II.A. Table 1 – Total Nitrogen Average Monthly Limit of 90 lbs/day is a new addition. In prior communications with MassDEP, the Town was expecting the potential of a numerical TN limit during a future individual permit renewal, not sooner than the year 2024. Regarding footnotes 6 and 11; Footnote 11 references Part III.G and F for additional requirements and compliance schedule; Part F is in reference to the Total Phosphorus compliance schedule and does not contain language on Total Nitrogen compliance. Part G references TN optimization and reporting but does not contain any language about compliance with the proposed new numerical limit of 90 lbs/day. The design upgrade to meet TP compliance is already out to bid. This proposed new TN limit should be removed until the next individual permit renewal (2024), at the earliest.

Response 35

Contrary to the comment, Part III.F of the Draft General Permit specifies that the new total nitrogen limit of 90 lbs/day for Spencer is subject to a 24-month compliance schedule. Given that this 24-month schedule will not begin until the effective date of Spencer's authorization under the Final General Permit (likely not until early 2023), the nitrogen limit will not become effective until 2025. Given that the Town was expecting a numeric TN limit no sooner than 2024, EPA does not consider this comment as a reason to justify a further delay in a permit limit that is deemed necessary to protect water quality standards.

However, if the Permittee is unable to comply with the limit once it becomes effective, then it is encouraged to contact EPA's ECAD to explore the possibility of an administrative order.

Comment 36

Part III.C.3 – The Spencer collection system contains very few industrial users. From the list provided, Commercial Car Washes would apply. It is unclear how the sewer department staff

would be able to sample the car wash discharge. Please provide guidance on how to accomplish this task.

Response 36

EPA acknowledges that the permittee is responsible for determining which specific industrial users within its jurisdiction are subject to this annual monitoring requirement as described in Part III.C.3 of the General Permit. However, the permittee may incorporate requirements on industrial users through regulatory mechanisms such as local limits, pretreatment programs, industrial discharge permits, and/or sewer use ordinances. Such requirements may include annual PFAS monitoring. Thus, the permittee may transfer all or part of the monitoring responsibilities associated with this monitoring requirement to the industrial user, as it deems appropriate.

K. Comments from John Mainini, Director of Operations, Town of Milford Board of Sewer Commissioners, on April 21, 2022:

Comment 37

The new permit requires that various types of PFAS testing be conducted on sludge as follows:

- Perfluorohexanesulfonic acid (PFHxS)
- Perfluoroheptanoic acid (PFHpA)
- Perfluorononanoic acid (PFNA)
- Perfluorooctanesulfonic acid (PFOS)
- Perfluorooctanoic acid (PFOA)
- Perfluorodecanoic acid (PFDA)

The town has a serious concern about this new testing requirement. Since there has been inadequate guidance and regulation with regard to PFAS in sludge, facilities that test their sludge and find PFAS in the sludge experience an unfair burden with regard to disposal of the sludge; this is because there have been limited outlets who will take the sludge and the sludge is more costly to dispose of. Will towns experience an increase in disposal costs simply due to testing for PFAS? What is EPA doing to mitigate this issue? Please provide a comprehensive plan to demonstrate that the towns who are now subject to this permit will not face a new cost burden to dispose of their sludge, simply because of this new testing requirement.

In addition, the Town hereby expresses a concern with the inclusion of these same PFAS testing parameters in the influent and effluent testing and for industrial users for the same reasons listed above.

Due to the unknown impacts that discovering PFAS in sludge, influent, effluent and industrial users will have on costs of disposing of the sludge and thus on the residents of this Town, we request that this testing requirement be removed.

Response 37

See Response 1.

Comment 38

Part Ill A. Operation and Maintenance of the Sewer System. The Town expresses a concern with the deadlines for these new requirements. The pandemic has created a labor backlog as well as personnel shortages that will make it impossible to meet this deadline in such a short period of time.

Response 38

See Response 2.

L. Comments from Dane Arnold, Director of Public Works, City of Gardner, on April 22, 2022:

Comment 39

On February 3, 2022, the United States Environmental Protection Agency (USEPA) - Region 1 provided public notice of their intent to issue the National Pollutant Discharge Elimination System (NPDES) Medium Wastewater Treatment Facilities (WWTF) General Permit for Massachusetts and informed the City of Gardner that their facility met the eligibility requirements for coverage under the Draft General Permit. The EPA also provided The City with the facility-specific draft general permit for the Gardner Wastewater Treatment Facility (Authorization #MAG590013).

The City of Gardner hereby provides the following written comment regarding the referenced draft general permit.

PARTS III.F and III.G
Parts III.F and III. G of the General Permit read as follows:

F. Schedules of Compliance

1. Total Nitrogen Compliance Schedule

Every April until January 2025, the Permittee shall submit a progress report on the status of the facility upgrade outlining the milestones that the City has achieved. The limit will become effective December 1, 2025.

The limit is a 12-month rolling average limit calculated as the arithmetic mean of the monthly average total nitrogen load for each reporting month and the previous eleven months. Therefore, the rolling average load calculated for the first month of compliance (December 2025) will be based on the arithmetic mean of the monthly average total nitrogen loads for January 2025 through December 2025. Compliance will continue to be measured each month following.

G. Additional Requirements for Facilities Discharging to the Long Island Sound Watershed, the Blackstone River Watershed, the Taunton River Watershed, as well as the Plymouth WWTP and Fairhaven WPCF

1. The Permittee shall continue to optimize the treatment facility operations relative to total nitrogen (TN) removal through measures and/or operational changes designed to enhance the removal of nitrogen in order to minimize the annual average mass discharge of total nitrogen.
2. The Permittee shall submit an annual report to EPA and the State, by February 1st of each year, that summarizes activities related to optimizing nitrogen removal efficiencies, documents the annual nitrogen discharge load from the facility, and tracks trends relative to the previous calendar year and the previous five (5) calendar years. If, in any year, the treatment facility discharges of TN on an average annual basis have increased, the annual report shall include a detailed explanation of the reasons why TN discharges have increased, including any changes in influent flows/loads and any operational changes. The report shall include all supporting data.

The City finds the reporting requirements under Part III.F.1 and Part II.G.2 to be essentially the same with overlapping information. The City therefore requests that the requirement to submit a progress report every April under Part III.F.1 be deleted and the information to be reported on be included with the annual report required under Part III.G.2.

Response 39

EPA disagrees that these two reporting requirements are duplicative but acknowledges that some information may be overlapping. The requirement at Part III.F.1 is a compliance schedule with annual progress reports to document progress toward compliance with the new nitrogen limit that was established in the recent 2021 individual permit. The requirement at Part II.G.2 is a nitrogen optimization requirement with annual reports to document efforts taken to optimize the removal of nitrogen. This optimization requirement is independent of the nitrogen limit and requires the optimization of nitrogen removal from the facility both before and after the nitrogen limit becomes effective. Notably, nearly identical requirements are both included in Gardner's current individual permit at Part I.G.1 and I.G.2 and the General Permit effectively carries these requirements forward, maintaining the same due dates and effective dates.

Therefore, this comment does not result in any change to the Final General Permit. Given the distinction between these two requirements described above, EPA does not expect a significant overlap of information. However, EPA notes that to the extent any required information is overlapping the Permittee must submit that information in both annual reports.

M. Comments from David Coppes, Chief Operating Officer, Massachusetts Water Resources Authority, on April 25, 2022:

Comment 40

The Massachusetts Water Resources Authority ("MWRA") has reviewed the draft National Pollutant Discharge Elimination System ("NPDES") permit no. MAG590000 for medium wastewater treatment facilities in Massachusetts ("GP"), which was noticed on February 8, 2022, the accompanying Fact Sheet, and the Draft Authorization to Discharge MAG590033 for the Clinton Wastewater Treatment Plant ("CWWTP"). MWRA is providing the following comments in accordance with 40 C.F.R. §124.13.

EPA issued and published the initial Draft NPDES Permit No. MAG590000, which would

supersede the individual permit for the CWWTP, for public comment on February 8, 2022, pursuant to the Federal Clean Water Act as amended, (33 U.S.C. 1251 et seq.) ("CWA"). The Massachusetts Department of Environmental Protection ("MassDEP") issued and published a companion state water quality permit (MA Permit No. MAG590000) on the same date pursuant to the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, 26-53).

MWRA appreciates EPA's efforts to streamline the NPDES process for similar sized wastewater treatment facilities, and any efforts that help ease regulatory burdens for small and medium-sized facilities. While MWRA does not question EPA's legal authority under the CWA and EPA's NPDES regulations to include MWRA's CWWTP as a publicly owned treatment works ("POTW") that is subject to the GP, it does question EPA's stance to unilaterally include these communities as "co-permittees" under the GP. In short, EPA's position: (a) runs counter to its authority under the CWA and NPDES regulations; (b) creates liability risks; and (c) is not logically supportable justification. Accordingly, MWRA respectfully maintains that EPA should modify its GP approach to remove the co-permittee obligations from the GP. MWRA has additional comments regarding the GP's terms and conditions for: (1) Total Nitrogen; (2) Phosphorus; (3) PFAS; (4) Whole Effluent Toxicity reporting; (5) calculations involving non-detects; (6) Ambient monitoring; (7) Total Residual Chlorine; (8) Unauthorized Discharges; (9) dilution studies; (10) Industrial Pretreatment Program; and (11) Reporting, which are set forth below. MWRA also includes comments on Attachment E and on Draft Authorization # MAG590033.

Response 40

EPA acknowledges this comment and has responded to the items raised in more detail below.

Comment 41

<u>Comments on inclusion of Co-permittees in the draft NPDES general permit</u>

EPA is not authorized under the CWA and EPA's NPDES program to include municipalities that do not discharge to waters of the U.S. as Co-permittees in draft NPDES permit no. MAG590000 for MWRA's CWWTP. Further, the inclusion of Co-permittees creates unacceptable liability risks for Permittees and Co-permittees. Finally, the use of Co-permittees in the GP is logically flawed.

1. Background

The GP includes conditions related to the operation and maintenance of the sewer system. See, Fact Sheet and Supplemental Information NPDES General Permit Number: MAG590000 at 36-37 (hereinafter "Fact Sheet"). General requirements for the proper operation and maintenance, and mitigation are included in Parts VII., III.A, and III.B of the GP. EPA explains that the various requirements "…include mapping of the wastewater collection system, preparing and implementing a collection system operation and maintenance plan, reporting of unauthorized discharges including SSOs, maintaining an adequate maintenance staff, performing preventative maintenance, controlling inflow and infiltration ("I/I") to separate sewer collection systems (combined systems are not subject to I/I requirements) to the extent necessary to prevent sanitary sewer overflows ("SSOs") and I/I related effluent violations at the Wastewater Treatment Facility and maintaining alternate power where necessary." Fact Sheet at 36.

EPA maintains that since certain municipalities own and operate collection systems that discharge to one or more of the WWTFs covered by the GP, these municipalities have been included as "copermittees" for these specific permit requirements. Fact Sheet at 36. EPA's position regarding copermittees is not new and EPA reviews the rationale for this position in Appendix C to the Fact Sheet.

The specific municipalities identified as co-permittees for each facility are listed in Attachment E of the GP. According to Attachment E, of the 44 treatment facilities eligible for coverage under the GP, eight treatment facilities will be coupled with eleven separate municipalities as "copermittees." These treatment facilities, the facilities' current permit numbers, and the proposed co-permittees are as follows:

Table 1.

Facility Name	Current Permit Number	Co-permittee(s)
Gardner WWTF	MA0100994	Ashburnham
South Hadley WWTP	MA0100455	Granby
Easthampton WWTF	MA0101478	Southampton (new)
Pepperell WWTP	MA0100064	Groton
MWRA-Clinton STP	MA0100404	Clinton, Lancaster
Hull WPCF	MA0101231	Hingham
Marshfield WWTF	MA0101737	Duxbury (new)
MFN Regional WPCF	MA0101702	Mansfield, Norton, Foxboro

As set forth in Table 1. above, EPA has included the Town of Clinton and the Lancaster Sewer District as "co-permittee" communities that would be covered by the GP, because they own and operate municipal satellite sewage collection systems, which convey sewage to MWRA's CWWTP for treatment prior to discharge to the South Branch of the Nashua River.

MWRA owns and operates the CWWTP and an approximately one-mile separate sanitary interceptor sewer line that delivers wastewater to the CWWTP. CWWTP is an advanced wastewater treatment plant, which discharges through a single outfall to the South Branch of the Nashua River pursuant to NPDES Permit No. MA0100404. CWWTP treats wastewater from the Town of Clinton and the Lancaster Sewerage District. Wastewater enters CWWTP through two connections: (1) a 24-inch diameter reinforced concrete sewer connected to the MWRA 30-inch diameter interceptor on High Street (Clinton influent); and (2) an 18-inch diameter reinforced concrete sewer connected to the Lancaster interceptor on High Street (Lancaster Sewer District influent). MWRA owns and maintains approximately one mile of 20-inch, 24-inch and 30-inch interceptor in Clinton that parallels the South Branch of the Nashua River between High and Williams Streets.

The Town of Clinton and the Lancaster Sewer District own and operate their respective separate sewage collection systems. The Clinton sewage collection system includes approximately 40 miles of sewers ranging in diameter from 8 to 30 inches. The Clinton collection system has nine public and eleven special connections to the MWRA interceptor system. The southern portion of the Town of Lancaster ("Lancaster Sewer District") is served by a sewage collection system that

includes seven small pump stations and approximately 22.6 miles of pipeline, primarily 8, 10, and 15-inch diameter lateral sewers. The Town's one main interceptor (15 to 36-inch diameter) collects flow from the lateral sewers and connects to MWRA's 18-inch diameter interceptor on High Street. Neither the Town of Clinton and nor the Lancaster Sewer District discharge to the South Branch of the Nashua River.

Response 41

EPA acknowledges this comment.

Comment 42

2. Comments

a. Legal Authority

The CWA and the NPDES regulations require permits for the direct discharge of pollutants from a point source into the waters of the United States. Moreover, Section 301(a) of the CWA states that the discharge of any pollutant to the waters of the United States except in compliance with a NPDES permit is unlawful. Including the Town of Clinton and the Lancaster Sewer District as entities that are subject to the GP or including municipal satellite sewage collection systems that convey sewage to POTW treatment plants for treatment in individual NPDES permits, as has been EPA's past practice, oversteps their authority and is an erroneous interpretation of the CWA and the NPDES regulations. It is EPA's position that pipes and other conveyances comprising the satellite sewer collection systems are point sources that discharge pollutants to the waters of the United States, and are therefore subject to regulation under the NPDES program. While EPA is generally given deference to interpret its own regulations, it does not have the authority or discretion to change the meaning of the CWA or its regulations. EPA's NPDES permitting approach for POTWs that include municipal satellite sewage collection systems is not supported by the CWA or EPA's NPDES regulations. This approach would require that all municipal satellite sewage collection systems, which convey sewage to POTW treatment plants for treatment, have NPDES permits to legally operate or in other words, make it a violation of the CWA to operate a municipal satellite sewage collection system without the authorization of a NPDES permit.

Section 402(a)(1) of the CWA authorizes EPA to issue permits for the discharge of pollutants from a point source into the waters of the United States. Section 33 U.S.C. §1362 of the CWA and 40 C.F.R 122.2 define "discharge of pollutant(s)" as any addition of any pollutant to navigable waters from any point source and any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft. "This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person <u>which do not lead to</u> a treatment works…" (Emphasis added). Section 502(14) of the CWA and 40 C.F.R 122.2 define "point source" as any discernible, confined and discrete conveyance…<u>from which pollutants are or may be discharged</u>. (Emphasis added). A NPDES permit issued pursuant to 40 CFR 122, 123, and 124 is a license that grants permission to a direct discharger of pollutants to discharge a specified amount of pollutant into the waters of the United States subject to certain effluent limitations and conditions that ensure that such discharge receives adequate treatment so that the discharge will be in compliance with state water quality standards and the CWA. "Direct discharge" is defined as the discharge of a pollutant. 40 C.F.R 122.2. The adjective "Direct" as defined in the

Merriam-Webster Dictionary means stemming immediately from a source. In this case, the only direct discharge to South Branch of the Nashua River is from the CWWTP outfall (001).

From a reading of the CWA and 40 CFR 122, 123, and 124, it is clear that a NPDES permit for a POTW treatment plant is issued to a direct discharger. A direct discharger discharges pollutants from a point source directly into the waters of the United States. The NPDES permit is authorizing such discharge subject to certain effluent limitations and conditions. CWWTP is a POTW treatment plant that is designed to provide treatment to sewage and authorized to discharge treated pollutants to the waters of the United States subject to certain effluent limitations and conditions. Combined sewer overflows ("CSO") (stormwater runoff combined with municipal sewage) are other examples of point sources that directly discharge from a point source into the waters of the United States. CSOs discharge to the waters of the United States prior to reaching a treatment plant for treatment, and therefore require authorization to discharge in compliance with state water quality standards and the CWA.

The only entity that is subject to regulation is the "person who discharges or proposes to discharge." 40 CFR 122.21(a)(1). CWWTP is the entity that is discharging pollutants from a point source into the South Branch of the Nashua River. The Town of Clinton and the Lancaster Sewer District merely convey sewage to the CWWTP for treatment. The Town of Clinton and the Lancaster Sewer District do not discharge pollutants directly from point sources into the South Branch of the Nashua River. Therefore, the Town of Clinton and the Lancaster Sewer District are not required by the CWA and 40 C.F.R. 122, 123, and 124 to be covered by the GP. To argue otherwise would go against the CWA and the NPDES regulations, because it would require that all municipal satellite sewage collection systems be permitted to operate or be in violation of the CWA.

EPA drafted its NPDES permitting approach for POTWs that include municipal satellite sewage collection systems (Appendix C of *Fact Sheet*), well after it began including municipal satellite sewage collection systems as co-permittees in individual NPDES permits issued to POTW treatment plants. EPA developed its approach in response to a May 28, 2010, decision by its Environmental Appeals Board ("EAB") remanding certain permit provisions. *See, In re Upper Blackstone Water Pollution Abatement District*, 14 E.A.D. 577 (EAB 2010). EPA Region I issued its approach in 2012 in response to the EAB's 2010 remand to provide its reasoning for its legal authority to include satellite sewage collection systems as co-permittees in individual NPDES permits issued to POTW treatment plants. Rather than reviewing the purpose of CWA and its NPDES regulations as a whole, EPA made the argument that it had the legal authority to include satellite sewage collection systems as co-permittees by interpreting definitions in the CWA and its NPDES permitting regulations in such a way as to support its position. This is at odds with the overall purpose of the CWA and the NPDES permitting regulations. Most notably, Region I states that because the term "point source" includes "pipes" satellite sewage collection systems, which include pipes to convey sewage flows to POTW treatment plants for treatment prior to discharge, are required to have a NPDES permit to operate. EPA concluded that since the satellite sewage collection systems convey sewage to a POTW treatment plant for treatment, which discharges from a point source directly into the waters of the United States, the satellite sewage collection systems are contributing to the discharge of pollutants from the POTW treatment plant, and are therefore discharging pollutants from a point source as defined in the CWA and the NPDES regulations. If that were the case, homeowners who discharge domestic sewage into a satellite sewage collection system would also be subject to the GP because they are

contributing to the discharge from the POTW treatment plant. This interpretation is an erroneous conclusion of law.

Satellite sewage collection systems merely convey sewage to POTW treatment plants for treatment and are not direct dischargers or indirect dischargers under the CWA or the NPDES regulations. Here, the Town of Clinton and the Lancaster Sewer District only convey sewage to CWWTP for treatment prior to discharge from outfall (001) the South Branch of the Nashua River. Therefore, the Town of Clinton and the Lancaster Sewer District do not require NPDES permits to operate their respective municipal satellite sewage collection systems pursuant to the CWA or the NPDES regulations. Moreover, the Town of Clinton and the Lancaster Sewer District would not be in violation of the CWA for operating their respective sewage collection systems without coverage under a NPDES permit.

Response 42

The Board has previously upheld the Region's approach to co-permitting of satellite communities. *In re Charles River Pollution Control Dist.*, 16 EAD 623, 24 (EAB 2015). Neither the CWA nor the NPDES regulations prohibit the Region from regulating the satellite communities under a single NPDES permit with a regionally integrated plant. The record in this case supports applying the legal reasoning in Charles River to the Region's permit decision here. *See also In re Springfield Water & Sewer Comm'n*, 18 E.A.D. 430, 514-516 (same). The specific legal rationales identified by the Board in upholding EPA co-permittee approach, and those set forth in Fact Sheet, Appendix C, encompass and dispose of the commenter's objections and are incorporated here.

Comment 43

b. Liability Risks

Without question, the CWA, like many Federal environmental laws contains significant and far reaching enforcement tools, including: (1) criminal, civil, and administrative enforcement actions; (2) separate permitting actions (e.g., permit termination); and (3) citizen suit enforcement. In the NPDES context, however, the linchpin that supports all of these command and control options is the NPDES permit itself, including its terms and conditions. This point is underscored by many of the standard conditions that appear in all NPDES permits. *See e.g.,* 40 C.F.R. § 122.41(a) ("Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application."). Accordingly, "[e]ach [NPDES] permit must be written clearly and unambiguously so that compliance can be tracked effectively and the permit can be enforced if violations occur." *NPDES Permit Writers' Manual*, EPA-833-K-10-001, at 11-21 (September 2010).

To its credit, EPA has at least implicitly recognized that having multiple entities like WWTP owners/operators and municipal owners/operators of sewage collection systems joined in a single NPDES permit can create unintended liability risks for all, when a single entity is alleged to be in violation. *See, In re Charles River Pollution Control District*, 16 E.A.D. 623, 639-640 (EAB 2015) (Charles River Pollution Control District and four separate Towns were joined in a single NPDES permit). In *Charles River*, EPA defended its permit against claims that the permit language was unclear such that each of the Towns risks liability from EPA or citizen suit

enforcement if the Charles River Pollution Control District or other Towns fail to comply with the terms of the NPDES permit. EPA explained that "the Permit holds the [Charles River Pollution Control] District and Towns responsible only for portions of the collection system that they own or operate. * * * * The Region reaffirms its consistent reading of the Permit, which reflects Petitioners' desired interpretation: each permittee is only responsible for actions with respect to the portions of the collection system that it owns and operates, and is not liable for violations relative to portions of the collection system operated by others." *Id* at 639. The EAB found this to be acceptable when it was further coupled with EPA's record statements, finding the interpretation is "an authoritative reading of the permit that is binding on the Agency." *Id* at 640. EPA appears to be advancing a similar construct with language included in the GP.

The GP expressly provides that "[c]ertain municipalities are also identified as Co-permittees related to operation and maintenance of the sewer system in compliance with the Standard Conditions of Part VII and the terms and conditions of Part II.C, Unauthorized Discharges; Part III.A, Operation and Maintenance of the Sewer System (which include conditions regarding the operation and maintenance of the collection systems owned and operated by the municipality); and Part III.B, Alternate Power Source." *See*, GP at 1. The draft GP goes on to explain that the "…Permittee and Co-permittee are severally liable for their own activities under Parts II.C, III.A and III.B and required reporting under Part V with respect to the portions of the collection system that they own or operate. They are not liable for violations of Parts II.C, III.A and III.B committed by others relative to the portions of the collection system owned and operated by others. Nor are they responsible for any reporting under Part V that is required of other Permittees under Parts II.C, III.A and III.B." *Id*.

The *Charles River* matter, however, remains instructive as it lays bare at least two problems with the GP co-permittee approach. First, notwithstanding the language on page one of the GP, the terms of the draft GP are ambiguous. As but one example, the GP's "Duty to Comply" and consequences for non-compliance still may be read to fall squarely on the Permittee. *See*, GP Part VII.A.1. ("The Permittee must comply with <u>all</u> conditions of this permit. <u>Any</u> permit noncompliance constitutes a violation of the [CWA] and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [emphasis added]."). At best, this standard condition creates an ambiguity. At worst, it directly conflicts with the language appearing on page one of the GP.

Second, even if all of the GP's terms are dutifully examined and scrubbed for further ambiguities and conflicts, the rationale EPA previously advanced in the *Charles River* matter remains incomplete and therefore problematic. *See, Charles River* at 640 (EPA advanced a "…reading of the permit that is *binding on the Agency*….[emphasis added]"). Presumably, however, EPA's reading is not similarly binding on third parties. This arguably leaves Permittees (and Co-permittees alike) unnecessarily exposed to separate citizen suit claims and liability theories arising under the very same terms that EPA has foreclosed itself from pursuing in the future. Respectfully, MWRA urges EPA to unequivocally ensure that no enforcement action (in any form) will lie against the Permittee in the case of noncompliance alleged against a Co-permittee (or vice versa).

Response 43

EPA has examined the language regarding liability and does not discern any ambiguity or imprecision in it. Part VII.A.1 says the Permittee must comply with all conditions of this

permit. The Permit at page 1 says the Permittee is not responsible/liable for co-permittee requirements. Put together, the Permittee is not responsible/liable for co-permittee requirements, and vice versa. The Permittee and co-permittees each are liable for complying with their respective obligations in the Final Permit, which are expressly delineated and set forth on the face of the permit. These provisions provide each party with notice of their obligations under the permit and do not foster arbitrary enforcement. Complexity or potential difficulty in developing a future enforcement action by EPA or a third party is not a reason to forestall compliance with the requirements of the Act. EPA would be open to language that might further clarify the obligations and responsibilities of the participants in this arrangement, but neither permittee nor the co-permittees have offered any proposed language in this regard. If in the future, EPA or a citizen were to seek to enforce the provisions of the permit, the Permittee and/or co-permittees may raise any concerns it has about such an enforcement action at that time and in the appropriate forum, whether such action is brought administratively or in federal court. As with a single permit issued to a single owner or operator, if either the Permittee or co-permittee violate the requirements of their permits, liability could attach assuming EPA and/or citizens carry their burdens based on the law and facts of any future case.

Comment 44

c. The GP Further Exposes the Flawed Logic of Including Co-permittees in NPDES Permits

Regardless of EPA's rationale with respect to the prior use of Co-permittees in *individual* NPDES permits, the draft GP construct further exposes a logical flaw that cannot be reconciled. By its terms, only those specifically enumerated types of entities may qualify for coverage under the GP. *See*, GP at Part I.A.&C. In fact, the GP explicitly lists of all Eligible Facilities that may obtain coverage under the GP in Attachment E. Absent from this list of the entities that may obtain coverage, however, are the eleven municipalities identified in Table 1. above, as Co-permittees, including the Town of Clinton and the Lancaster Sewer District.

Accordingly, on the one hand Co-permittees are specifically excluded from obtaining coverage under the GP; while on the other hand, these are somehow transformed into entities that also have binding legal responsibilities under the GP, without ever having sought coverage. This conclusion is not logically supportable to the point of being arbitrary and capricious. Either an entity should be eligible for GP coverage or not, but it cannot make sense that ineligible entities may also be swept into the GP's terms and conditions. For all of the foregoing reasons, MWRA respectfully requests that EPA remove the co-permittee requirements from the GP.

General Comments: All references to co-permittees should be deleted.

Response 44

EPA considers the full definition of "POTW" from 40 CFR § 403.3(q) as follows:

> "The term **Publicly Owned Treatment Works** or POTW means a treatment works as defined by section 212 of the Act, which is *owned by a State or municipality* (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes

sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the Act, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works." (emphasis added)

Given that satellite collection systems are defined as part of a POTW, EPA considers each co-permittee of an eligible POTW to also be eligible for coverage under the General Permit based on the eligibility of the POTW as described in Part I.A and C of the General Permit. In other words, if a POTW is eligible for coverage then both the Permittee and Co-permittee(s) that own and/or operate different portions of that POTW (including the collection system) are eligible for coverage. Contrary to this comment (yet consistent with Comment 41 by the same commenter), the co-permittees mentioned in this comment were included in Attachment E of the Draft General Permit, clearly indicating their eligibility for coverage.

See Response 42. EPA recognizes that the Board's decision to uphold the Region's approach to co-permittees was related to an individual permit, but EPA is implementing the same co-permittee approach under this General Permit. This comment does not result in any change to the Final General Permit.

Comment 45

Comments on Part II.A. Table 1

MWRA appreciates that the monitoring frequency has been reduced for some parameters. The CWWTP has an excellent record of permit compliance, with occasional violations of the flow limit, which is beyond the control of the operator. The monitoring frequency in the GP is sufficient to ensure that CWWTP continues to produce excellent quality effluent.

Furthermore, MWRA applauds the flexibility afforded to permittees to sample for whole effluent toxicity ("WET") at any time during the calendar quarter (provided a routine schedule is established and followed), rather than specifying months at the end of the quarter. This allows the time-consuming chronic toxicity testing and reporting to be completed with sufficient time to allow reporting of WET at the same time as the other parameters, so that only one Discharge Monitoring Report is needed.

Response 45

EPA acknowledges the comment. See Response 275 for further discussion of monitoring frequencies.

Comment 46

<u>Total Nitrogen</u>

The GP requires monitoring and reporting of nitrate+nitrite, Total Kjeldahl nitrogen, and reporting of total nitrogen concentration and load, for all permittees. MWRA recommends that this requirement be eliminated for those permittees who do not discharge into waters designated by the MassDEP as impaired due to nitrogen.

The *Fact Sheet* (section 4.1) notes that excessive nitrogen loadings to waterways can cause water quality problems at estuaries. However, not all Massachusetts estuaries have water quality problems caused by nitrogen loading, and there is therefore no justification for requiring nitrogen monitoring of all permittees covered by the GP. Indeed, some of the permittees covered by the GP discharge directly into oligotrophic coastal waters (*e.g.*, Marshfield). There is a qualitative difference between the southeastern Massachusetts estuaries that are sensitive to nitrogen, and the colder, deeper, macrotidal, and better-flushed estuaries north of Cape Cod.

Although monitoring of effluent nitrogen is likely not onerous, MWRA cautions that the *Fact Sheet* does not adequately justify a concern about nitrogen loading to all receiving water bodies in the state. In cases where MassDEP has determined an impairment exists, the appropriate next step for addressing any such impairment would be development of an approved TMDL.

Response 46

This comment suggests that nitrogen monitoring only be included for WWTFs that discharge to waters impaired due to nitrogen. EPA disagrees with this comment and notes that such monitoring will be necessary to determine whether a discharge has the reasonable potential to cause or contribute to an excursion of water quality standards. *See* 40 CFR § 122.44. EPA acknowledges that there are differences in the susceptibility of certain waters to impacts from nutrient enrichment but has determined (as described in the Fact Sheet at 28) that sufficient effluent monitoring data for all dischargers will be useful in the future to ensure water quality standards are maintained regardless of the impairment status. Given that all nitrogen discharges in Massachusetts eventually reach a downstream marine water, that nitrogen loads impact marine waters cumulatively on a watershed-wide basis, and that such effluent monitoring is "likely not onerous," EPA considers this monitoring requirement to be reasonable and appropriate and may be used both in the next permit reissuance and/or in the development of a future TMDL, if necessary. This comment does not result in any change to the Final General Permit.

Comment 47

<u>Phosphorus</u>

The GP requires ambient monitoring for phosphorus for several permittees. MWRA recommends that this requirement be eliminated for those permittees who do not discharge into waters designated by the MassDEP as impaired due to phosphorus. MWRA notes that in the Final 2018/2020 Integrated list of Waters (§303(d) list) approved by EPA on February 2, 2022[1], the water quality of the South Nashua River (MassDEP assessment units MA81-08 and MA81-09) is not impaired for phosphorus.

Permittees such as the Clinton WWTP, who discharge to waters not impaired for phosphorus, should be removed from the list of those required to perform ambient phosphorus monitoring.

Massachusetts Water Quality Standards 314 CMR 4.00 include a narrative standard for nutrients. There is no Gold Book criterion for phosphorus in freshwater. In fact, the Gold Book outlines, "No national criterion is presented for phosphate phosphorus for the control of eutrophication."

The Fact Sheet erroneously uses values mentioned in one (1973) literature citation in the Gold Book, ignoring the remainder of the text, and uses 0.1 mg/L as part of the reasonable potential

determination procedure for all freshwater discharges covered by the GP as though it were an approved water quality criterion. Such use is inappropriate and usurps the state's authority to set water quality standards.

The *Fact Sheet* states "EPA is not aware of any site-specific factors relevant to the receiving waters that would result in the waters being unusually more or less susceptible to phosphorus loading." But in fact Massachusetts has recently assessed the state's waters, and EPA has approved the 2018/2020 Integrated list of Waters (§303(d) list). Thus, recent information about phosphorus impairment of Massachusetts fresh waters is readily available.

EPA may consider that there is no harm in broadly applying a stringent phosphorus limit that is not scientifically supported and has not been subject to public review. However, besides the obvious cost to sewer ratepayers, there are environmental costs to requiring nutrient removal when it is not warranted. This includes: (a) the environmental impacts of the energy used – often generated by burning fossil fuels – to operate advanced waste treatment; (b) producing and transporting the additional chemicals required by the process; and (c) treating and disposing of the additional sludge produced.

Please also refer to comments on Footnote 19 below, regarding the ambient phosphorus monitoring study design.

[1] https://www.mass.gov/lists/integrated-lists-of-waters-related-reports#final-2018/2020-integrated-list-of-waters-

Response 47

First, this comment suggests that ambient phosphorus monitoring only be included for WWTFs that discharge to waters impaired due to phosphorus. EPA disagrees with this comment and notes that such monitoring will be necessary to determine whether a discharge has the reasonable potential to cause or contribute to an excursion of water quality standards in the future. *See* 40 CFR § 122.44.

Second, the comment objects to EPA's use of the Gold Book target of 0.1 mg/L by noting that certain waters are impaired for phosphorus and others are not. The commenter seems to conflate EPA's translation of the numeric water quality standard into a numeric target concentration [based on 40 CFR § 122.44(d)(vi)] with the current impairment status of the waterbody. In developing a NPDES permit, EPA must determine whether the discharge has the reasonable potential to cause or contribute to an excursion of water quality standards, and, if so, establish a permit limit that would ensure the protection of such standards. This process is independent from MassDEP's process under CWA 303(d) to assess whether a water is currently impaired for water quality standards. In the Fact Sheet, EPA stated that the Gold Book target of 0.1 mg/L was used because EPA was "not aware of any site-specific factors relevant to the receiving waters that would result in the waters being unusually more or less *susceptible* to phosphorus loading." (emphasis added). Notably, this refers to the evaluation of <u>susceptibility</u> to phosphorus loading for purposes of 122.44(d)(vi) to determine whether an instream water quality target should be higher or lower, in order to attain or maintain the applicable narrative standards. EPA acknowledges that the various receiving waters are currently at differing stages of water quality with differing levels of assimilative capacity and/or impairment. However, such

impairment status merely indicates that current level of phosphorus in the water and does not directly indicate the susceptibility of such water to phosphorus loading. Given that this comment did not provide any information related to the susceptibility of any receiving water to phosphorus, EPA maintains that its use of the Gold Book target was appropriate. This approach is consistent with EPA's permitting methodology, which is to adopt a reasonably protective or precautionary stance when permitting nutrients when faced with uncertainty, given these pollutants tendency to be retained in the receiving water, potentially amplifying the eutrophic cycle. This comment does not result in any change to the Final General Permit.

Comment 48

PFAS

Table 1 of the GP lists six PFAS compounds but the compounds that actually must be monitored and reported on the Discharge Monitoring Report ("DMR") in influent, effluent, and sludge is 40 (Attachment H: PFAS Analyte List), per Footnote 12. All 40 compounds should be included in each applicable subsection of Table 1 of the GP. It is confusing to have required parameters buried within footnotes and attachments. Everything to be reported on the monthly Discharge Monitoring Report should be listed out in Table 1 of the GP.

MWRA supports the language in the footnote that removes compounds that are not successfully validated and approved during the final approval process of EPA Method 1633.

Table 1 of the GP requires composite sampling for PFAS in influent, effluent, and sludge. MWRA recommends the sample type be changed from composite to grab samples. The requirement to collect composite samples conflicts with the sampling instructions provided in the draft EPA Method 1633. Per the method, for aqueous samples (Section 8.2.1) – "*Because the target analytes are known to bind to the interior surface of the sample container, the entire aqueous sample that is collected must be prepared and analyzed and subsampling avoided whenever possible*" Collecting a composite sample for a reasonable sample volume to analyze, while avoiding subsampling would be difficult.

MWRA has specific concerns about the reporting of PFAS sampling results as required in this permit. It is our understanding that EPA's Office of Enforcement and Compliance Assurance is poised to release a new PFAS Analytical Tool this summer that uses software similar to its Enforcement and Compliance History Online database. This tool is supposed to be a much more user-friendly platform for the public to find and search for PFAS data reported under NPDES permits.

While MWRA supports efforts to collect additional information regarding the sources of PFAS entering the environment, MWRA is concerned that without the inclusion of appropriate discussion and caveats in this new PFAS Analytical Tool, wastewater treatment plants (WWTP) may be perceived as sources of PFAS. While PFAS is found in WWTP effluent, the PFAS originates from the domestic, industrial, and commercial wastewater treated by the WWTP. The real source of PFAS lay upstream from the WWTP and come from products used by individuals and industries that contain PFAS. As additional information about PFAS is collected, EPA

should concurrently educate the public about the sources of PFAS in WWTP effluent, not perpetuate public perception that WWTPs are independent sources of PFAS.

Response 48

First, this comment correctly notes that PFAS sampling and reporting should include the full list of parameters shown in Attachment H of the Draft General Permit. The comment requests that these parameters be included in Table 1. EPA has chosen to summarize these parameters in an attachment due to the length of the list and to prevent Table 1 from becoming too large. The commenter seems to have understood the requirement clearly. Therefore, EPA will maintain the analyte list in Attachment H of the Final General Permit. However, EPA notes that the six analytes listed in Table 1 of the Draft General Permit are also included in Attachment H. Therefore, to avoid this unnecessary duplication and to further simplify Table 1, EPA has removed the six analytes listed in Table 1 (repeated for effluent, influent and sludge monitoring) and replaced them with one line (repeated for effluent, influent and sludge monitoring) that says "PFAS Analytes" referencing the same footnote that refers to the complete list of 40 analytes in Attachment H of the Final General Permit. This clarification is also made to Parts III.C.3 and III.D.7 related to sampling for industrial users.

Second, the comment requests a change from composite to grab sampling. EPA disagrees with this request on the basis that composite sampling will result in more representative sampling results because there is inherent variability throughout a typical day. To the extent feasible, the permittees should sample in a manner consistent with Method 1633 instructions and that ensures representative results.

Finally, EPA agrees with the comment that most or all of the PFAS found in WWTP effluent originates from the domestic, industrial, and commercial wastewater treated by the WWTP, and not from the POTW itself; although it is possible that some PFAS may originate within the POTW (*e.g.*, from PVC piping). EPA also agrees that public education regarding the sources of PFAS 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.

Comment 49

<u>Whole Effluent Toxicity</u>

Table 1 of the GP lists some, but not all of the parameters required by section VI Chemical Analysis of the toxicity protocols (Attachments A and B for freshwater discharges, Attachments C and D for marine discharges). For example, for freshwater discharges, permittees are required to measure the following, which are not in the table:

- Effluent: TRC, alkalinity, pH, specific conductance, total solids, total dissolved solids
- Ambient: alkalinity, pH (from WET test), specific conductance.

It is confusing to have required parameters, buried within footnotes and attachments. Everything to be reported on the monthly Discharge Monitoring Report should be listed out in Table 1 of the GP.

Response 49

EPA acknowledges that Permittees must perform WET tests in accordance with relevant Attachments A through D, as applicable, and that these attachments require the measurement of certain parameters. In the past, none of these parameters were required to be reported on each monthly Discharge Monitoring Report (DMR) and were merely included in the WET test report submitted as an attachment to the DMR. However, in recent years, EPA determined that much of that parameter-specific data would be more efficiently summarized and used by EPA if it were also reported in the monthly DMR. Notably, this reporting requirement does not result in any additional monitoring but merely a requirement to report the results independently. However, as the comment notes, not all of the information in the WET test reports was deemed necessary for reporting in this manner. Rather, EPA summarized in Table 1 only the information that EPA anticipates using broadly in the future. The other data (summarized in the comment) may still be useful on occasion but are not deemed necessary for this type of reporting. Therefore, EPA confirms as the comment requests that everything related to the WET test that must be reported on the monthly DMR is listed in Table 1 of the General Permit. This comment does not result in any change to the Final General Permit.

Comment 50

Comments on Footnotes to Part II.A. Table 1

<u>Footnote 2 minimum level and DMR calculations</u>

When a parameter is not detected above the ML, the Permittee must report the data qualifier signifying less than the ML for that parameter (e.g., < 50 µg/L, if the ML for a parameter is 50 µg/L). For reporting an average based on a mix of values detected and not detected, assign a value of "0" to all non-detects for that reporting period and report the average of all the results.

MWRA has the following concerns with this language:

- As a practical matter, conditioning the calculation of an average on whether all measurements are "nondetects," makes calculating the results and management of the data extremely complex. It would be difficult for the permittee to document how the monthly average is calculated in a straightforward way, if it changes from month to month. Automating the calculation procedure may become impossible. It also makes the reported results unusable for examining trends.

- It does not explain how to combine results from multiple approved methods that have different minimum levels, when all results included in the average are not detected. Should permittees report as less than the largest minimum level, less than the smallest minimum level, or some other value?

- In the case when all approved methods have a minimum level that is larger than the permit limit (for example, if the Total Residual Chlorine average monthly limit is 17.6 ug/L, and the approved method has a minimum level of 20 ug/L, if chlorine residual was not detected in any samples the result would be reported as "< 20 ug/L" which would (in NetDMR) be flagged as a permit violation.

MWRA recommends that all nondetect results continue to be assigned a value of "0" as is the current practice according to the most recent available instructions[2] for completing a DMR in EPA Region 1. In these EPA instructions, Permittees are instructed to substitute '0' for any non-detect results prior to averaging or reporting results on the DMR.

If the footnote is retained, EPA should provide permittees with instructions on performing the calculation when there are multiple approved methods with different minimum levels. EPA should also ensure that limits coded in NetDMR forms are not less than the minimum level of the most sensitive available approved method.

[2] NPDES Permit Program Instructions For the Discharge Monitoring Report Forms (DMRs) Report Year 2010 (EPA January 2010). This document, which was provided with the 2010 DMR forms, is no longer available on EPA Region 1's web site but can be found on Hach's knowledge base: http://www.opssys.com/InstantKB/attachments/EPA-Region1-2010-DMR-Instructions.pdf

Response 50

EPA notes that this comment seems to be in support of the use of "0" for non-detects as the current footnote indicates and simply raises some concern around the reporting of "less than the ML" if all results are non-detect. EPA agrees that non-detects should be treated as "0" for averaging purposes and does not consider this practice to be overly complex or to prevent automation or trend analysis. Further, EPA agrees that non-detects should also be treated as "0" for compliance purposes, so long as the method was "sufficiently sensitive" as defined in the preceding portion of footnote 2. In that regard, the requirement to report "less than the ML" is merely to allow EPA to easily confirm that the sampling was sufficiently sensitive.

Having said that, the comment seeks some further clarification as follows.

First, when reporting "less than the ML" due to all samples being non-detects, permittees must report the value as less than the highest ML among all samples, which would directly indicate whether all samples were sufficiently sensitive.

Second, EPA notes that a non-detect reported as "< ML" would not be flagged as a permit violation even if the ML is greater than the permit limit, so long as the method was sufficiently sensitive. Importantly, in such a case there would only be a single ML (the lowest one available) that would be considered sufficiently sensitive and any higher ML would not be sufficiently sensitive. EPA will maintain lower effluent limits in permits (as low as necessary to protect water quality standards) because EPA-approved Part 136 methods may become available in the future that allow measurement at or below those limits. However, Part II.B.9.a of the General Permit says "For any permit limits below 20 µg/L, the compliance level for TRC is 20 µg/L." This "compliance level" indicates that any result at or below 20 µg/L will be considered in compliance with the

effluent limit based on the currently available methods. This compliance level may be adjusted in a future permitting action if a new method with a lower ML is approved by EPA.

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

Comment 51

Footnote 12 PFAS

Footnote 12 states in part that "Any [PFAS] parameters that are removed from the method based on multi-lab validation of the method will not be required for reporting and the Permittee may report "NODI: 9" for any such parameters." If at a later time the analyte list changes, because parameters are removed from the method, EPA should consider modifying the permit to remove the PFAS parameters for which no approved method exists.

MWRA recommends that EPA remove Appendix H and list out all PFAS compounds in the tables as noted above. MWRA further recommends that EPA modify the footnote to state that EPA intends to modify the permit to update the list of PFAS compounds to those that pass the final approval process, once EPA Method 1633 has completed validation and approval.

Response 51

See Response 48.

If certain PFAS compounds are removed from the final Method 1633, EPA does not intend to modify the General Permit to remove these compounds from Attachment H. Rather, EPA has included this footnote to account for this possibility in this permit term and will update the list in the next permit reissuance.

Comment 52

Footnote 19 (Ambient Phosphorus Monitoring)

If ambient phosphorus monitoring is required, the described study design seems unnecessarily complex. No rationale is given for sampling only after 72 hours of dry weather. This restriction makes it impossible to schedule sampling resources in advance, and planned sampling may be "rained out" at the last minute. This will be especially burdensome for permittees who do not have in-house trained staff, and/or vessels and sampling equipment with which to carry out the ambient monitoring.

When preparing a Quality Assurance Project Plan, it is necessary to detail the review activities that will be performed to ensure that the collected data are scientifically defensible, of known quality, and can support project objectives – but the project objectives are not explained. EPA should provide a rationale for the study design, as none is provided in the Fact Sheet.

MWRA recommends that if ambient monitoring for phosphorus is retained in the final permit, this section be modified to delete the strikeout text below:

All Permittees listed in Attachment E with "Yes" in the "Ambient TP Monitoring" column shall develop and implement a sampling and analysis plan for biannually collecting monthly samples at a location upstream of the facility. Samples shall be collected once per month, from May through September, every even calendar year. The Permittee may enter "NODI" code 9 (i.e., conditional monitoring) in the relevant discharge monitoring report during years when monitoring is not required. ~~Sampling shall be conducted on any calendar day that is preceded by at least 72 hours without rainfall, following the last rainfall of 0.1 inches of rainfall or greater.~~ A sampling plan shall be submitted to EPA and the State at least three months prior to the first planned sampling date as part of a Quality Assurance Project Plan for review and ~~State~~ **EPA** approval.

Response 52

EPA notes that the ambient phosphorus sampling data are intended to be used the next permit reissuance in order to ensure the discharge of phosphorus does not have the reasonable potential to cause or contribute to an excursion of water quality standards. This analysis is described in more detail in Section 4.9 of the Fact Sheet. As noted, EPA evaluates critical low flow conditions (*i.e.*, 7Q10 conditions) when the discharge of phosphorus from a WWTF is most likely to result in water quality problems. Therefore, this sampling effort is intended to characterize the receiving water during times with limited impact due to rainfall. EPA acknowledges that this incorporates uncertainty into the timing of each sample but considers it necessary in order to obtain the most representative data. If sampling in a given month is not possible due to excessive rainfall, the permittee is not required to sample in that month and may report a NODI code.

Finally, the comment suggests that the Quality Assurance Project Plan (QAPP) be approved by EPA rather than MassDEP. In addition to EPA's use of these data in the next permit reissuance, MassDEP intends to use these data for assessment purposes. Based on this alternate use, the QAPP is subject to MassDEP approval.

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

Comment 53

Comments on Part II.B. Other requirements

<u>Total Residual Chlorine</u>

Part II.B.9 of the GP contains the term "compliance level" which is not defined anywhere in the GP:

<u>9.Total Residual Chlorine (TRC)</u> limitations and related requirements are specified below:

a. All existing TRC limits will be carried forward in the authorization to discharge unless a more stringent limit is required. See Attachment E for a summary of any more stringent TRC limits that apply to an eligible facility. For any permit limits below 20 µg/L, the compliance level for TRC is 20 µg/L.

This section seems to indicate that even if a permit limit is less than 20 µg/L, the limit will be effectively 20 µg/L because that is the minimum level for the most sensitive method. MWRA

requests that EPA confirm that permit limits will be coded in NetDMR to set the permit limit at 20 µg/L, for any permit with a lower limit for TRC.

Response 53

Yes, this comment is correct. See Response 50 for more information.

Comment 54

Comments on Part II.C. Unauthorized Discharges

Part II.C.2 of the GP requires 24 hour notice to the public of unauthorized discharges:

> 2. The Permittee must provide notification to the public within 24 hours of becoming aware of any unauthorized discharge, except SSOs that do not impact a surface water or the public, on a publicly available website, and it shall remain on the website for a minimum of 12 months. Such notification shall include the location and description of the discharge; estimated volume; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue.

The Fact Sheet does not include the basis for this requirement. Furthermore, some unauthorized discharges must be reported to MassDEP and to EPA within 24 hours under the NPDES Standard Conditions (Part VI of the draft permit) and 314 CMR 12. 314 CMR 16 also has requirements for notification. Part II.C.2 of the draft permit seems to conflate and confuse the different requirements, thereby adding additional requirements that EPA has no authority to impose and causing additional confusion to permittees.

Notification of the public of <u>certain</u> sanitary sewer overflows is required by the recently promulgated state regulation 314 CMR 16, however, that regulation does not require permittees to provide an estimated volume within 24 hours. Rather, it requires estimated volumes of sanitary sewer overflows to be provided by the 15th of the following month.

It is not always possible to estimate volume within 24 hours of becoming aware of a sanitary sewer overflow; indeed, if the SSO is caused by extreme weather, it may still be ongoing 24 hours after discovery.

The NPDES standard conditions and 314 CMR 12 require permittees to provide an initial oral report to MassDEP and EPA within 24 hours, but allow <u>five days</u> to provide estimated volume and exact dates and times. See Part VI. D.1.e (emphasis added):

> …A **written report shall also be provided within 5 days** of the time the Permittee becomes aware of the circumstances. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including **exact dates and times**, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow

structure (e.g., manhole, combined sewer overflow outfall), **discharge volumes** untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather.

While it can be challenging to estimate volumes of unauthorized (and un-metered) discharges within five days, that is more reasonable and is consistent with existing regulatory authority. In its Response to Comments on the Greater Lawrence Sanitary District NPDES permit MA0100447, with respect to notifications of combined sewer overflows (CSOs), EPA wrote (response 46):

> In consideration of the time needed for the validation, post-processing and interpretation of CSO data, EPA has determined that requiring the reporting of CSO discharge volumes in the annual notification is more appropriate than the supplemental notification. See also Response 33 regarding the time needed to verify and process CSO data to ensure the reporting of accurate information.

Although this comment related to CSOs, not SSOs, clearly the difficulty of estimating volume is even greater for SSOs than for CSOs.

If the 24-hour notification requirement is retained as written, the unauthorized discharge information is very likely to undergo some corrections between the 24-hour notification and the five-day report. It is not clear in the permit how the Permittee is to handle any discrepancies.

Response 54

This comment seeks the justification for public notification of unauthorized discharges as well as some clarification on some specific parameters that overlap with other reporting requirements.

Regarding the justification, EPA has authority to impose any additional requirements as stated in 40 CFR Part 127 Appendix A: "Authorized NPDES programs may also require NPDES regulated entities to submit more data than what is listed in this appendix. The authorized NPDES program can require NPDES regulated entities to submit these 'non-appendix A' data on paper, electronically, or attachments to electronic notices and reports filed in compliance with this part." In this case, EPA is requiring the information described in the comment to be posted on a publicly available website within 24 hours due to the potential for certain SSOs to impact public health and the need for timely notification to protect public health.

Regarding overlap with other reporting requirements, EPA acknowledges the overlap of some information that must be reported to EPA or to MassDEP or posted on a publicly available website. However, EPA has determined that the permit requirements are necessary to ensure that the necessary information is available to protect public health. Additionally, the new MassDEP regulations 314 CMR 16.00 do not impact permittees' obligations under federal regulations found at 40 CFR § 122.41. As stated in 314 CMR 16.04(13) and 16.07(4) "Compliance with the notification requirements of 314 CMR 16.00 does not relieve a permittee of their obligations under 40 CFR 122.41, 314 CMR

3.19: Standard Permit Conditions, 314 CMR 12.03(8), or other applicable federal and state laws."

Finally, the commenter suggests that certain details of the report, such as the exact date and times as well as an estimate of the discharge volume, may be difficult to determine within 24 hours. EPA acknowledges this difficulty and notes that the permittee should report these details to the best of their knowledge at the time of the report. It is understood and expected that in some cases the five-day report will include further information that will supplement or sometimes correct previous information. The information posted on the publicly available website may also be updated in a timely manner if better information becomes available regarding a particular discharge event. Given the potential impact unauthorized discharges may have to human health, EPA has determined that providing this information as soon as possible outweighs to potential that some of the information will be updated and/or corrected later.

Based on this comment, EPA is correcting a typographical error in Part II.C.1 of the Draft General Permit which refers twice to "Part II.D.1.e" and should refer to "Part VII.D.1.e."

Comment 55

Comments on Part II.E Additional Requirements for Facilities Discharging to Marine Waters

Part II.E.4 of the GP requires certain dischargers to conduct dilution models or dye studies:

> 4. In the fifth year of this permit term, the following eligible dischargers to marine waters must conduct a new model or dye study to determine a defensible dilution factor for their discharge: Plymouth, Hull, Newburyport, Fairhaven, Dartmouth and Marshfield. Each Permittee should coordinate with EPA and MassDEP in advance of conducting the model or dye study to confirm an appropriate methodology for this model or dye study. The results of this model or dye study must be submitted to EPA and MassDEP by the expiration date of the General Permit.

MWRA recommends that EPA delete this requirement. The only rationale provided in *the Fact Sheet* is that the existing dilution studies are "old" – however, there is no reason why dilution should have changed. It is unreasonable to require permittees to go to the expense of redoing the dilution study. Furthermore, permittees design and operate their treatment processes based on approved dilution factors.

If EPA believes that models used in past dilution factor determinations are no longer valid or not up to the quality of newer models, then this should be documented in the *Fact Sheet*. And even if that is the case, for permittees who conducted a dye study there is no reason to require the work to be redone.

Response 55

EPA disagrees with this comment and notes that environmental conditions do change over time. As noted on page 15 of the Fact Sheet, this requirement is for WWTFs whose dilution factors were determined over 15 years ago. By the time this new dilution model or dye study occurs in the 5th year of the permit term, the old dilution factors will be

based on conditions over 20 years prior. EPA does not consider that these old estimates of available dilution will continue to be representative of current conditions at the time of the next reissuance of the General Permit. EPA recognizes that this update will have a modest cost that must be borne by the six listed permittees but considers this a necessary step to maintain permit coverage that is protective of water quality standards. Further, EPA finds that requiring this within the current permit term for these dischargers will expedite the reissuance process for this General Permit.

Comment 56

Comments on Part III.A Operations and Maintenance

Co-permittees should be removed from the permit, as noted above. However, if co-permittees are retained in the GP, the introductory language in this section should be modified by adding the language in bold below:

> Operation and maintenance (O&M) of the sewer system **owned and operated respectively by the Permittee and Co-Permittee(s), if any**, shall be in compliance with the Standard Conditions of Part VII and the following terms and conditions. **Each Co-Permittee, if any, respectively shall only be responsible under Part VII and Part III for only its own infrastructure, activities and required reporting with respect to the portions of the collection system that each owns or operates.**
>
> **Operation and maintenance of that portion of the collection system and the entirety of the treatment system owned and operated by the Permittee shall be in compliance with the General Requirements of Part VII and the terms and conditions of Part III of this permit. The Permittee shall only be responsible under Part VII and Part III for its own infrastructure, activities and required reporting with respect to the portion of the collection and treatment system that it owns or operates. In no event shall the Permittee be responsible for the acts or failure to act of Co-Permittees, or for the failure to properly operate or maintain any collection system or portion of a collection system that it does not own or operate. No Permittee shall be responsible for violations of Part VII, Part III committed by another Permittee relative to the portions of the collection system owned and operated by such other Permittee. In the event of any conflict between the above provisions and any other term or provision of this Permit, the above provisions shall control.** The Permittee and Co- permittee(s), if any, shall complete the following activities for the collection system which it owns:

Response 56

See Response 42.

Language similar to the proposed language in this comment is already included on page 1 of the General Permit in reference to these subparts of the permit. The comment does not specify or justify what value, if any, would result from reproducing such language in this subpart. Therefore, EPA determined that the proposed change is not necessary and is not included in this section of the Final General Permit.

Comment 57

Comments on III.C Industrial Users

The table in C.3 requires composite samples for PFAS in industrial samples discharges. MWRA recommends the sample type be changed from composite to grab samples. The requirement to collect composite samples conflicts with the sampling instructions provided in the draft EPA Method 1633. Per the method, for aqueous samples (Section 8.2.1) – "Because the target analytes are known to bind to the interior surface of the sample container, the entire aqueous sample that is collected must be prepared and analyzed and subsampling avoided whenever possible" Collecting a composite sample for a reasonable sample volume to analyze, while avoiding subsampling would be difficult.

Response 57

See Response 48.

Comment 58

Comments on Part III.D. Industrial Pretreatment Program

Section III.D.3 of the draft permit requires the pretreatment annual report to cover a calendar year and to be submitted by March 1. This is a significant change on how MWRA administers its Industrial Pretreatment Program. MWRA has, for 20 years, submitted its industrial pretreatment report, which covers 2 NPDES permits (MA0103284 and MA0100404) on a fiscal year basis (July- June) due October 31. Changing the due date for one of the permits requires the 2 permits to be tracked, administered and reported differently, requiring 2 Annual Reports. MWRA's Pretreatment Information Management System (PIMS) is set up for fiscal year reporting. The EPA monitoring plan and associated annual fees are based on fiscal year calculating and reporting. The permit should allow permittees to submit the annual report on their existing schedule, e.g. either a calendar or fiscal year basis.

MWRA also requests 90 days rather than 60 days after the reporting period for completion of the annual report. Although the Clinton Wastewater Treatment Plant falls into the medium sized category, MWRAs IPP oversees two NPDES permits with over 2000 Industrial Users. The 90 days to report is required to verify data reports and allows MWRA to report the two permits together.

If the March 1 date is retained, the final permit should make clear whether the first report under the permit is due March 1 of the year the permit becomes effective, or the following March 1, in case of permittees that must switch to a new reporting schedule.

The table in D.7 requires composite samples for PFAS in samples of industrial discharges. MWRA recommends the sample type be changed from composite to grab samples. The requirement to collect composite samples conflicts with the sampling instructions provided in the draft EPA Method 1633. Per the method, for aqueous samples (Section 8.2.1) – "*Because the target analytes are known to bind to the interior surface of the sample container, the entire aqueous sample that is collected must be prepared and analyzed and subsampling avoided whenever possible*" Collecting a composite sample for a reasonable sample volume to analyze, while avoiding subsampling would be difficult.

Response 58

EPA agrees that it is appropriate for MWRA Clinton's pretreatment annual report due date to continue to be based on a fiscal year basis, which will also align this with MWRA's other pretreatment annual report so that they are both due October 31st. Therefore, Part III.D.3 of the Final General Permit has been updated accordingly, only for MWRA Clinton.

Regarding composite sampling, see Response 48.

Comment 59

Comments on Part V. Monitoring, Record-Keeping, and Reporting Requirements

6. Submittal of Sewer Overflow and Bypass Reports and Notifications

> The Permittee shall submit required reports and notifications under Part VII.B.4.c, for bypasses, and Part VII.D.1.e, for sanitary sewer overflows (SSOs) electronically using EPA's NPDES Electronic Reporting Tool ("NeT"), which will be accessible through EPA's Central Data Exchange at https://cdx.epa.gov/.

The language above includes "reports and notifications", VII.B.4.c uses the term "notices", so it would be clearer to revise the above paragraph to say "The Permittee shall submit required reports and notices."

The system for electronic reporting of SSOs, which MWRA understands is called "NeT-SewerOverflow," is not yet available to Massachusetts permittees and it is relatively untested. Furthermore, MWRA's understanding is that it is not yet capable of accepting notices of anticipated bypasses required by VII.B.4.c.(1). Therefore, MWRA recommends that the GP provide for an alternate permitted method in case a permittee is unable to access CDX or the NeT- SewerOverflow program service. For example, add the clause:

> unless the permittee is able to demonstrate a reasonable basis that precludes the use of NeT-SewerOverflow for submitting reports.

and add information about how to submit reports if NeT-SewerOverflow is not available.

Response 59

EPA agrees that the term "notifications" in Part V.6 of the General Permit should be replaced with "notices" to be consistent with Part VII.B.4.c.

EPA disagrees that "NeT – SewerOverflow" is untested and confirms that it is currently up and running in New Hampshire and will be rolled out soon for Massachusetts as well. EPA confirms that NeT will be able to handle notices of anticipated bypasses required by VII.B.4.c.(1). Therefore, EPA has not added the proposed language to the Final General Permit. However, EPA notes that Permittees may request a waiver from electronic reporting as described in 40 CFR § 127.15, which, if granted, would require permittees to submit hard copy reports and notices.

Comment 60

Comments on Attachment E

Critical low flow

On Attachment E the critical low flow (upstream 7Q10) listed for the Clinton wastewater treatment plant is 2.63 cfs (1.70 MGD). MWRA requests that this value be corrected to be **5.52 cfs (3.57 MGD)** as explained below[3]. The resulting corrected dilution factor for a plant flow of 3.01 MGD would be 2.2 rather than 1.6.

The critical low flow value of 5.519 cfs, or 3.57 MGD, was determined using USGS SWToolbox software, inputting gauged flow at the USGS Water Street gauge, station 01095503, from July 2015-June 2021. This time period was chosen as representative for the reasons described below. During the period, various adjustments to Wachusett Dam operating procedures and improved measurement and control of Wachusett Reservoir releases were implemented.

The CWTP outfall discharges into the South Branch of the Nashua River. The outfall is approx. 3.25 miles downstream from the Wachusett Dam, which releases flows that make up the headwaters of the South branch of the Nashua River. The minimum required release from the dam is 12 million gallons per week (1.714 MGD).

To ensure that adequate flow is released, MWRA requested that the U.S. Geological Survey install a gauge downstream near the CWTP.

Releases from the Wachusett Reservoir to the S. Nashua River vary seasonally and interannually depending on water quality concerns, relative watershed yields, and for operational and flood control needs. Releases can be made through the circular basin at the foot of the dam (the "fountain"), through an angle pattern sleeve valve which allows safe and controlled discharge of the water, and via a hydraulic crest gate and stone spillway when reservoir levels are high.

Gauge measurements are subject to post-correction[4] as USGS periodically recalibrates the gauge to account for changing stream channel geometry. Therefore, MWRA updated its operational procedures to release more than the required minimum, starting during the 2015 drought period, to ensure that even recalculated values would be above the required minimum. On 7/10/2015 MWRA targeted releases of ~ 50 MGD from the angle pattern sleeve valve (APSV) to provide additional flow to the Nashua River during these dry conditions. On 6/8/2018, modification and repairs were made to the fountain feed lines which reduced friction loss and increased fountain flow to the River from 1.72 MGD to 5-8 MGD depending on reservoir elevation. This 2018 modification ensures that the gauged flow downstream will always be well above the statutory minimum flow.

[3] This information was previously submitted as part of the 2021 permit renewal application for MWRA's Clinton plant (permit MA0104004); see attachment to Form 2A Section 3.7.

[4] Notes on USGS gauge data: The original gauge (station 01095505, from June 2007) was subject to backwater and was moved to a better location (station 01095503, Water Street) in November 2011. Stream ratings are not static so the USGS must occasionally evaluate the stream channel geometry and apply a rating shift to the discharge curve. This typically occurs after heavy flood flow periods where sediment is repositioned resulting in a modification to the

discharge calculation. In 2012 there was a beaver dam across the River creating backwater issues at the Water Street gage. The Town of Clinton DPW removed this to address the gage issues and to mitigate flooding concerns.

Response 60

The comment requests an increase in the 7Q10 flow used for the MWRA Clinton WWTF based on modifications and repairs done in 2018 to the fountain feed lines at the upstream dam. According to the comment, this 2018 modification ensures that the flow upstream of the Clinton outfall will always be well above the statutory minimum which is currently used as the 7Q10 flow. The higher flow suggested for use as the 7Q10 is based on USGS SWToolbox software inputting gauged flow at the USGS Water Street gauge, station 01095503, from July 2015 through June 2021.

First, EPA notes that it is unclear why the input flow data used by the commenter were from 2015 to 2021 given that the modification occurred in 2018. EPA's typical approach is to use the most recent 30 years of flow data unless (as in this case) there is a definite change upstream that would suggest a shorter period is more representative. In such a case, EPA would use the flow data after that change (*e.g.*, after 2018). In any case, EPA does not have confidence that data from such a short timeframe would result in a representative 7Q10 flow (*i.e.*, the lowest 7-day average flow over 10 years) based on actual long-term changes in the hydrodynamics of the receiving water.

Second, this comment does not indicate that the statutory minimum flow of 1.7 MGD has been increased. Other than this comment, EPA has no assurance that the actual flow will not be reduced to 1.7 MGD during the permit term.

Therefore, EPA considers the existing 7Q10 flow (1.7 MGD) to continue to be appropriate and this comment does not result in any change to the Final General Permit. However, in the next permit reissuance more representative flow data may be available and the 7Q10 flow may be updated at that time.

Comment 61

<u>Ammonia</u>

Aside from the issue of critical low flow, mentioned above, MWRA notes that the calculation of acute ammonia criteria used to derive daily maximum ammonia limits for MWRA's Clinton permit is incorrect. EPA has used the formula for "salmonids present". In fact, the Clinton permit discharges into waters classified as "Warm water" and therefore the correct equation to use is the one for "salmonids absent."

Per 314 CMR 4.06(6)(d), Table 29a: AQUATIC LIFE CRITERIA, APPENDIX B: Calculation of Fresh Water Ammonia Criteria Values:

a. The following equation shall be used when Salmonidae species are absent. Salmonidae species are presumed absent in surface waters designated Warm Waters in 314 CMR 4.00; and in surface waters that are not designated Cold Waters, CFRs or Cold Water Fishery existing uses, or tributary to such designated Cold Waters, CFRs or Cold Water Fishery existing uses:

$$CMC\ absent = 0.7249\ x \left(\frac{0.0114}{1+10^{7.204-pH}} + \frac{1.6181}{1+10^{pH-7.204}}\right) x\ MIN(51.93, 23.12\ x\ 10^{0.036\ x\ (20-T)})$$

In 314 CMR 4.06(6)(b), Table 18, the Nashua River is classified as "Warm Water". Therefore, the "CMC absent" equation should be used to determine the acute criterion.

EPA should review the criteria derivations for the other treatment plants with new or modified ammonia criteria, to ensure that the correct equation is used as applies to each receiving water body.

Due to antibacksliding, using the correct criteria and correcting rounding errors in EPA's limit calculations, does not result in any changes to the proposed ammonia limits for the CWWTP, under either the existing or new water quality standards.

Response 61

At the time of issuance of this General Permit, the revised 2021 Massachusetts WQS for ammonia have been approved by EPA. Therefore, the limits indicated in Attachment E of the Draft General Permit under the heading "Modified Limit(s) if new WQS approved before issuance" will apply. EPA agrees that the determination regarding salmonids present or absent should apply under these new water quality standards as described in the comment. Therefore, EPA has reevaluated each of these calculations and the following permit limits have been updated in Attachment E of the Final General Permit for Northbridge, Belchertown, MFN Regional and Bridgewater. Note that the changes to Northbridge and Belchertown are also impacted by changes to 7Q10 flow, as discussed in Responses 101 and 122, respectively.

- Northbridge: 5.1 mg/L (monthly ave, November 1 - April 30), 1.6 mg/L (monthly ave, May 1 - October 31);
- Belchertown: 4.2 mg/L (daily max, May), 0.8 mg/L (monthly ave, May), 14.3 mg/L (daily max, November 1 - April 30), 2.6 mg/L (monthly ave, November 1 - April 30), 0.8 mg/L (monthly ave, June 1 - October 31);
- MFN Regional: 18.1 mg/L (monthly ave, November 1 - March 31);
- Bridgewater: no new/modified ammonia limits.

Comment 62

III. MWRA comments on Draft Authorization # MAG590033

General Comments: All references to co-permittees and corresponding requirements should be deleted.

The comments above on the GP, apply as well to the draft authorization.

Response 62

See Response 42.

Comment 63

Additional specific comments are as follows:

Comments on Part II.A. Table 1

Dilution factor

See comments on Attachment E to the draft permit. MWRA believes the Critical Low Flow estimate is incorrect and the dilution factor should be for a plant flow of 3.01 MGD would be 2.2 rather than 1.6.

Response 63

See Response 60.

Comment 64

Comments on Part II.B.9 Total Residual Chlorine

The GP contains this language with respect to total residual chlorine (TRC) in II.B.9:

a. All existing TRC limits will be carried forward in the authorization to discharge unless a more stringent limit is required. See Attachment E for a summary of any more stringent TRC limits that apply to an eligible facility.

   For any permit limits below 20 µg/L, the compliance level for TRC is 20 µg/L.

However, in the draft authorization II.B.9.a is "N/A".

In the draft authorization, the average monthly limit is 17.6 µg/L which is below 20 µg/L. MWRA requests that the permit make clear that the minimum level of the most sensitive method by default is the "permit limit."

MWRA requests II.B.9 be clarified by inserting

a. The compliance level for TRC is 20 µg/L. Average monthly results reported as <20 µg/L will not be a violation of the average monthly TRC permit limit.

See also comments on the general permit on Footnote 2 to Part II.A. Table 1 Footnote 2, and Part II.B.9, above.

Response 64

See Response 50. Authorization number MAG590033 for the MWRA Clinton WWTF will be updated to include this language based on its applicability, as confirmed by this comment. The "N/A" in Part II.B.9.a of the Draft Authorization was a typographical error.

Comment 65

IV. MWRA comments on Draft Massachusetts Permit No. MAG590000

Comments on PFAS Monitoring

The table listed under condition 5 requires composite sampling for PFAS annually in industrial discharges. MWRA recommends the sample type be changed from composite to grab samples. The requirement to collect composite samples conflicts with the sampling instructions provided in the draft EPA Method 1633. Per the method, for aqueous samples (Section 8.2.1) – "Because the target analytes are known to bind to the interior surface of the sample container, the entire aqueous sample that is collected must be prepared and analyzed and subsampling avoided whenever possible". Collecting a composite sample for a reasonable sample volume to analyze, while avoiding subsampling would be difficult.

Response 65

See Response 48.

Comment 66

Comments on Co-permittees

In accordance with our comments on co-permittees, above, MWRA recommends that the section about co-permittees on pages 2-4 of the state permit be eliminated. If it is retained, MWRA recommends that the language on page 4, relating to co-permittee responsibilities, be changed to mirror the language of the federal permit as indicated in "Comments on Part III.A Operations and Maintenance" above.

Response 66

See Response 56.

N. Comments from Hull Sewer Department, on April 25, 2022:

Comment 67

The Hull Sewer Department has reviewed the Draft General Permit and provides the following comments:

- Section II.A.Table 1 – Effluent Limitations and Monitoring Requirements.
    - Why has the measurement frequency for effluent pH Range gone from 1/Day every day to 5/Week? Would like clarification and reasoning if this has changed. What would the days be? What would the days be if not every day?
    - Why has the measurement frequency for effluent Total Residual Chlorine gone from 3/Day every day to 5/Week? Would like clarification and reasoning if this has changed. What would the days be if not every day?
    - Why has the Influent BOD and TSS measurement frequency minimum changed from 1/Week to 2/Month? Need additional clarification on this.

Response 67

See Responses 20 and 275.

Based on footnote 1 of Table 1 of the General Permit, the permittee must develop a routine sampling program to ensure representative sampling. This routine sampling program should include details such as which days of the week to measure pH, TRC and influent BOD and TSS, which may be established at the discretion of the permittee.

Comment 68

Section II.C.2 – Is it acceptable to post notifications of SSOs to the Town Website Sewer Department Page?

Response 68

Yes, as long as this is a publicly available website that can be updated in a timely manner to accommodate the 24-hour posting requirement.

Comment 69

Section II.D – Hull WWTF discharges directly to the Atlantic Ocean, so we assume this section does not apply to us because there are no downstream community water systems from the WWTF. Please confirm.

Response 69

EPA concurs. If there are no downstream community water systems then this requirement does not apply.

Comment 70

Section II.E.1.a – The Hull WWTF ocean outfall was presumed to be constructed with 36 diffuser heads however only 18 were located during a 2021 outfall assessment. Will we be required to dredge to locate any others that may or may not have been constructed?

Response 70

As noted in Section II.E.1.a, dredging may be required to ensure proper operation of the diffuser. The dilution factor of 94 determined for the Hull WWTF assumes proper operation of the outfall. It is the responsibility of the Permittee to ascertain the capacity of the diffuser and to ensure proper operation. Additionally, EPA notes that Part II.E.4 of the General Permit requires the Permittee to reassess the available dilution in the 5th year of the permit term, which must be based on the actual condition of the diffuser.

Comment 71

Section II.E.1.b – The Hull WWTF ocean outfall was inspected in March 2021, will we be required to reinspect it within 12 months of permit issuance?

Response 71

EPA acknowledges that diffuser inspections should occur once every 5 years. In this case the diffuser was inspected quite recently, and the General Permit would require a reinspection within approximately 3 years of the prior inspection. Given the issue raised in the previous comment regarding the discrepancy in diffuser heads and the potential need of dredging, EPA considers that this timing is appropriate and may serve as a confirmation that the diffuser is operating properly. Therefore, this comment does not result in any change to the Final General Permit.

Comment 72

Section III.C.3 – Per the permit, Hull will have to complete annual sampling of the landfill leachate using Draft Method 1633 for PFAS. This will need to be submitted with the March DMR every year.

Response 72

EPA acknowledges this comment.

Comment 73

Section V.7 State Reporting.

- Question, where if all other submitted reports are done electronically through the various reporting systems, why a duplicate signed copy of the WET test reports is to be submitted to the Mass DEP Division of Watershed Management. Is there a need for a duplicate submission, since the full report is submitted through NetDMR.

Response 73

EPA has conferred with MassDEP regarding this requirement. MassDEP's Division of Watershed Management's current system for analysis, database coding and data validation relies upon paper copies of the WET test reports. If this process changes in the future, permittees will be notified.

O. Comments from Carl Williams, Wastewater Superintendent, Easthampton, on April 25, 2022:

Comment 74

The City of Easthampton, MA (City) has carefully reviewed the draft "Medium General Permit MAG590000 (GP) and the Easthampton facility-specific "draft authorization" MAG590022 including the various appendices and attachments issued by U.S. Environmental Protection Agency (EPA). EPA has indicated that the draft authorization is not a draft permit and that it is intended to show what a permit "would look like." The agency also noted that all facility-specific information is open for public comment. EPA notified permittees on April 4, 2022, that the EPA general permit web site now includes the draft authorizations for the forty-four potential permittees plus DMR data and reasonable potential analyses information. The City acknowledges the detailed evaluation that the agency put together to provide the opportunity to update and reissue permit coverage for forty-four wastewater treatment facilities in Massachusetts. The City makes the following comments and requests for either clarification or changes in the draft authorization for the City. The comments cover several areas of the GP and are specifically directed at conditions in the "draft authorization" permit for Easthampton. The comments and related information are presented below by permit element.

Response 74

EPA acknowledges this comment and has responded to the specific comments below.

Comment 75

Total Aluminum: The "draft authorization" includes an effluent total aluminum limit of 87 µg/L average monthly limit which is equivalent to the limit in the 2013 individual National Pollutant

Discharge Elimination System (NPDES) permit. The MassDEP Surface Water Quality Standards (SWQS) were updated and promulgated on November 12, 2021. Those standards contain new, updated aluminum criteria specific to the Connecticut River. The City feels that the draft authorization should contain an updated limit to reflect the new higher aluminum criteria. The SWQS have not yet been formally approved by EPA. Upon EPA's approval of the updated SWQS (hopefully prior to the issuance of this draft GP and draft authorization), the NPDES permits should be revised regarding the aluminum limit to reflect the scientifically based new criteria. Anti-backsliding should not prevent the implementation of the new limit.

Response 75

At the time of issuance of this General Permit, the revised 2021 Massachusetts WQS for aluminum have been approved by EPA. Therefore, as discussed in Response 26, the new or more stringent aluminum limits based on the old aluminum criteria were unnecessary and have been removed from Attachment E of the Final General Permit. This comment, as well as Comments 103, 117 and 135, make a further request that EPA evaluate existing aluminum limits that are already effective under the existing individual permits to determine if any can backslide to a less stringent limit based on the updated aluminum criteria. From an environmental standpoint, EPA notes that some facilities use Polyaluminum Chloride (PAC) to aid in reducing phosphorus and backsliding the aluminum limit (in accordance with updated water quality standards) will allow for greater operational flexibility to meet both the required aluminum and phosphorus limits and may enhance overall compliance with water quality standards.[6] Therefore, in response to these comments, EPA evaluated these limits which were included in the individual permits for 15 of the eligible dischargers to determine if any may backslide.

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

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

Based on this exception, EPA evaluated whether a less stringent effluent limit may be allowed for each of the 15 relevant facilities. To characterize the "level of pollutant control actually achieved" EPA calculated the 95th percentile of the effluent data from each facility during the 5-year review period for the General Permit. If this level is greater than the limit, then EPA determined that backsliding is allowable up to that level. The results of this analysis are summarized in the table below.

[6] EPA acknowledges that permittees may choose to use alternative chemicals (instead of PAC) for aid in phosphorus removal without contributing any aluminum to the treatment process. However, as noted in Comment 117, these alternative chemicals often result in increased maintenance activities that have the potential to negatively impact the treatment process. Therefore, EPA has determined that allowing flexibility through backsliding the aluminum limits (where justified based on the regulations) will serve to enhance overall compliance with water quality standards.

Facility Name	Current Permit Number	Current Monthly Average Al Limit (µg/L)*	95th (µg/L)	Achieving limit?
Northbridge WWTP	MA0100722	87	161	No
Uxbridge WWTF	MA0102440	87	243	No
Milford WWTF	MA0100579	87	173	No
Medfield WWTF	MA0100978	447	2,125	No
Adams WWTP	MA0100315	198	890	No
Ware WWTP	MA0100889	96	318	No
Gardner WWTF	MA0100994	87	91	No
Ayer WWTP	MA0100013	87	92.5	No
Belchertown WWTP	MA0102148	87	70	Yes
Easthampton WWTF	MA0101478	87 (Outfall 001)	85	Yes
Sturbridge WPCF	MA0100421	250	72	Yes
Southbridge WWTP	MA0100901	144	119	Yes
Hudson WWTF	MA0101788	278	58	Yes
Rockland WWTP	MA0101923	87.2	23	Yes
Middleborough STP	MA0101591	112	95	Yes

* EPA notes that 4 of these facilities also have a daily maximum limit but all 4 were in compliance with those limits so backsliding is not allowable for those limits and they are not included in this table.

As shown, there are 8 facilities that are not achieving the limit in their individual permit and may qualify for a less stringent limit. Therefore, EPA conducted a further evaluation on these dischargers to determine if a less stringent limit (up to their level achieved) would comply with the revised chronic WQS for aluminum. EPA applied the default criteria for each watershed that are included in the revised WQS[7] (*See* Appendix A in 314 CMR 4.06) and conducted a mass-balance evaluation using the equations presented in Appendix A of the Fact Sheet. The results of these calculations are presented below (see Appendix A of the Fact Sheet for the full equation and definition of terms).

[7] https://www.mass.gov/doc/314-cmr-400/download

Facility Name	Conc. Units	Q_s (MGD)	C_s (median)	Q_e (MGD)	C_e (95th)	Q_d (MGD)	C_d	Watershed Default Criteria
Northbridge WWTP	µg/L	0.36	195	2	**161**	2.36	166.2	262
Uxbridge WWTF	µg/L	33.1	130	1.25	**243**	34.4	134.1	262
Milford WWTF	µg/L	0	64	4.3	**173**	4	173	380
Medfield WWTF	µg/L	3.19	61	1.52	**2125**	4.71	727.1	380
Adams WWTP	µg/L	10.9	55.5	4.6	**890**	15.5	303	515
Ware WWTP	µg/L	9.2	105	1	**318**	10.2	126	170
Gardner WWTF	µg/L	1.45	158.5	5	**91.0**	6.45	103.1	200
Ayer WWTP	µg/L	19.8	63	1.79	**92.5**	21.6	65.4	200

As shown, the 95th percentile of the effluent data (C_e) for all of the facilities (except Medfield) results in a downstream concentration (C_d) below the watershed default criterion. Therefore, these 95th percentile values (shown in bold in the column labeled C_e) are protective of water quality standards and these values are established as the monthly average limits for these facilities.

For Medfield, the 95th percentile of the effluent data would result in a downstream concentration above the watershed default criterion. Therefore, EPA calculated (using the same equation from Appendix A of the Fact Sheet) a maximum allowable effluent concentration of 1.05 mg/L as their monthly average limit.

EPA has determined that backsliding is allowable for these limits and that this is also in accordance with antidegradation regulations found at CWA § 303(d)(4) given that these limits do not allow any increase in the actual load of aluminum from current levels.

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

Comment 76

Fecal coliform limit and testing methodology: The draft "authorization" has the E. coli limit for Outfall 001 in effect April 1- October 31 while the E. coli limit for Outfall 002 is in effect April 1- November 30. The City requests that the limit effective dates for both outfalls be set for April 1- October 31. Footnote #8 indicates that MPN analysis can be used. The City feels that MPN testing for E. coli is not an appropriate methodology.

Response 76

Bacteria criteria are applied on a seasonal basis at the discretion of EPA and MassDEP to ensure protection of recreational uses of the receiving waters. As stated in the *Surface Water Quality Criteria for Bacteria: Implementation Guidance*[8]*:*

> "Surface water quality must meet the SWQS recreational bacteria criteria year-round, unless MassDEP uses its discretion to apply the criteria seasonally in accordance with 314 CMR 4.05(5)(f). In these cases, MassDEP determines whether, because of a reduction in primary contact recreation during a specified period, such criteria are not needed to be protective. Bases for such determinations usually include identification of periods when frequency of use is reduced due to cold weather (typically from November through March) but could consider other relevant and appropriate factors, such as documentation that primary contact recreation does not occur at a specific location."

In this case, it was determined in a previous permit issuance that the Manhan River (Outfall 002) must be protected through November 30. This comment does not provide any justification to change this prior determination and the season is carried forward under the General Permit, which is also in accordance with anti-backsliding requirements.

Regarding the MPN method, EPA notes that the General Permit does not specify any particular method but allows the use of any sufficiently sensitive method that is EPA-approved in 40 CFR Part 136.

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

Comment 77

Whole Effluent Toxicity (WET) Testing: The draft requires that LC50 be conducted semi-annually for outfalls 001 and 002. The timing of the testing is different. The City requests that the WET tests for both outfalls be at the same time period to promote efficiency of collection.

Response 77

Given that the same effluent wastewater is discharged through both outfalls, EPA purposely established these testing requirements in alternating calendar quarters to avoid collecting duplicative effluent data from each outfall. To continue obtaining the most representative data throughout the calendar year, EPA has carried these requirements forward. This comment does not result in any change to the Final General Permit.

Comment 78

Total Nitrogen: The draft authorization contains a new limit for total nitrogen of 317 lbs./day (rolling annual average). The draft permit link also contains Appendix B which provides the methodology and rationale for setting total nitrogen limits for wastewater treatment facilities

[8] https://www.mass.gov/doc/bacteria-surface-water-quality-criteria-for-bacteria-implementation-guidance-for-the-protection-of-human-health-in-waters-designated-for-primary-contact-recreation-cn-5630/download

discharging into the Long Island Sound (LIS) Watershed. The methodology, without an updated total maximum daily load (TMDL), has some questions in its validity. The City strongly recommends that the total nitrogen loadings from all sources to the LIS watershed be quantified in a more robust manner. The effluent limits are likely achievable; however, the required total nitrogen loadings remain questionable.

Response 78

While it is not clear to what specific concerns the comment refers, EPA acknowledges this comment and agrees that quantifying all nitrogen sources and trends in the LIS watershed should continue to be improved. This General Permit represents a big step forward in establishing both limits and monitoring requirements for many such sources and will result in significant nitrogen reductions as well as improved loading data in the future. See Fact Sheet Appendix B for more rationale.

Comment 79

pH limits for Outfalls 001 & 002: The pH limits for outfall 001 are set at 6.0-8.3 while the pH limits for Outfall 002 are set at 6.5-8.3. The City provides the same level of treatment for the effluent to both outfalls and thus this difference in pH values is inconsistent. The outfall 002 discharges are only in higher flow periods when the ambient river flow is high, and the pH reflects the background levels. The draft permit contains a requirement for the City to conduct a "pH study" within three years of the effective date of the permit. The City would include the receiving waters of both outfall 001 & 002 if it conducts the study.

Response 79

EPA notes that the pH limits are based on achieving the water quality standards in each receiving water and not the level of effluent treatment.

The expanded pH range of 6.0-8.3 S.U. from the previous permit for Outfall 001 was carried forward. To continue to have an expanded pH range for Outfall 001 a pH study must be conducted as noted in Footnote 7 of the Draft General Permit.

The standard range of 6.5-8.3 S.U. from the previous permit for Outfall 002 was also carried forward. Based on this comment and the unique nature of this facility with two outfalls for the same effluent, EPA and MassDEP agree that Easthampton should have the option of conducting a pH study for the Manhan River to determine whether an expanded pH range would meet water quality standards in the Manhan River. Therefore, Outfall 002 has been added to footnote 7 of Part II.A Table 1 the Final General Permit. If warranted by the study, the pH range for this outfall may be expanded to 6.0-8.3 S.U. in the next permit reissuance.

Comment 80

PFAS testing: The draft general permit and the Easthampton "draft authorization" (along with several recently issued induvial NPDES permits) require per- and polyfluoroalkyl substances (PFAS) testing of the influent, effluent, sludge, and selected industries. This is also a main element in the MassDEP permit program. The need for data on PFAS is well known and acknowledged. The testing at the wastewater treatment facility (WWTF) is on a quarterly basis

beginning the first full year after final permit issuance. The industrial source sampling is once per year. Easthampton makes the following comments on this approach:

a. The permit does not a have a provision to reduce testing frequency if values are below a certain (not yet defined) benchmark. This approach is part of the MassDEP drinking water testing program which allows for reduction in frequency if values are below levels related to the established standards for "PFAS-6". Such an approach would reduce laboratory costs if levels were low. Easthampton suggests that after two full years of testing, if the PFAS-6 levels are below 20 ng/L (the MassDEP drinking water standard) or other appropriately established benchmark, then sampling be reduced to once per year.

b. The current testing protocol will be applied to all WWTF's in Massachusetts regardless of effluent flow thus creating an imbalance in costs based upon operating costs. The testing should be balanced to reflect flow and percent cost to operations.

c. The draft permit lists six PFAS compounds (the "6" regulated by the MassDEP drinking water regulations) to be tested and reported. Attachment H lists 40 PFAS analytes that are part of draft method 1633. The forty results are required to be reported in the NetDMR system. Easthampton suggests that the permit simply state that the permit requires reporting the 40 PFAS analytes in draft method 1633 and that the list automatically changes if the multi-laboratory method anticipated to be approved in 2022 has a different list. To have the "PFAS-6" listed in the permit but requiring reporting of forty analytes may lead to confusion.

d. The City feels that the particular industry discharging to its sewer system should be responsible for the cost of the testing and analysis of their effluent. The draft permit places the cost on the City. The City requests clarification on this issue.

Response 80

Regarding the request for reduced testing see Response 21.

Regarding cost, EPA acknowledges that PFAS testing has a modest cost, however, EPA does not consider it appropriate to base permitting decisions on percent cost to operations. Rather, EPA requires monitoring necessary to characterize the discharge and ensure sufficient data for future permitting decisions.

Regarding the request to remove the list of PFAS analytes, EPA disagrees because that would not allow EPA to insert each analyte into NetDMR for reporting and would create greater confusion regarding this reporting requirement.

Regarding the cost of testing industrial dischargers, see Response 36.

Comment 81

SSO notification requirements: The draft general permit and the draft authorization designates time frames for reporting sanitary sewer overflows (SSOs) including notification of downstream water suppliers of any SSO events. There is a long-standing SSO reporting system that MassDEP has had in place. In addition, MassDEP recently passed regulations (314 CMR 16.00) for public

notification of certain SSO events as well as continuance of the notification of all SSO events as outlined in 314 CMR 12.00. The new regulations require more detailed reporting and different time frames than are listed in the draft permits. Easthampton requests that the SSO section of the draft permit reflects the recent requirements of MassDEP. This will avoid confusion on when, how and to whom notifications must be made.

Response 81

EPA has included Part II.D of the General Permit to ensure that all downstream water suppliers are aware of "any emergency condition, plant upset, bypass, or other system failure which has the potential to impact the quality of the water to be withdrawn by that community for drinking water purposes. This notification should be made as soon as possible but within four (4) hours, and in the anticipation of such an event, if feasible, without taking away from any response time necessary to alleviate the situation." Notably, this requirement does not list SSOs specifically although they may be categorized as an "other system failure" and would trigger such notification if they have "the potential to impact the quality of the water to be withdrawn by that community for drinking water purposes." This 4-hour timeframe is distinct and much shorter than the requirement In Part II.C.2 to post SSO information on a publicly available website (*i.e.*, within 24 hours) based on the direct and urgent impact such events may pose to public health through drinking water supplies. Other SSO reports and notices are discussed in Response 54.

Comment 82

Permit reporting requirements: The reporting requirements in Section V list many different electronic submittal systems for various data, effluent test results and administrative changes. It would be beneficial to all permit holders to have a table included as an appendix to the permit which lists the elements that are required to be reported, the time frame and due dates, and the link to the electronic reporting system. In addition, in this section, if a permittee submits a "Notice of Termination" they are required to submit that notice to the MassDEP office in Worcester, MA. Easthampton suggests EPA check to see if that is the proper office for such notification to be sent.

Response 82

EPA considers the current format to be clear. However, if any permittee has a specific question about a reporting requirement's submittal process or due date they can reach out to EPA for further clarification.

Regarding Notice of Termination submissions, EPA agrees that the MassDEP office in Worcester, MA is not the appropriate office. To clarify, the last sentence of Part VI.A of the Final General Permit has been changed to say "Completed and signed NOTs shall be submitted to EPA at R1NPDESReporting@epa.gov and to MassDEP at MassDEP.NPDES@mass.gov.

Comment 83

Massachusetts certification requirements: The MassDEP will, in most cases, issue a "state certification" to EPA indicating any special conditions that MassDEP requires be put into the permit. Easthampton assumes that such a certification will be provided by MassDEP. The City

questions whether the MassDEP certification is subject to public review and comment. Will public comments be accepted on the state certification or is that outside the public comment process?

Response 83

The draft state certification was available for public notice concurrently with the Draft General Permit.

Comment 84

The City of Easthampton appreciates the opportunity to submit comments on the draft "Medium General Permit" and the "draft authorization" specific for the City of Easthampton. The City wants to ensure that it is establishing standing in the review of the draft permits and that it retains its legal rights. Please inform the City of any problems relating to its "standing" in the review of these documents.

Response 84

EPA confirms that these comments have been received during the public comment period.

P. Comments from James Boudreau, Town Administrator, Kevin Cafferty, Director of Public Works, and William Branton, Wastewater Superintendent, Town of Scituate, on April 19, 2022:

Comment 85

The Town of Scituate, MA (Town) has carefully reviewed the draft "Medium General Permit MAG590000 (GP) and the Scituate facility-specific "Draft Authorization" MAG590041 including the various appendices and attachments issued by U.S. Environmental Protection Agency (EPA). EPA has indicated that the draft authorization is not a draft permit and that it is intended to show what a permit "would look like." The agency also noted that all facility-specific information is open for public comment. EPA notified permittees on April 4, 2022, that the EPA General Permit web site now includes the draft authorizations for the forty-four potential permittees, plus DMR data and reasonable potential analyses information. EPA extended the initial comment period deadline from April 11, 2022 to April 26, 2022. The Town acknowledges the detailed evaluation that the agency put together to provide the opportunity to update and reissue permit coverage for forty-four wastewater treatment facilities in Massachusetts. The Town makes the following comments and requests for either clarification or changes in the draft authorization for the Town. The comments cover several areas of the GP and are specifically directed at conditions in the "Draft Authorization" permit for Scituate. The comments and related information are presented below by permit element.

Response 85

EPA acknowledges this comment and has responded to the specific comments below.

Comment 86

Total Recoverable Copper, Nickel, and Zinc: The "draft authorization" includes effluent total recoverable copper, nickel, and zinc equivalent to those contained in the 2012 individual NPDES permit. The MassDEP Surface Water Quality Standards (SWQS) were updated and promulgated

on November 12, 2021. Those standards have not yet been formally approved by EPA. The Town's review of the updated standards does not show any changes in the metals criteria for discharges to marine waters. The Town still questions the validity of the marine copper criteria and notes that changes have been made for the copper criteria in fresh waters. If MassDEP and EPA eventually review and update the marine copper criteria, the Town hopes that those changes (if they result in an increase in the criteria value) are reflected in a modification to the Town's copper limit.

Response 86

EPA confirms that the updated Massachusetts WQS does not contain any changes to the copper, nickel, and zinc criteria. As the criteria has not changed this does not affect the facility's limits. If any such criteria change occurs in the future, EPA will review it in a future permitting action.

Comment 87

Total Nitrogen: The draft authorization limits the total nitrogen effluent value at a monthly average of 4.0 mg/l and 53 lbs./day on a year-round basis. The Town requests that the limit be on a "rolling annual average" instead of monthly. This type of year-round limit is used in most permits which have total nitrogen limits for NPDES permits in Massachusetts.

Response 87

EPA notes that these monthly average nitrogen limits are carried forward from the existing individual permit. The change requested in the comment would represent a less stringent limit which is not allowed based on anti-backsliding regulations. Since the comment does not provide any rationale for such a change, this comment does not result in any change to the Final General Permit.

Comment 88

Fecal Coliform limit and testing methodology: The draft "authorization" in footnote eight seems to allow for using either MPN method or membrane filtration method when testing for fecal coliform; the Town requests confirmation of this assumption.

Response 88

EPA notes that the General Permit does not specify any particular method for fecal coliform but allows the use of any sufficiently sensitive method that is EPA-approved in 40 CFR Part 136.

Comment 89

Whole Effluent Toxicity (WET) Testing: The draft requires that LC50 and C-NOEC tests be conducted quarterly and that the tests be conducted in the "same weeks" of the individual quarters. The Town requests that the testing be reduced to twice per year due to past testing results. Such a request for reduction in frequency and/or species was included in the existing individual permit, but is not in the draft authorization. The Town notes that it collects its "ambient" water on an incoming tide and requests that the "same week" provision be removed or modified in case of issues with collecting on certain tidal cycles in the "same week."

Response 89

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. Given the duration of an incoming tide EPA does not consider it appropriate to change the testing requirement. Instead, EPA considers that the facility should have ample time to collect a sample on the incoming tide at some point during the specified week. EPA considers this requirement would provide more representative ambient data over the course of the permit term.

Comment 90

PFAS testing: The draft general permit and the Scituate "draft authorization" (along with several recently issued individual NPDES permits) require PFAS testing of the influent, effluent, sludge, and selected industries. This is also a main element in the MassDEP permit program. The need for data on PFAS is well known and acknowledged. The testing at the WWTF is on a quarterly basis beginning the first full year after final permit issuance. The industrial source sampling is once per year. Scituate makes the following comments on this approach:

a. The permit does not a have a provision to reduce testing frequency if values are below an undefined benchmark. This approach is part of the MassDEP drinking water testing program which allows for reduction in frequency if values are below levels related to the established standards for "PFAS-6". Such an approach would reduce laboratory costs if levels were low. Scituate suggests that after two full years of testing, if the PFAS-6 levels are below 20 ng/I (the MassDEP drinking water standard) or other established benchmark, then sampling be reduced to once per year.

b. The current testing protocol will be applied to all WWTF's in Massachusetts regardless of effluent flow thus creating an imbalance in costs based upon operating costs. The testing should be balanced to reflect flow and percent cost to operations.

c. The draft permit lists six PFAS compounds (the "6" regulated by the MassDEP drinking water regulations) to be tested and reported. Attachment H lists 40 PFAS analytes that are part of draft method 1633. The forty results are required to be reported in the NetDMR system. Scituate suggests that the permit simply state that the permit requires reporting the 40 PFAS analytes in draft method 1633 and that the list automatically changes if the multi-laboratory method anticipated to be approved in 2022 has a different list. To have the "PFAS-6" listed in the permit but requiring reporting of forty analytes may lead to confusion.

d. The Town feels that the particular industry discharging to its sewer system should be responsible for the cost of the testing and analysis of their effluent. The draft permit seems to place the onus on the Town. The Town requests clarification on this issue.

Response 90

See Response 80.

Comment 91

SSO notification requirements: The draft general permit and the draft authorization designates time frames for reporting sanitary sewer overflows (SSOs) including notification of downstream water suppliers of any SSO events. Scituate would like to note that there are no downstream water withdrawals as the waters are saline. This provision should be removed from the draft authorization. There is a long-standing SSO reporting system that MassDEP has had in place. In addition, MassDEP recently passed regulations (314 CMR 16.00) for public notification of certain SSO events as well as a continuance notification of all SSO events as outlined in 314 CMR 12.00. The new regulations require more detailed reporting and different time frames than are listed in the draft permits. Scituate requests that the SSO section of the draft permit reflects the recent requirements of MassDEP. This will avoid confusion on when, how and to whom notifications must be made.

Response 91

Regarding downstream water withdrawals, see Response 69.

Regarding SSO reporting requirements, see Response 81.

Comment 92

Diffuser inspection: Section II.E. of the draft general permit and the Scituate draft authorization contain a requirement for the inspection of the effluent diffuser. Scituate acknowledges that this is a "standard" requirement for marine discharges and, also notes that the Town's WWTF does not have a diffuser and discharges through a conduit to the receiving tidal creek. Thus, the Town requests that the diffuser inspection requirement be removed from the draft authorization.

Response 92

EPA agrees that a diffuser inspection should not be required for any WWTF that does not have a diffuser. EPA has confirmed that the Scituate WWTF does not have an effluent diffuser and has therefore been removed from Section II.E.1 of the Final General Permit as well as Scituate's draft authorization.

Comment 93

Permit reporting requirements: The reporting requirements in Section V list many different electronic submittal systems for various data, effluent test results and administrative changes. It would be beneficial to all permit holders to have a table included as an appendix to the permit which lists the elements that are required to be reported, the time frame and due dates, and the link to the electronic reporting system. In addition, in this section, if a permittee submits a "Notice of Termination" they are required to submit that notice to the MassDEP office in Worcester, MA. The Town requests that EPA check and confirm that this is the appropriate office for such notification to be sent.

Response 93

See Response 82.

Comment 94

Massachusetts certification requirements: The MassDEP will, in most cases, issue a "state certification" to EPA indicating any special conditions that MassDEP requires be put into the

permit. Scituate assumes that such a certification will be provided by MassDEP. The Town questions whether the MassDEP certification is subject to public review and comment. Will public comments be accepted on the state certification or is that outside the public comment process?

Response 94

See Response 83.

Comment 95

The Town of Scituate appreciates the opportunity to submit comments on the Draft "Medium General Permit" and the "Draft Authorization" specific for the Town of Scituate. The Town wants to ensure that it is establishing standing in the review of the draft permits and that it retains its legal rights. Please inform the Town of any problems relating to its "standing" in the review of these documents.

Response 95

See Response 84.

Q. Comments from Ian Catlow, PE, on behalf of the Town of Sturbridge, on April 25, 2022:

Comment 96

Tighe & Bond has reviewed the Town of Sturbridge's Draft NPDES General Permit (Permit No. MAG590026) and generated the following comments that we would like entered into the record on the Town's behalf. Our comments include the following:

1. Total Aluminum Sampling Frequency (Section II.A, Table 1, p.2) – The sampling frequency for total aluminum increased from 1/month to 2/month without justification.

a. The WPCF has continued to operate in its current operation and there has been no effluent data to suggest that the effluent aluminum concentration has increased since the last permit was issued. Therefore, we believe that the current sampling frequency of 1/month is sufficient for monitoring aluminum concentration. We would request that the total aluminum sampling frequency remain the same as stated in the last permit issued.

Response 96

See Response 275.

Comment 97

PFAS Sampling Comment (Section II.A, Table 1, p.3) – We recommend that this be postpone until draft method becomes finalized and approved. There are very few labs capable of performing this work nationally and time is needed to build analytical capacity. Labs are unlikely to invest in this process until a method is approved.

Response 97

EPA acknowledges that the Method 1633 is currently "draft" but expects the multi-lab validated method to be published in Fall of 2022. As PFAS contamination is an urgent public health and environmental issue, the General Permit requires use of this method in NPDES permits (even before it is multi-lab validated) as recommended in EPA's *October 2021 PFAS Strategic Roadmap*[9] and in an EPA memo dated April 28, 2022 called *Addressing PFAS Discharges in EPA-Issued NPDES Permits and Expectations Where EPA is the Pretreatment Control Authority*[10].

As noted in footnotes 12 and 20 of Table 1 of the Draft General Permit, PFAS monitoring shall begin in the first full calendar quarter after the effective date of the authorization. Given the timing of the issuance of the General Permit, EPA confirms that no facilities will be authorized under the permit before October 1, 2022. Therefore, this monitoring will be required no earlier than the first calendar quarter of 2023 which is after the multi-lab validation will presumably be completed. EPA expects that this General Permit, the 2021 Small WWTF General Permit (number MA-NHG580000), and several recently-issued individual permits that all contain PFAS monitoring requirements for over 100 WWTFs in MA and NH will trigger enough demand for local labs to institute this method to meet that demand.

Comment 98

WET Testing (Section II.A, Table 1, p.4) – It is unclear why TOC was added as a parameter for WET testing. We recommend that this be omitted from the sampling requirements until the need for this parameter can be justified.

Response 98

EPA notes that TOC was not added as a parameter for WET testing but has been included in WET testing protocols for many years. The General Permit now requires this result to be reported on the monthly DMR for easier access to the data in the future.

Comment 99

Zinc Limits (Section II.A, Table 1, p.3) – The current permit limits for total zinc are as follows: 0.0459 **mg/l** and 0.5087 **lbs/day** (maximum daily). The draft authorization for the facility lists the new potential permit limits as follows: 0.0469 **ug/l** and 0.5087 **ug/l** (maximum daily). We would like to point out two possible (and likely) typographical errors regarding potential permit limits for total zinc:

a. We believe that the maximum day limit should of 0.5087 should be listed in **lbs/day** instead of in **ug/l**. Both values included in the draft authorization are defined in ug/l, which creates some confusion as there can only be one daily maximum limit.
b. We believe that the maximum daily concentration value of 0.0459 should be listed with units of mg/L to match the existing permit rather than ug/L which we believe to be a type-o. The values on the draft authorization are exactly the same as the values on our current

[9] https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf
[10] https://www.epa.gov/system/files/documents/2022-04/npdes_pfas-memo.pdf

permit, except for the fact that the units have changed, which leads us to believe that there are two typographical errors here.

Response 99

See Response 22.

Comment 100

The Town is eager to discuss resolution of the above issues with EPA and MassDEP however we have submitted this letter to protect the Town's rights should these issues not be resolved favorably and an appeal is needed.

Response 100

See Response 84.

R. Comments from Mark Kuras, Department of Public Works, Town of Northbridge, on April 25, 2022:

Comment 101

The revised 7Q10 flow and dilution factors do not reflect the hydrologic record
The Draft Authorization to Discharge under the Draft Medium WWTF General Permit uses a significantly lower 7Q10 flow to calculate the dilution factor compared to the flow used in Northbridge's current individual permit. The current permit's Fact Sheet (September 2012) indicated that that the 7Q10 flow was 0.557 cfs, corresponding to a dilution factor of 1.2. However, the new Draft General Permit revises the 7Q10 flow and associated dilution factor using USGS StreamStats to be 0.0319 cfs, with an associated dilution factor of 1.01. This 94 percent decrease results in a significant reduction in the permit limits for aluminum, cadmium, ammonia (winter average monthly), and chronic toxicity.

In the Draft General Permit, EPA has not provided justification for revisiting the 7Q10 flow that has been used in previous permit cycles. Therefore, in assessing this change, we evaluated available hydrologic data to determine if such a large reduction in the 7Q10 flow is warranted. To do this, we reviewed:

- Whether StreamStats can be used to evaluate temporal changes in 7Q10 flows in Massachusetts since the previous 7Q10 flow was calculated
- The applicability of USGS StreamStats for estimating the 7Q10 flow in the absence of a gage for the Northbridge discharge location
- Regional hydrologic trends to evaluate whether low flows are decreasing over time that would support such a reduction in the 7Q10 flow
- Low flow statistics at a nearby gage that has similar characteristics to the unnamed brook that Northbridge discharges

The findings of this assessment are described below.

A. StreamStats does not represent changes in 7Q10 flow since the previous permit was issued

In the Fact Sheet, EPA indicates that revisions to the 7Q10 flows were computed "to account for recent hydrological changes in the watershed and changing climatic conditions." However, the unnamed stream that Northbridge discharges to does not have an active gage, so EPA relied on StreamStats to estimate the 7Q10 flow.

The regression equations used in StreamStats do not achieve the goal of representing recent nor changing climatic conditions to the 7Q10 flow. In Massachusetts, the USGS developed the 7Q10 regression equations that are used in StreamStats in 2000[1]; the equations were based on a statistical analysis of 114 stations throughout the state (**Attachment 1**). The period of record for the calculation was based on the period of record (through publication in 2000) for each gage. Given that the equations in StreamStats are over 20 years old, they simply cannot account for recent hydrologic changes.

Furthermore, StreamStats' regression equations were developed assuming stationarity in the underlying data (no adjustment is made to account for the period of record of the gages underlying the regression equation development) and is only based on data collected through publication in 2000. Therefore, the StreamStats 7Q10 flow does not represent changes to the 7Q10 flow since the previous permit analysis was completed. Instead, EPA's application of StreamStats is a prediction of the 7Q10 flow based on a compilation of gage data collected between 1910 and 2000 in the eastern portion of the Commonwealth.

B. The application of StreamStats exceeds the limits of the underlying data used to develop the regional regression equations

The StreamStats 7Q10 regression approach uses four parameters, shown in **Table 1**. For each parameter, the table also includes the range of observed data used to develop the regression equation and the value for the Northbridge effluent discharge location. The parameters in **Table 1** for Northbridge were taken from the Administrative Record provided by EPA. This comparison indicates that the drainage area at the discharge location (1.45 mi2) is below the minimum value indicated by USGS for application of the regression equation for estimating the 7Q10 flow, indicating increased uncertainty in extending the regression equation to this smaller drainage area. Therefore, there was a misapplication of the StreamStats tool to develop a 7Q10 flow for the tributary to which Northbridge discharges

Table 1 Components of the Massachusetts 7Q10 Regional Regression Equation in StreamStats

Parameter	Minimum Limit	Maximum Limit	Northbridge	Notes
Drainage Area (mi^2)	1.61	149	1.45	Below minimum guidance for analysis
Mean Basin Slope (percent)	0.32	24.6	3.735	Meets analysis requirements
Stratified Drift per Stream Length (mi^2/mi)	0.00	1.29	0.0786	Meets analysis requirements
Massachusetts Region (-)	0	1	0	Meets analysis requirements

C. Changes in regional hydrology do not suggest a significant reduction in 7Q10 flow since the previous permit analysis

We next evaluated whether significant hydrologic changes have occurred in the regional hydrology that would indicate whether a 94 percent reduction in the 7Q10 flow is reasonable. As noted previously, the unnamed tributary to the Blackstone River to which Northbridge's effluent discharges does not have a USGS stream gage. Therefore, for this assessment, we reviewed the historical flow at four USGS gages near Northbridge (**Table 2**)[2]. The gages were selected because they have relatively small drainage areas (46.3 mi2 or less) and are not likely to be impacted by upstream regulation or point sources.

For each gage, the minimum 7-day average flow was calculated between 1991 and 2021 for each year and plotted to evaluate whether regional hydrologic changes would support such a significant reduction in the 7Q10 flow[3]. This analysis (**Figure 1**) indicates that the 7-day average low flow exhibits an upward trend at all four gages. This assessment therefore indicates that regional baseflow has not been trending down since the previous permit was issued in 2012, and does not support the nearly two orders of magnitude reduction in 7Q10 flow indicated by EPA's revised analysis in this Draft General Permit.

Table 2 USGS Gages with Smaller Watersheds Near Northbridge

Gage	Period of Record	Drainage Area (square miles)
01095375 - Quinapoxet near Holden	11/1996 - Present	46.3
01095434 - Gates Brook near West Boylston	12/2011 - Present	3.31
01111300 - Nipmuc River near Harrisville RI	10/1993 - Present	16

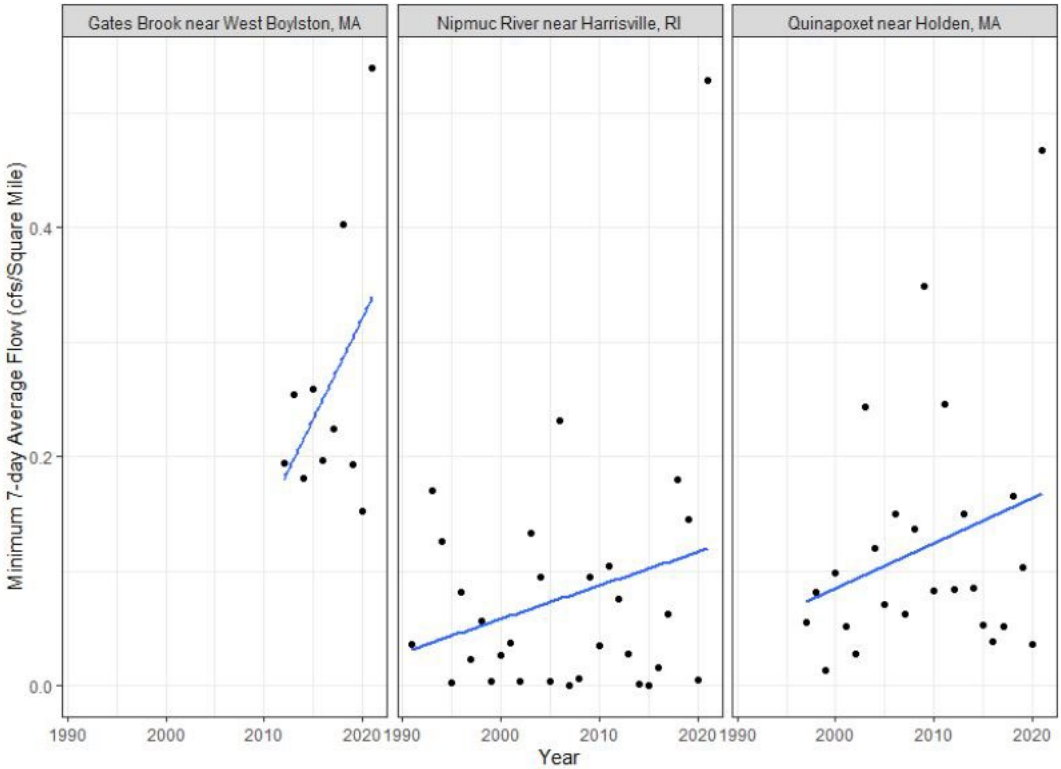


Figure 1
Annual Minimum 7-day Average Flow Normalized by Drainage Area for Three Gages near Northbridge

D. Calculated 7Q10 flow from a nearby gage supports a higher 7Q10 flow in the unnamed tributary

To further evaluate whether the 7Q10 flow calculated using StreamStats is representative of current conditions at the Northbridge WWTP discharge location, we evaluated the 7Q10 flow using two methods for the closest small, unregulated gage (Gates Brook near West Boylston, MA – USGS 01095434):

- Using standard calculation techniques with a Log-Pearson Type III fit to the streamflow data (using USGS SW Toolbox version 1.0.5)
- Using the regression equations in StreamStats. The calculated 7Q10 for this gage is 0.525 cfs, with a 95% confidence interval of 0.379 – 0.631 cfs (**Figure 2** and **Attachment 2**).

This analysis is summarized in **Table 3**.

Based on the USGS-reported drainage area for the Gates Brook gage (3.13 mi2), the 7Q10 flow is 0.168 cfs/mi2 with a 95% CI of 0.121 – 0.202 cfs/mi2. Scaled to the drainage area of the unnamed tributary (1.45 mi2) the Northbridge discharge would represent a 7Q10 flow between 0.18 and 0.29 cfs – lower than the current 7Q10 flow, but not a decrease of an order of magnitude that is proposed in the Draft General Permit. Furthermore, for Gates Brook, the calculated 7Q10 and estimated 7Q10 using StreamStats vary by an order of magnitude here, as well, suggesting that the StreamStats estimate is not a reliable calculation for the 7Q10 flow for small streams in this region.

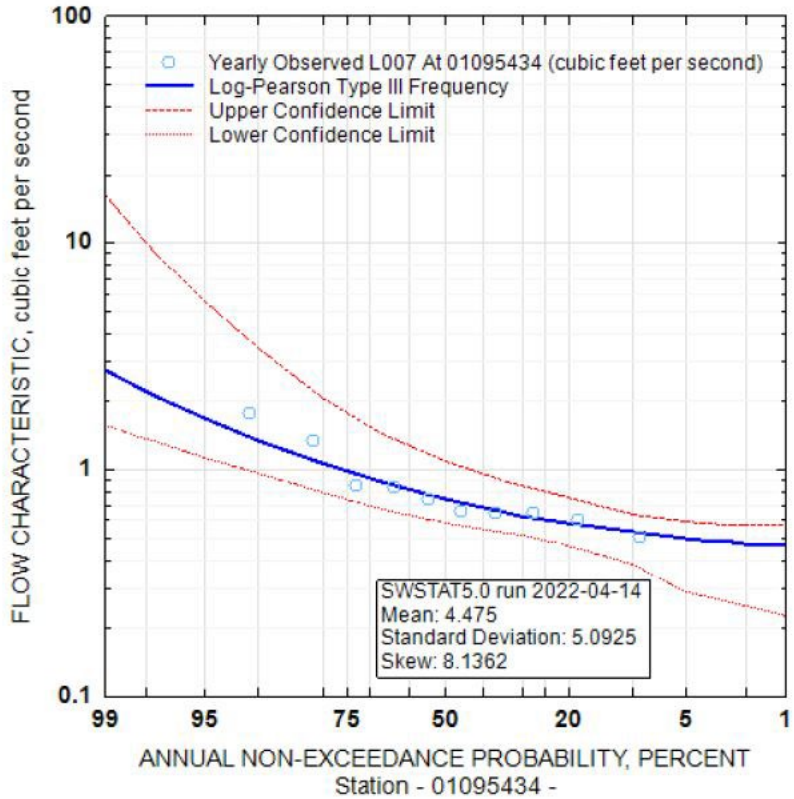


Figure 2
7Q10 Analysis for USGS 01095434 Gates Brook near West Boylston MA

Table 3 Summary of 7Q10 Calculation for Gates Brook

Analysis	7Q10 (cfs)	Normalized 7Q10 flow (cfs/mi²)
LPIII Calculation	0.525 (95% CI: 0.379 – 0.631)	0.168 (95% CI: 0.121 – 0.202)
StreamStats Calculation	0.0906	0.028

Finally, while this analysis is based on a limited record (and is lower than the 15-20 year recommendation in the EPA Low Flow Statistics Tools Handbook (EPA-833-B-18-001)), the minimum 7-day average flow at Gates Brook in 2020 was 0.5 cfs; regional flows approached or exceeded 7Q10 in stream gages across the region in 2020, lending confidence that the 7Q10 flow is close to the calculated 0.52 cfs despite the uncertainties introduced by using a gage with a short period of record, and further supporting the finding that StreamStats is not a reliable estimator of low flows for small streams in this region.

E. The dilution factor should not be revised

Our analysis of regional hydrologic trends and the underlying basis for the regression-based analysis in StreamStats suggests that the reduction in 7Q10 flow between EPA's previous analysis and the analysis completed for the 2022 Draft General Permit is not representative of changes that have occurred in the last 10 years nor is it representative of the 7Q10 flow for watersheds at the low end of the range used to develop the regional regression equations. The existing 7Q10 and dilution factors should be retained.

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

1 Ries and Friesz (2000). Methods for Estimating Low-Flow Statistics for Massachusetts Streams. USGS Water Resources Investigations Report 00-4135.
2 The Blackstone River gages (e.g., Millbury and Uxbridge) are significantly impacted during low flow by the Upper Blackstone Clean Water WWTF discharge, so their low flow statistics are influenced by the WWTF discharge. For this reason, gages outside of the Blackstone River watershed were used.
3 This 30-year period was selected to correspond to the 30-year period cited by EPA as the basis for the 7Q10 calculations in the Fact Sheet (at 15)

Response 101

EPA and MassDEP agree with the comment that the Northbridge outfall is below the minimum drainage area recommended for using StreamStats to determine the 7Q10. Therefore, EPA agrees that the existing 7Q10 of 0.557 cfs based on the *Blackstone River Initiative Report* (2001)[11] is the best available information and Attachment E of the Final General Permit will be changed to include this 7Q10 and a dilution factor of 1.2 as suggested in this comment. However, EPA notes that the next reissuance of this permit may require conducting a new study to update the 7Q10 to account for any recent changes in upstream flow at that time.

Based on this change in 7Q10 and dilution factor, the more stringent limits were recalculated and will be updated in Attachment E of the Final General Permit as follows:

- Ammonia: 5.1 mg/L (monthly ave, November 1 - April 30), 1.6 mg/L (monthly ave, May 1 - October 31);
- Al: 593 µg/L (daily max);
- Cd: 0.9 µg/L (daily max).

Comment 102

Water Quality Based Effluent Limits should be based on the newly promulgated Amendments to the Massachusetts Water Quality Criteria

The Draft General Permit includes two parallel Water Quality Based Effluent Limits for aluminum, cadmium, and ammonia, with one WQBEL established for the current approved version of the Massachusetts Surface Water Quality Standards (314 CMR 4.00, effective September 19, 2007) and a second WQBEL established for the newly promulgated amendments to the Massachusetts Water Quality standards (Mass SWQS, 314 CMR 4.00, promulgated November 12, 2021 but not yet approved by EPA). The Draft General Permit states that if the newly promulgated amendments are approved prior to the final permit issuance, then the new criteria will be used for the WQBEL calculation.

Depending on the parameter, the WQBELs can be higher or lower than WQBELs established under the current Surface Water Quality Standards. For constituents with higher limits with the newly promulgated Surface Water Quality Standards (e.g., for Northbridge, the monthly average cadmium limit is higher), the new criteria may not be able to be used in a future permit issuance to revise the WQBELs due to the anti-backsliding provisions of the Clean Water Act. Therefore,

[11] https://nepis.epa.gov/Exe/ZyPDF.cgi/940050N7.PDF?Dockey=940050N7.PDF

EPA should delay the issuance of the Medium WWTF General Permit until the amendments to 314 CMR 4.00 are commented on and/or approved by EPA.

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

Response 102

EPA confirms that the updated Massachusetts WQS have been approved by EPA and the resulting limits based on the new WQS are applied in the Final General Permit.

Comment 103

The aluminum limits should be removed from the permit based on a reasonable potential analysis using the updated EPA/MassDEP aluminum criteria

In 2018, EPA published its updated final aquatic life criteria for aluminum in freshwater, which used recent toxicology science to account for local water chemistry impacts on potential toxicity to aquatic life from aluminum by making the criterion dependent on the site-specific pH, DOC and hardness, whereas the previous limits applied to all waters. MassDEP has incorporated the latest EPA criteria in its newly promulgated amendments to the Mass WQS, which are currently with EPA for approval. The revised EPA/MassDEP criteria, based on EPA's 2018 update, raise the chronic criterion from 87 µg/L to 262 µg/L using default watershed criteria for the Blackstone River watershed that account for the local factors EPA intended to be considered when it updated the criteria in 2018[4].

Using the updated aluminum criteria, there is no longer a reasonable potential to exceed the water quality criteria based on the procedures outlined in Appendix A to the Medium WWTF General Permit Fact Sheet. This procedure uses the following data:

- The median concentration for the receiving water just upstream of the facility's discharge taken from all available information over the most recent 5-year period, including WET testing data, for each Permittee (Appendix A, Footnote 1, Page A-1)
- The 95th percentile (for $n \geq 10$) … from all available data over the most recent 5-year period, including DMR data and/or WET testing data, for each Permittee. Appendix A of the General Permit states that "When both the downstream concentration (Cd) and the effluent concentration (Ce) exceed the applicable criterion, there is reasonable potential for the discharge to cause, or contribute to an excursion above the water quality standard." (Appendix A, Page A-2).

Based on Appendix D of the General Permit Draft Authorization, the median aluminum concentration upstream of the Northbridge discharge was 195 µg/L and Northbridge final effluent aluminum ranged from 4.7 to a maximum of 246.9 µg/L ($n = 60$), with a 95th percentile of 146.4 µg/L. We used the equation in Appendix A to solve for the downstream concentration, following the flow characteristics stated in Appendix A, where:

- The effluent is discharging at the 95th percentile observed concentration (Ce, 146.4 µg/L) at design flow (Qe, 2 mgd or 3.094 cfs).

- The upstream concentration (Cs) is the median concentration from the WET test results at the revised 7Q10 (Qs). This is an aluminum concentration of 195 µg/L at a flow of 0.0309 cfs.

This results in the following downstream concentration (Cd):

$$C_d = \frac{C_s Q_s + C_e Q_e}{Q_d} = \frac{195\,\frac{\mu g}{L} * 0.0309\ cfs + 146.4\,\frac{\mu g}{L} * 3.094\ cfs}{0.0309\ cfs + 3.094\ cfs} = 146.9\ \mu g/L$$

Both the downstream concentration and the maximum effluent concentration are less than the chronic water quality criteria of 262 µg/L. Therefore, based on the procedures used by EPA Region 1 for the Medium WWTF General Permit, there is no reasonable potential to exceed the aluminum water quality criteria following the approval of the Amendments to 314 CMR 4.00. EPA should remove the aluminum permit limit based on this finding.

The removal of a permit limit in this situation is consistent with the Clean Water Act (33 USC 26 §1313(d)(4)(B)) and previous EPA actions in Region 1. The Clean Water Act generally prohibits anti-backsliding except for specific exceptions, described in 33 USC 26 §1342(o). One of those circumstances – which applies for Northbridge's aluminum limit – is found in Section 1313(d)(4) providing a mechanism to remove an effluent limit in a water where water quality standards are attained:

> (B) STANDARD ATTAINED.—For waters identified under paragraph (1)(A) where the quality of such waters equals or exceeds levels necessary to protect the designated use for such waters or otherwise required by applicable water quality standards, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section, or any water quality standard established under this section, or any other permitting standard may be revised only if such revision is subject to and consistent with the antidegradation policy established under this section.

Thus, removal of an effluent permit limit for a constituent for which water quality criteria are attained is permissible under the Clean Water Act. This type of permit action has precedent in EPA Region 1, and is identified as a mechanism for implementation in MassDEP's Fact Sheet, *Implications for Implementation of Proposed SWQS Revisions Regarding the SWQS' Antidegradation and the CWA's Anti-Backsliding Provisions* **(Attachment 5**).

[4] The 2018 water quality criteria use ambient data for DOC, pH, and hardness. These data have not been collected in the unnamed tributary to the Blackstone River to which Northbridge discharges. In the absence of data, MassDEP has developed default watershed criteria; the default criteria for the Blackstone River are 532 µg/L (acute) and 262 µg/L (chronic) **(Attachment 4)**. This matches the approach taken by EPA in the Medium General Permit.

Response 103

See Responses 101 and 102.

For more details regarding the aluminum limit, see Response 75.

Comment 104

Interim limits for zinc should be maintained

The Town of Northbridge is currently operating under interim limits for zinc established in an Administrative Order issued in 2018 (Administrative Order Docket No. CWA-01-18-001, 2018). These limits are 76 µg/L for both average monthly and maximum daily. The Town has been operating under this Administrative Order, and will work with the EPA Enforcement and Compliance Assurance Division to discuss the status of this Administrative Order relative to the new General Permit.

Response 104

EPA acknowledges this comment.

Comment 105

Eliminate potential for confusion on the monitoring requirements for parameters associated with Whole Effluent Toxicity Testing

The Draft General Permit newly includes monitoring requirements in Part A (Effluent Limitations and Monitoring Requirements) for many, but not all, of the required parameters associated with whole effluent toxicity testing, which are found in Attachments A and B to the permit.

By not entirely replicating the monitoring requirements in Attachments A and B in Part A of the permit, EPA is creating the potential for confusion on those requirements. EPA should either replicate the requirements in their entirety or remove them from Part A of the permit and allow Attachments A and B to define the requirements as has been the case for decades.

Response 105

See Response 49.

Comment 106

PFAS monitoring requirements should be reduced

The Draft General Permit includes a requirement for quarterly PFAS monitoring. Given the relatively small size of the facilities covered under the General Permit (Northbridge has a design flow of 2 mgd) and the high cost of the PFAS monitoring, the monitoring requirements should be reduced to twice per year. This is consistent with EPA's approach for the recently issued Region 1 Small Wastewater Treatment Facilities General Permit response to a similar comment from several permittees:

> …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. …

Small WWTF General Permit RTC at 105-106

The rationale used by EPA to support a reduction in the reporting frequency for the Small WWTF General Permit should be applied to facilities covered under the Medium WWTF General Permit.

Response 106

EPA disagrees with this comment and highlights that the Small WWTF General Permit only includes WWTFs with a design flow below 1 MGD. The reference to "smaller WWTFs" in the citation above is in reference to below 1 MGD. The WWTFs eligible for coverage under the Medium WWTF General Permit, in contrast must have a design flow between 1 and 5 MGD and are "medium" in size, not "small." EPA considers these medium-sized WWTFs to have a more significant environmental impact and justify additional PFAS monitoring.

Comment 107

A Sampling Plan and QAPP should not be required for the ambient phosphorus monitoring program

The Draft General Permit imposes an ambient phosphorus monitoring program for facilities with a dilution factor greater than 1.1 and a final effluent concentration limit greater than 0.1 mg/L, which would apply to Northbridge when the dilution factor is modified per Comment No 1. The Draft General Permit calls for permittees to submit a sampling plan and QAPP for approval by EPA and MassDEP. These requirements are unnecessary and overly burdensome.

A sampling plan is not needed because the monitoring requirements are clearly specified in the Draft General Permit, and the required monitoring is similar to that Northbridge currently undertakes to collect the ambient sample for WET testing. Northbridge successfully completes the WET testing requirements per permit specifications without an approved sampling plan or QAPP. Since the phosphorus monitoring location can be concurrent with the ambient monitoring location used for the WET testing, there is no logic to requiring a sampling plan and QAPP for one analyte and not the others. Therefore, a site-specific monitoring plan and QAPP is not necessary to collect these data when the town is already collecting ambient data for the WET testing requirements, and these data are already used by EPA for the reasonable potential analysis calculations. Thus, this requirement is overly burdensome.

Notwithstanding this comment, should EPA require a sampling plan and QAPP for the ambient phosphorus monitoring program, the town notes that there are at least 24 facilities covered by the Draft General Permit that will require phosphorus monitoring. If all 24 facilities are required to develop an individual sampling plan and QAPP, each monitoring plan and QAPP will be largely identical since the program is prescribed by EPA in the Draft General Permit. It is an unnecessary burden on the regulated community (and the regulators who will have to approve the documents). To minimize this burden, we request that EPA:

- Develop a QAPP template for this monitoring program that will cover all eligible facilities, and/or
- Review AquaQAPP – the Massachusetts Bay Estuaries Program's web-based application which helps monitoring program managers develop project-specific Quality Assurance

Project Plans (QAPPs) for fresh/marine/estuarine water quality that can be automatically approved by the regulators – for adequacy for use for the phosphorus monitoring program and inform permittees of the option to use it.

Response 107

See Response 52. Regarding the request for a QAPP template, MassDEP has agreed to provide a template to assist with the development of this QAPP. Any affected Permittees may reach out to MassDEP at MassDEP.NPDES@mass.gov to request the QAPP template once they are authorized under the Final General Permit.

Comment 108

General Comments

A. Part II.B Other Requirements, subparagraph 1, states, "The discharge shall not cause a violation of the water quality standards of the receiving water."

As required by the Clean Water Act, the permit writer has the burden to identify and apply applicable regulations and incorporate all necessary and appropriate terms, conditions, and limitations into the permit. Federal law requires that permitting agencies include limitations necessary to meet applicable water quality standards (WQS), including numeric effluent limits for any pollutant that has reasonable potential to cause a WQS violation. As such, we request that this narrative language be deleted from the permit.

Similarly, subparagraphs II.B.2, 3, 4 and 5, contain narrative language that mimic language in the Massachusetts Water Quality Standards. These are not necessary if Part II.B.1 is contained in the permit. Therefore, we request that this narrative language also be deleted from the permit.

Notwithstanding the request in the previous paragraph, the language in Part II.B.1(3) should be restated as it overreaches the requirements of the Mass WQS (314 CMR 4.05(5)b)), which provides two specific instances of biological pollutants or alterations relative to biological organisms (emphasis added):

> "all surface waters shall be free from pollutants in concentrations or combinations or from alterations that adversely affect the physical or chemical nature of the bottom, **interfere with the propagation of fish or shellfish, or adversely affect populations of non-mobile or sessile benthic organisms**.

The Draft General Permit should mimic this language rather than the all-encompassing "biological nature of the bottom" language in the current Draft General Permit, which states "The discharge shall be free from pollutants in concentrations or combinations that adversely affect the physical, chemical, or biological nature of the bottom.

Response 108

In implementing the statutory requirements in sections 301 and 402, permitting authorities have frequently included in NPDES permits general prohibitions such as the one contested here alongside more specific "end of pipe" pollutant-specific effluent limits. This provision has been recently upheld by the Environmental Appeals Board. *In*

re: City of Lowell, 18 E.A.D. 115, 175-180 (E.A.B. 2020). Other Regions and permitting authorities similarly include such language. *See, e.g., Ohio Valley Envtl. Coal. v. Fola Coal Co.*, 845 F.3d 133, 136 (4th Cir. 2017) (upholding enforcement of provision requiring the permittee's discharges to "'be of such quality so as not to cause violation of applicable water quality standards'") (quoting W. Va. Code R. § 14-30-5.1.f (2009)). The Fourth Circuit in *Fola Coal* recognized that EPA has often included such provisions in NPDES permits and noted that "EPA's view as to the reach of [narrative permit provisions prohibiting violations of water quality standards] has been consistent, as has the acceptance by courts of EPA's view when interpreting similar provisions." *Id.* at 141 & n.5 (citing several NPDES permits and relevant cases as examples). Including such permit conditions not only allows permit issuers to incorporate enforceable assurances into the permit that water quality standards will be met, but also provides permit authorities with a method to address, as necessary, water quality violations that a permittee causes due to unanticipated circumstances or changes to effluent quality.

With regard to the provision at Part II.B.1, EPA's authority is not as narrowly constrained as the commenter implies. Section 402 of the Act authorizes EPA to issue an NPDES permit with conditions that ensure that the discharge will meet, among other things, the requirements of § 301 of the CWA. That provision includes § 301(b)(1)(c), which requires that a discharge shall achieve "...any more stringent limitation, including those necessary to meet water quality standards...established pursuant to any State law or regulation...." (emphasis added). Nowhere does the statute specify that EPA may only impose specific numeric effluent limitations to meet state water quality standards. EPA's regulations at 40 CFR § 122.44(d)(1) state that each permit shall include "any requirements in addition to or more stringent than promulgated effluent limitations guidelines.... necessary to achieve water quality standards...." While § 122.44(d) does require "effluent limits" to be established when EPA determines that a particular pollutant has the reasonable potential to cause or contribute to an in stream excursion above a water quality criterion, the regulations do not require that all "effluent limitations" necessary to meet water quality standards be expressed in terms of specific pollutant by pollutant numeric limitations. They may be narrative in form, including for example, when they are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes or intent of the CWA. As explained below, this requirement narratively tracks a key, and unambiguous, provision of the MA WQS.

The language included in Part II.B.1 is both lawful and consistent with EPA Region 1's past practice. Exactly the broad narrative language to which the commenter objects is included in all Massachusetts NPDES permits. EPA includes this provision to ensure full implementation of Sections 301(b)(1)(C) and 402 of the Clean Water Act. 33 U.S.C. §§ 1311(b)(1)(C). *Northwest Envtl. Advocates v. City of Portland*, 56 F.3d 979, 990 (9th Cir. 1995) (concluding that "the statutory language, legislative history, and case law authorize citizens to enforce permit conditions stated in terms of water quality standards"). Moreover, this provision is also consistent with requirements under Massachusetts state law and regulations. Section 4.03(1)(a) of Massachusetts' water quality standards specifically states, "The Department will limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected and maintained or attained." 314 CMR 4.03(1)(a). EPA's Draft Permit is consistent with, and derived from, this state requirement.

EPA sees merit in including a general, narrative, preventative permit provision that restates the commands of Section 301 and the implementing regulations at 40 CFR §§ 122.4 and .44 to "ensure" compliance with quality standards, and that similarly mirrors the Commonwealth's mandate at 314 CMR 4.03(1)(a). Doing so not only allows EPA to incorporate a legal assurance in the permit that water quality standards will be met, consistent with its obligations under sections 301 and 402 of the Act and MA WQS, but also will allow it to address, as necessary, water quality violations caused or contributed to by Permittees due to such circumstances as unanticipated changes in or alterations to effluent quality that might otherwise meet permit conditions or the discharge of pollutants previously identified in the discharge, for example. Again, this requirement narratively tracks key provisions of the MA WQS, which EPA is not required to translate or express as a series of individual numeric limitations, but that it may instead frame as a narrative prohibition in furtherance of its obligation to include in permits conditions that ensure compliance with water quality standards, as it is incontrovertibly entitled to do under law. The "[Clean Water] Act permits enforcement of broad, narrative criteria." *PUD No. 1 of Jefferson Cty. v. Washington Dep't of Ecology*, 511 U.S. 700, 700 (1994).

With regard to the comment regarding the provision at Part II.B.3, EPA agrees with the comment and has changed the provision to reflect verbatim the Massachusetts WQS at 314 CMR 4.05(5)(b).

Comment 109

B. Part III.G.2 requires permittees to submit an annual report documenting the annual nitrogen discharge load from the facility and tracking trends relative to the previous calendar year and the previous five calendar years. TN discharges can increase due to changes in the influent loads due to changes in dischargers to the plant or influent flow changes due interannual hydrologic variability.

EPA will already be informed about the introduction of new pollutants or increased flows or loads as it is required to be reported to EPA (see Part B.7 of the Draft General Permit). Changes in loads due to interannual variability will be common across all the plants in a region and do not warrant dozens of POTWs informing EPA of regional hydrologic trends.

Therefore, annual reporting on the nitrogen loads is not necessary for EPA to understand regional trends in TN loads. This requirement is a regulatory overreach and will require significant additional reporting and analysis conducted by permittees to satisfy this request. Further without further guidance, permittees could use a variety of methods to calculate loads obviating the usefulness of discharger's estimates throughout a watershed to understand changing loads. Therefore, we request that this provision be removed from the permit requirements.

Response 109

EPA notes that this annual report is intended to confirm compliance with the permit requirement to optimize nitrogen removal. As noted in the description of the report at Section II.G.2 of the General Permit, EPA agrees that an increasing trend in effluent nitrogen may be due to an increase in the influent load to the facility and/or operational changes at the facility. The report requires an explanation of the cause for any such trends

which will further confirm compliance with the optimization requirement. These annual reports may also serve as a self-assessment to the permittees to verify and maintain the most effective optimization practices.

Comment 110

C. Footnote 13 to the Draft Authorization states that "For phosphorus, the Permittee shall properly operate and maintain the phosphorus removal systems in order to obtain the lowest effluent concentration possible." Northbridge has a seasonal total phosphorus limit, with a more stringent limit of 0.2 mg/L and 3.3 lb/day in the summer months (April 1 – October 31) and a less stringent limit of 1.0 mg/L and 16.7 lb/day in the winter months (November 1 – March 31). As written, this footnote implies that the treatment system will need to be operated to maximize phosphorus removal to the limit of technology even during the winter months when the higher 1.0 mg/L limit is in effect. Since Northbridge uses alum for phosphorus removal, year-round operation of the SBR and alum system to achieve lowest effluent concentration possible results in a higher operational cost for the additional alum dose without a resulting ecological benefit. Therefore, we request that this provision be removed from the permit. Alternatively, EPA should add a provision similar to the nitrogen removal provision in Part G.1 indicating that any alum addition that is necessary to meet the total phosphorus limit during the months of May to October is not required during the months of November to April.

Response 110

First, the requirement referenced in this comment is included in their 2013 individual permit and is carried forward into the General Permit. Second, during the review period Northbridge has been in consistent compliance with these limits with a median summer concentration of 0.14 mg/L and a median winter concentration of 0.4 mg/L. These limits, including the year-round requirement to maximize phosphorus removal, are designed to protect the water quality standards of the receiving water. Given the Blackstone River downstream of the discharge is impaired for phosphorus, EPA confirms that it is appropriate and necessary for the facility to maximize phosphorus removal year-round to the maximum extent possible. Even in the winter months phosphorus can accumulate in the sediment and then be released during the growing season, so it is important to reduce phosphorus loads year-round.[12] Further, this requirement may not be relaxed due to anti-backsliding and antidegradation regulations.

S. Comments from Steven Williams, Director, Department of Public Works, Town of Belchertown, on April 26, 2022:

Comment 111

Paragraph G.2 of the Draft Permit requires that the Town submit an annual report to EPA and MassDEP that summarizes activities related to optimizing nitrogen removal efficiencies, documents the annual nitrogen discharge load from the facility, and tracks trends relative to the previous calendar year and the previous five (5) calendar years. We ask that this reporting requirement be removed. Since, ammonia and total nitrogen effluent limitations are included in the Draft Permit (as well as monitoring requirements for total Kjeldahl nitrogen, nitrite, and

[12] See CDM, Assabet River Sediment and Dam Removal Study Modeling Report, June 2008. This same justification for winter phosphorus limits applies to the Blackstone River as well as the Assabet River.

nitrate) and the Town has consistently been meeting these effluent limitations, it is unclear what the need is for this additional reporting requirement. Moreover, under the previous permit, the Town completed a detailed nitrogen optimization evaluation, documented the findings in a report to EPA, and implemented the recommendations. If the Town is consistently meeting its nitrogen discharge limitations further optimization should not be required at this point.

Response 111

EPA notes that the General Permit includes two independent requirements related to the facility's discharge of nitrogen. One requirement is to achieve compliance with the rolling annual average effluent limit; the second requirement is to optimize the treatment facility operations relative to total nitrogen removal as set forth in Part II.G.2 of the General Permit. EPA notes that this second requirement applies regardless of whether the facility is discharging below the effluent limit.

While the monthly Discharge Monitoring Report (DMR) data will document the level of nitrogen in the discharge to confirm compliance with the effluent limit, the DMRs do not indicate whether the Permittee has complied with the optimization requirement of the permit. In order to confirm compliance with this requirement, an annual report is necessary that "summarizes activities related to optimizing nitrogen removal efficiencies."

See also Response 109.

Comment 112

Please clarify the requirements of the nitrogen optimization report as follows:

- Track trends relative to the previous three years instead of the previous five years. Reporting 5 years of data is not consistent with the records retention policies of maintaining data for 3 year period.

- Remove or clarify the requirement to "include a detailed explanation of the reasons why TN discharges have increased ... ". This language is ambiguous. To what degree of an increase requires a response? What constitutes a detailed explanation? The nature of wastewater treatment is dependent on any number of variables, many of which are outside our control as operators (change in influent conditions, weather fluctuations, etc). The task of pin-pointing a specific reason or reasons with certainty for a marginal increase, demands an expensive and time-consuming evaluation.

- Define what other additional optimization strategies the Town should evaluate to reduce the effluent total nitrogen discharge load. As we have already completed such an evaluation and implemented its recommendations, it is not clear what opportunities remain to reduce effluent total nitrogen.

Response 112

First, EPA notes that Part VII.C.1.b indicates, "Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least 5 years (or longer as required by 40 C.F.R. § 503), the Permittee shall retain records of all monitoring

information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time."

Given that compliance with this annual report necessitates retaining relevant nitrogen optimization records for at least 5 years, this provision should be understood as an extension by request of the Director.

Second, this requirement does not entail the level of detail implied by the comment. Rather, the annual report requires an explanation of increases in TN load based on increased loading to the facility and/or operational changes at the facility. The Permittee is not required to provide a detailed assessment of exactly where that increased load originated but rather an approximation of the extent such an increase was due to increased loading versus operational changes.

Third, Part II.G.1 of the General Permit indicates "If the Permittee has *already conducted this evaluation* under their existing permit, this requirement does not apply, and the Permittee shall *continue* to optimize…" (emphasis added) Given that the commenter has already completed this evaluation, the General Permit specifies they must continue to optimize accordingly.

Comment 113

The Draft Permit Authorization increases the frequency by which ammonia samples are taken. Can we reduce the frequency of all ammonia samples from twice per month as stated in the draft permit back to once per month as is the case in our existing permit? Similarly, we request the reduction of the frequency for sampling all other nitrogen species during the nitrogen permit season from once per week to once per monthly? Based on historical operating data, the Belchertown WWTF effluent has continuously been in compliance with the proposed ammonia effluent limits and total nitrogen requirements. Therefore, we believe that the current sampling frequency of once per month is sufficient for monitoring effluent nitrogen discharges, to avoid additional operating costs to the Town.

Response 113

See Response 275.

Comment 114

In the Draft Permit, the Belchertown WWTF received a revised maximum daily total aluminum effluent limitation of 760 µg/L, which is lower than the current limit of 792 µg/L. Moreover, as stated in the Draft Permit, if the revised 2021 Massachusetts Water Quality Criteria are approved by EPA, this limit will drop further to 610 µg/L. Paragraph F.3.a states that if the WQC are not approved, "the more stringent daily maximum effluent limit for total aluminum shall be subject to a schedule of compliance whereby the limits take effect three years after the authorization date under the permit." For Belchertown, the stricter daily maximum limit is based on the 2021 MA Water Quality Criteria, which contradicts the quoted statement above. Please clarify which limit

will be in effect following the three-year interim period, if the 2021 MA WQC are not approved by the time frame required.

Response 114

At the time of issuance of this General Permit, the revised 2021 Massachusetts WQS for aluminum have been approved by EPA. Therefore, EPA clarifies that the daily maximum aluminum limit of 610 µg/L would apply under the Final General Permit and the 3-year compliance schedule will be removed from the Final General Permit. However, EPA notes that the aluminum limit is impacted by changes to 7Q10 flow, as discussed in Response 122, and the limit of 634 µg/L will apply under the Final General Permit.

Comment 115

The Draft Permit requires the total aluminum sampling frequency to increase from once per month as is required in the existing permit, to twice per month. Based on historical operating data, the Belchertown WWTF effluent has continuously been well below the existing total aluminum effluent permit limits on both a monthly average and maximum daily basis. Moreover, since the effluent is sampled once per month, the single data point must meet both permit requirements. Therefore, our historic data show that we are consistently below the monthly average limit. In light of these data, we believe that the current sampling frequency of once per month is sufficient for monitoring effluent aluminum concentration. We request that the total aluminum sampling frequency remain the same as stated in the existing permit, to avoid additional operating costs to the Town.

Response 115

See Response 275.

Comment 116

In Paragraph F.3.a, the draft permit requires submission of an annual aluminum report before January 15th for each year in the interim limit. The report requires documenting progress towards meeting the more stringent proposed permit limit. As stated in the previous comment, the WWTF has continuously well exceeded the proposed more stringent maximum daily aluminum permit limit. It further states that the annual reports should include "(a) an evaluation of all potential significant sources of aluminum in the sewer system and alternatives for minimizing these sources, and (b) an evaluation of alternate modes of operation at the WWTF in order to reduce the effluent levels of aluminum." As part of the existing permit, we conducted an extensive evaluation to reduce aluminum sources and effluent discharges at the WWTF, submitted these reports to the EPA and MassDEP, and implemented the recommendations to great success. Therefore, we do not believe repeating these studies is warranted as we have already achieved compliance with the new permit limits and optimized aluminum removal. For these reasons, we request that EPA reconsidering requiring this annual reporting requirement, or at the very least, further clarify what these reports should include that is different from our previous significant efforts.

Response 116

The aluminum compliance schedule has been removed from the Final General Permit. See Response 114.

Comment 117

The Revised 2021 Massachusetts Water Quality Criteria adopts the revised aluminum criteria developed by EPA. The new guidance uses a multiple linear regression model (MLR) that incorporate local pH, hardness, and dissolved organic carbon (DOC) data to derive aluminum criteria. These MLR criteria better reflect the impact of local water chemistry on the bioavailability and toxicity of aluminum. MassDEP has proposed default aluminum criteria for river basins and coastal drainage areas across the state; the revised acute and chronic values for aluminum criteria for the Connecticut River Basin (the watershed where the WWTF discharges) are 630 µg/L and 300 µg/L, respectively.[1]

We note that the maximum daily limit proposed in the draft general permit is based on the revised acute toxicity limit. However, EPA has not consistently applied the same methodology to the chronic toxicity limit; the average monthly total aluminum effluent limit remains unchanged in the draft permit. Why was the updated guidance not applied to the calculation of the chronic toxicity? If the updated science demonstrates that such a low level of aluminum as reference in our existing permit no longer is found to be toxic to organisms in the receiving waters, why is the monthly average aluminum effluent limit increased to reflect the new scientific methods. Although the WWTF is currently meeting the existing aluminum limit, it is doing so by using alternative chemicals for phosphorus removal which are more costly to purchase, lead to more maintenance activities, and present an elevated safety risk to the equipment and operators at the WWTF. Therefore, updating the chronic limit to be based on the revised science, would reduce operating and maintenance costs and the safety risk of hazardous chemicals at the WWTF without leading to toxic impacts on the receiving waters.

[1] - https://www.mass.gov/files/documents/2019/10/04/FactSheet_MassDEP_314CMR4_Aluminum.pdf

Response 117

See Response 75.

Comment 118

The Draft General Permit requires that the WWTF conduct quarterly influent, effluent and sludge sampling for PFAS compounds. We understand that because PFAS chemicals are very persistent in the environment and in the human body, and that exposure to PFAS chemicals can lead to adverse human health effects there is an increased desire to better understand the flow of PFAS both into and out of the WWTF. However, this additional sampling and reporting requirement comes at a significant cost to the Town. To help reduce the burden of this additional sampling, we ask EPA to reconsider the sampling frequency of quarterly samples and reduce the frequency to twice per year. This frequency is then consistent with the frequency of the whole effluent toxicity testing required in the Draft General Permit, so it can be more easily coordinated within our operations schedule and with the necessary laboratories.

Response 118

See Response 13.

Comment 119

Footnote 12 and 20 of the Draft General Permit requires sampling and reporting of six PFAS compounds of the influent, effluent, and sludge, on a quarterly basis as well as individual

industrial dischargers on an annual basis. This requirement takes effect within the first full calendar quarter after the permit's effective data. Notably, this requirement is effective immediately even though an analytical method is not yet approved by EPA for this testing. We have strong reservations about sampling using a non-approved method for the reasons stated below:

A) We have reached out to a number of local laboratories and found that none are currently offering testing via the recommended Draft Method 1633. While some have plans to offer this capacity soon, it is not clear whether this capability will be available by the timeframe laid out in the permit. Other labs clearly stated that it would not be offered until the method was approved by EPA. How can we be expected to meet this requirement without certainty that there is even a laboratory available to complete the analysis?

B) Without an approved method, the data cannot be validated, and therefore serves little benefit for regulatory purposes, especially when it comes at a significant expense to the Town. How does the EPA or MassDEP anticipate using the collected data if it is from a non-approved method?

C) Recent individual NPDES permits issued by EPA and MassDEP for POTW dischargers in Massachusetts include language that delays the sampling requirement until an analytical method is approved. Specifically, this language is: "shall begin six (6) months after the Town has been notified by EPA of a multi-lab validated method for wastewater, or two (2) years after the effective date of the 2021 Federal NPDES Permit, whichever is earlier." Why is the same approach taken within the General Permit?

Based on the above reasons, we request that the sampling requirement be delayed until an analytical method is approved by EPA, similar to the language included in other recent MA NPDES permits.

Response 119

See Response 97.

Regarding data validation, EPA confirms that Method 1633 has been single-lab validated and the multi-lab validation process is expected to be completed in Fall of 2022. Therefore, EPA confirms that use of this method will provide validated data.

Comment 120

Footnotes 12 and 20 of the Draft General Permit, requires that the Permittee reports the results of all PFAS analytes included in the analytical method, beyond just the six listed in the permit, on the NetDMR. Draft method 1633 tests and reports 40 separate PFAS compounds. EPA notes in footnote 20 of the factsheet that there is no additional cost to the Permittee to collect this data in terms of analytical costs; it fails to acknowledge the significant increase in time that it will take to report the results of 40 compounds on the NetDMR system. We therefore, request that the additional requirement to report all analytes in NetDMR be removed from the permit.

Response 120

As with all monitoring data, EPA acknowledges that data entry of these analytes will take some time. However, such data entry is necessary for EPA to access the results efficiently for a wide variety of dischargers.

Comment 121

In addition to the influent, effluent, and sludge PFAS sampling discussed in the comments above, paragraph C.3 of the Draft General Permit requires that the WWTF conduct annual sampling of PFAS compounds for all industrial dischargers that are associated with the list of industry types. Currently, the Town of Belchertown does not have any significant industrial dischargers and does not manage an industrial pretreatment program. The identification and subsequent sampling of PFAS compounds at an unidentified (and possibly unbounded) number of industrial discharges across the collection system places an unfair cost and significant labor burden on the Town. Not only does this sampling effort require time to conduct the sampling, but it also relies heavily on cooperation with the industrial users for access to their facilities for sample collection, assuming a convenient sampling location that isolates their flow even exists. The provided list of industries is broadly defined, especially the last bullet which states " or Expected Sources of PFAS", which means additional time spent by Town staff to identify these practices. Lastly, CWA § 308(a) states that "the owner or operator of any point source [shall be required to] ... sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe)." Based on this quote, it is our understanding that the onus should be placed on the industrial users themselves, rather than the WWTF, to conduct annual PFAS sampling at the industrial locations. For these reasons, we request that this requirement be removed in its entirety from the Draft General Permit.

Response 121

See Response 36.

Comment 122

Dilution Factor (DF) Calculation: Attachment E of the Draft General permit states that the 7Q10 flow for the Lampson Brook was calculated to be 0.0166 cubic feet per second (cfs). As a result, the dilution factor (DF) for the plant is shown as 1.01. While the math to achieve the revised DF is clear, the change in the reported 7Q10 flow is not. In the existing NPDES permit, which became effective in 2014, the 7Ql0 flow was reported as 0.1 cfs, which represents an order of magnitude difference between the revised dilution factor. The existing permit factsheet states that no gauge is available in Lampson Brook, so gauge data was instead taken from Cadwell Creek (USGS gage station number 01174900). The Draft General Permit does not provide supporting information for the revised 7Q10 calculation. In the absence of data and supporting calculations, we tried to recreate the 7Q10 calculation to understand why it was changed so drastically. USGS reports that gage data from Cadwell Creek is only available between 1990 and 1997. As this range does not reflect any new data since the existing permit was issued, we do not understand why the dilution factor would change at all. Moreover, USGS Stream Stats analysis for the Lampson Brook states that the 7Q10 flow estimates "were extrapolated with unknown errors." This suggests that data from a different stream gage may have been used in determining the 7Q10 flow. We request that EPA provide the supporting data, calculations, and assumptions to explain the change in the dilution factor. If a different methodology was considered, what

evidence is there to support that the alternative methodology or alternative stream gauge dataset is accurately representative of the conditions within Lampson Brook at the WWTF outfall?

Response 122

Similar to Response 101 regarding Northbridge, EPA and MassDEP note that the Belchertown outfall is below the minimum drainage area recommended for using StreamStats to determine the 7Q10. Therefore, the existing 7Q10 of 0.1 cfs described in the comment is the best available information and Attachment E of the Final General Permit will be changed to include this 7Q10 and a dilution factor of 1.1. However, EPA notes that the next reissuance of this permit may require conducting a new evaluation to update the 7Q10 to account for any recent changes in upstream flow at that time.

Based on this change in 7Q10 and dilution factor, the more stringent limits were recalculated and will be updated in Attachment E of the Final General Permit as follows:

- Ammonia: 4.2 mg/L (daily max, May), 0.8 mg/L (monthly ave, May), 14.3 mg/L (daily max, November 1 - April 30), 2.6 mg/L (monthly ave, November 1 - April 30), 0.8 mg/L (monthly ave, June 1 - October 31); and
- Al: 0.634 mg/L (daily max).

See also Response 61 regarding ammonia.

Comment 123

According to the supporting reasonable potential calculations in the Draft Authorization (Appendix A), the change in the dilution factor results in the lowering of the existing total phosphorus, total copper, and total aluminum permitted values. These permit limits are already stringent and as such require can be challenging to meet with the existing technology even under the most careful oversight and operation which we pride ourselves in doing. It is therefore not appropriate for the EPA to simply assume that the proposed small changes to the permit limits for these parameters can be easily met at these stringent of levels. Adjusting operations to meet these limits have proven in the past to be challenging given the existing equipment was not designed for the compliance with an ever-lowering effluent limit. Therefore, we request that the EPA grant a compliance schedule of 24-months for the revised total phosphorus limit and total copper limit to take effect. Such a time frame is consistent with Section III, Paragraph F. l, which is listed in the Draft General Permit specifically for this purpose but not applied to Belchertown's limits. The compliance schedule would allow the operators to experiment with the necessary process modifications and operational adjustments that may be required to meet compliance with these lower limits, and/or consider options to meet the limit via upgrades to the existing treatment and chemical feed equipment.

Response 123

Based on Response 122, the phosphorus and copper limits are not more stringent in the Final General Permit than the currently effective limits under Belchertown's individual permit. Therefore, a compliance schedule is not warranted.

T. Comments from Paul Brinkman, PE, Director, Department of Public Works, Town of Pepperell, on April 26, 2022:

Comment 124

The town of Pepperell is in receipt of the draft renewal National Pollutant Discharge Elimination System (NPDES) permit for its municipal wastewater collection and treatment facility located at 47 Nashua Road, Pepperell, MA. We do not agree with the approach that the EPA has taken towards permitting every facility between the flows of 1.0 million gallons per day and 5.0 million gallons per day. This places our small wastewater treatment plant (WWTP) with much larger more complex facilities, which has resulted in increased requirements as compared to facilities which are permitted for less than 1.0 million gallons per day. We also believe that it has resulted in the inappropriate inclusion of limits that would have otherwise been not included in the permit. There are several limits and conditions, which will require the WWTP to expend capital funds and increase operation and maintenance costs. These changes will result in increased costs to the Town's sewer system users and will not provide a perceivable environmental benefit.

The following represents our specific concerns with the aforementioned draft NPDES permit. Where possible we offer and alternate strategy to identify what would be an acceptable level of regulation that could be incorporated into the proposed permit.

> **Response 124**
>
> Pepperell's design flow is 1.1 MGD. EPA has established a Small WWTF General Permit (No. MAG580000) for WWTFs with a design flow below 1 MGD as well as this Medium WWTF General Permit for WWTFs with a design flow between 1 and 5 MGD. The Pepperell WWTF is categorized as a medium-sized WWTF and is eligible for coverage under this General Permit.
>
> EPA acknowledges that the General Permit includes a variety of new requirements that will result in increased costs. However, EPA disagrees that such requirements "will not provide a perceivable environmental benefit." While it is not clear to which specific requirements the comment refers, EPA contends that all such requirements are necessary to protect water quality and/or human health under the CWA.

Comment 125

Data gathering for **Per- and Polyfluoroalkyl Substances** (PFAS) testing. The testing frequency associated with the PFAS testing is quarterly, for influent, effluent and sludge. The testing serves only as a data gathering exercise and is not required as a means to regulate the treatment facility or improve water quality. Background testing completed by MassDEP on the receiving stream, Nashua River, indicates that the WWTP does not contribute to background levels in the Nashua River. This represents a significant increase in the laboratory costs, likely in excess of $6,000 per year. The Town requests that the sampling frequency be reduced to one per year as is required by the General Permit being issued to Small Wastewater Treatment Facilities.

Similarly, the testing for **Total Kjeldahl Nitrogen, Nitrate** and **Nitrite** represents a data gathering exercise and exceeds the sampling requirement for a regulated pollutant Ammonia Nitrogen during the summer months. Pepperell requests that the sampling frequency for these non-regulated pollutants be reduced to a maximum of once per month.

Response 125

Regarding PFAS, see Responses 21 and 80.

See Response 275 regarding monitoring frequency.

Comment 126

Total Recoverable Aluminum. This is a new limit with an average monthly limit of 507 micrograms per liter (ug/1). While we believe that we are likely to meet these limits without substantial changes to the treatment plant processes we are concerned with the way that the calculation was performed. Under low flow conditions the Nashua River is effluent dominated. The low flow rate is defined as 28.9 million gallons per day (mgd); however, three of the larger upstream treatment plant permits (Fitchburg, Leominster, and Clinton) that discharge to the same River exceed 25.7 mgd. The River under those conditions could not be compared to the typical characteristics captured by the results captured and used as part of the limits development. Additionally, two of these plants do not have an aluminum limit and Pepperell should not be asked to control its aluminum without other upstream larger plants being held to the same controls.

The Town also notes that under the "new MA WQS" Appendix A that there is no Aluminum limit for Chronic or Acute Criteria. As the new criteria represents a more favorable limit to Pepperell we request that anti-degradation not apply to any future change in this limit. The fact that the instream Aluminum criteria is currently lower should not penalize Pepperell for the lack of an up-to-date criteria.

Response 126

At the time of issuance of this General Permit, the revised 2021 Massachusetts WQS for aluminum have been approved by EPA. The final authorizations reflect this.

Comment 127

Total Recoverable Copper. This limit has been reduced substantially from the previous limits of 65.7 micrograms per liter (ug/1) monthly average and maximum daily of 97.5 ug/1. The proposed limits are greater than a one log reduction at 3.4 ug/1 and 4.6 ug/1 respectively. These limits are not reasonable and do not appropriately represent a protection to the receiving water. The Town has completed several years of upstream monitoring and reported this data to the EPA via the NetDMR application. The values are in a range, some of which exceed the published water quality criteria; however, a large number were at the detectable or below detectable limit. The testing prior to 2021 was completed at a lab that did not have a detection limit that would have provided results suitable for use in determining limits in the 5 ug/l range. Especially as the 2022 data indicates that the River is less than 1 ug/l.

Additionally, as discussed under total recoverable aluminum, the River is effluent dominated under low flow conditions and the three large upstream plants are permitted under recently issued NPDES permits to discharge copper at levels higher than the instream criteria being placed on the River at Pepperell.

While the MassDEP has asserted a different instream criterion for the portion of the River that receives the effluent from the Clinton, Leominster, and Fitchburg WWTPs, it appears that the

downstream users must be prepared to now remove the copper that was permitted to be discharged by these facilities. When factoring in the permitted flows these facilities will be allowed to discharge more than 200 times more copper than Pepperell on a daily basis.

Plant	Average Monthly (ug/l)	Maximum Daily (ug/l)
Fitchburg East	27	39
Leominster	32.3	50.3
Clinton	11.6	14.0
Pepperell (proposed)	3.4	4.6
Instream Criteria at Pepperell	3.4	4.6

These levels are not achievable by the WWTP in its current configuration. Any technology currently available to remove copper represents millions of dollars in capital and hundreds of thousands of dollars per year in operation and maintenance costs. This is not acceptable given the allowance for upstream facilities to pollute the River.

The following language was included in our last response to the Draft NPDES permit that was issued in 2016. It appears that the issue still was not acknowledged and remains to be resolved.

There are a number of facilities located on the River upstream of Pepperell that are allowed to discharge elevated concentrations of copper, due to the type of model used to calculate the water quality criteria for the upstream reaches of the River. For some unknown reason the water quality river model changes resulting in the imposition of unreasonable limits on treatment plants downstream. It is the Town's belief that the relaxation of the limits upstream of the Pepperell discharge point is directly causing the main stem/ lower Nashua River to have high copper concentrations. Thus creating an artificial need to impose unreasonable limits on our discharge. The model used to determine pollutant levels and water quality concentrations should reflect on the entire River and not just static locations along the River. Future limitations issued in permits should be updated to acknowledge this situation and adjust limits accordingly.

The limitation does not consider the differences between the speciation of the copper compounds when it is discharged, which impacts the biota in dramatically different fashions. This overly conservative approach is contrary to the effluent quality testing conducted at the plant through the Whole Effluent Toxicity testing. The plant effluent routinely passes this test exceeding the criteria required.

The imposition of copper appears inconsistent with the 303 listing for the River, which does not identify metals as needing control.

Response 127

EPA acknowledges that some of the upstream dischargers have less stringent copper limits based on site-specific copper criteria applicable upstream. Based on this comment, EPA reevaluated the data collected upstream of Pepperell's discharge to: (1) confirm that upstream dischargers are not causing or contributing to water quality impairments near the Pepperell discharge, and (2) determine if the additional ambient data referenced in the comment would result in any change to the effluent limit in Pepperell's discharge.

First, the data referenced in the comment includes 23 ambient samples upstream of Pepperell's discharge taken from July 2016 through September 2021. The median value of these data is 2.0 µg/L. Importantly, this is below the water quality criteria of 4.6 µg/L (acute) and 3.4 µg/L (chronic), indicating that there is remaining assimilative capacity and the upstream dischargers are not causing or contributing to a downstream excursion of water quality.

Second, EPA used this upstream median value of 2.0 µg/L to perform an updated calculation of the limit necessary to protect water quality criteria for copper downstream under critical flow conditions (*i.e.*, 7Q10 low flow of 44.7 cfs and design flow of 1.1 MGD). Applying the same mass balance calculation presented in Appendix A of the Fact Sheet, the resulting limits are 73.6 µg/L (maximum daily) and 40.6 µg/L (monthly average). These limits are still more stringent than the current limits in Pepperell's individual permit and will be included in Attachment E of the Final General Permit and in Pepperell's authorization under the General Permit. Additionally, Pepperell is already in consistent compliance with these limits, so they have been removed from the list of facilities needing a compliance schedule in Part III.F.1 of the Final General Permit.

Comment 128

Part III.A Operation and Maintenance of the Sewer System. This requirement represents a substantial planning, ongoing support and reporting burden on the existing staff and budget. The section includes a number of separate requirements that for a facility of this size is not feasible or will provide anything other than the creation of considerable paperwork. The history of the facility should provide an indication of the level of care and minimal risk of problems as a result of any failure by Pepperell to manage the collection system. The Town has not experienced any substantive sanitary sewer overflows in the last permit period and none that entered the receiving stream. They were primarily private back-ups. Additionally, a comprehensive Inflow and infiltration (I/I) program yielded virtually no I/I and flows remain largely unchanged at the facility even during periods of extended rainfall and high groundwater. Given the size of the system and the past issues, we request a reduction in reporting to every two years.

Response 128

EPA disagrees that the Operation and Maintenance requirements in the permit are not necessary for Pepperell. EPA considers these requirements necessary for all WWTFs, even those much smaller than Pepperell that are regulated under the Small WWTF General Permit. Notably, even these smaller WWTFs have generally complied with these requirements. As noted in the comment, the Pepperell sewer system has private back-ups and without proper operation and maintenance worse problems may arise in the future.

Comment 129

Part III.C Industrial Users. The permit requires Pepperell to conduct data gathering for industrial users for PFAS. The Town has only one user that meets the types of industrial discharges listed and they are well below the 25,000 gpd threshold. We request to have this data gathering requirement removed from the permit.

Response 129

Based on this comment, the General Permit would only require that single industrial user to monitoring PFAS annually. See Response 36.

Comment 130

There appears to be a typo on Appendix A. The last pollutant under the "new MA WQS are" identifies "Ammonia 1".

Response 130

EPA agrees that this was a typo in page 2 of the supplemental information for Pepperell's discharge and should have said "Phosphorus" as in page 1 of the same document.

U. Comments from Ian Catlow, PE, Director, on behalf of the Town of Ware, on April 26, 2022:

Comment 131

<u>Total Nitrogen Related Comments:</u>

The draft permit allows a compliance schedule of 24 months to achieve compliance with a new total nitrogen (TN) permit limit of 83 lb/d. As evidenced by the annual nitrogen optimization reports submitted to EPA as required by the existing permit, the Ware Water Pollution Control Plant (WPCP), does not currently meet this permit limit. The WPCP was not designed for total nitrogen removal. Over the past few years we have experimented with low-cost optimization strategies to incorporate anoxic zones, but have faced challenges that have limited successful results. Therefore, we believe that achieving this limit would require a significant capital investment to design and construct an upgrade to the WPCP that is capable of consistently meeting the total nitrogen limit. As a small community with limited resources, procuring funds for such a project is challenging and will require time to plan and appropriate Town monies.

Based on our experience in the planning, design, and construction of numerous wastewater treatment facility upgrades in Massachusetts, it is unlikely that the Town could secure funding, select a consultant, determine the type and extent of upgrade needed to meet the new limit, design the upgrade, advertise for bids, award a construction contract, permit the project, complete construction, and initiate operation of the facility improvements to achieve the total nitrogen effluent limitation within 24 months. We are requesting a more reasonable, yet aggressive schedule of 60 months to achieve compliance with the nitrogen final effluent limit, as follows:

- Within 12 months, submit a status report relative to the planning of the facilities necessary to achieve the permit limit
- Within 18 months, finalize planning and commence design of the facility improvements
- Within 36 months, complete design of the facility improvements
- Within 42 months, commence construction of the facility improvements
- Within 60 months, complete construction and initiate operation of the facility improvements.

Response 131

EPA included the 2-year compliance schedule based on the assumption that the limit could be met via optimization because the monitoring data during the review period indicates that your facility is near or mostly in compliance with the rolling average annual limit.

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 24 months through optimization or minor process changes, 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 ECAD to discuss a potential administrative order with additional time to achieve the phosphorus limit through alternate means.

Comment 132

Paragraph G.2 of the Draft Permit requires that the Town submit an annual report to EPA and MassDEP that summarizes activities related to optimizing nitrogen removal efficiencies, documents the annual nitrogen discharge load from the facility, and tracks trends relative to the previous calendar year and the previous five (5) calendar years. We ask that this reporting requirement be removed. Since, ammonia and total nitrogen effluent limitations are included in the Draft Permit (as well as monitoring requirements for total Kjeldahl nitrogen, nitrite, and nitrate) and the Town has consistently been meeting these effluent limitations, it is unclear what the need is for this additional reporting requirement. Moreover, under the previous permit, the Town completed a detailed nitrogen optimization evaluation, documented the findings in a report to EPA, and implemented the recommendations. If the Town is consistently meeting its existing nitrogen discharge limitations further optimization should not be required at this point and maintaining the requirement will be a further drain on the Town's already limited financial and staffing resources at a time when they are better spent planning for a mandated nitrogen removal upgrade.

Response 132

See Response 111.

Comment 133

Please clarify the requirements of the nitrogen optimization report as follows:

- Track trends relative to the previous three years instead of the previous five years. Reporting 5 years of data is not consistent with the records retention policies of maintaining data for 3-year period.
- Remove or clarify the requirement to "include a detailed explanation of the reasons why TN discharges have increased…". This language is ambiguous. To what degree of an increase requires a response? What constitutes a detailed explanation? The nature of wastewater treatment is dependent on any number of variables, many of which are

outside our control as operators (change in influent conditions, weather fluctuations, etc). The task of pin-pointing a specific reason or reasons with certainty for a marginal increase, demands an expensive and time-consuming evaluation.

- Define what other additional optimization strategies the Town should evaluate to reduce the effluent total nitrogen discharge load. As we have already completed such an evaluation and implemented its recommendations, it is not clear what opportunities remain to reduce effluent total nitrogen.

Response 133

See Response 112.

Comment 134

<u>Metals Related Comments:</u>

The Town is under an Administrative Order on Consent (AOC) (Docket No. CWA—01-19-020) for failing to meet the total copper and total aluminum limit of 9 ug/L and 96 ug/L, respectively. The AOC established interim limits and reporting requirements to address aluminum and copper removal. There are several instances of conflicts between the AOC and the draft permit; these are listed below. We request that EPA clarify which document should control and should be followed where differences lie. Where applicable we offer the following compromises as well.

a. Interim Limits: The AOC establishes interim limits for both copper and aluminum that are higher than those proposed in the Draft Permit. Given the ongoing challenges we face to achieve permit compliance given the existing design of the WPCP and existing equipment, which was not intended to remove these metals, we request consideration to maintain the interim limits in lieu of the proposed draft permit limits.
b. Sampling frequency: The draft permit increases the sampling frequency for total aluminum and total copper to twice per month, while the AOC states sampling shall be once per month. Confirm the required frequency.
c. Annual report submission date: The draft permit requires an annual aluminum report submitted on January 15th of each year, while the AOC requires a similar report by February 1st of each year. The required contents of these reports are similar, so completing two separate reports is redundant. We request that the draft permit required report be removed. The Town will then continue to submit the AOC compliance report by February 1st of each year.

Response 134

The General Permit is designed to replace coverage under the individual permit. As the comment states, the facility currently is operating consistent with an administrative order that includes copper and aluminum interim limits. By its terms, the current order is not applicable if the Town no longer has coverage under its individual NPDES permit. Once coverage under the General Permit is effective, the limits, monitoring frequencies and report dates established under the General Permit will apply rather than any requirements in the AOC.

If you are unable to meet the limits under the General Permit EPA encourages the Town to reach out to EPA's Enforcement and Compliance Assurance Division (ECAD) to discuss a new administrative order.

Comment 135

In the Draft Permit, a new average monthly total aluminum effluent limitation of 87 µg/L has been proposed. This limitation is dependent on the approval of the 2021 Massachusetts Water Quality Standards (WQS), with the permit limit increasing to 96 ug/L if the WQS are approved. The new WQS uses multiple linear regression models (MLR) models that incorporate local pH, hardness, and dissolved organic carbon (DOC) data to derive aluminum criteria. These MLR criteria better reflect the impact of local water chemistry on the bioavailability and toxicity of aluminum. MassDEP has proposed default aluminum criteria for river basins and coastal drainage areas across the state; the revised acute and chronic values for aluminum criteria for the Chicopee River (where the WPCP discharges) are 291 µg/L and 171 µg/L, respectively.[1]

We recognize that the Draft Permit has provisions to allow the Town to request a permit modification for the total aluminum limit depending on how quickly the new WQS are approved. However, the proposed aluminum concentration once the WQS are approved is still lower than the revised aluminum methodology would otherwise allow. That is, the chronic criteria for aluminum would increase to 170 ug/L under the new limit, which is substantially higher than the proposed 96 ug/L and on the order of the 172 ug/L interim limit established in the AOC. We request consideration to maintain the interim total aluminum limit instead of the proposed 96 ug/L, pending approval of the 2021 Revision MA Water Quality Standards.

1 - https://www.mass.gov/files/documents/2019/10/04/FactSheet_MassDEP_314CMR4_Aluminum.pdf

Response 135

See Response 75.

Comment 136

We acknowledge that the schedule of compliance provided in the Draft Permit allows the Town three (3) years to achieve compliance with the total aluminum effluent limit. Given the challenges to achieve this limit historically, we realize that to meet this limit, we will likely need to complete a major wastewater treatment plant upgrade, which cannot be completed within the 36 month compliance schedule. Therefore, we request that the compliance be extended to 60 months, following a similar schedule outlined in Comment #1 for total nitrogen removal.

Response 136

Given that the revised 2021 Massachusetts WQS for aluminum have been approved there is no compliance schedule in the Final General Permit. See Response 135.

Comment 137

<u>PFAS Sampling Related:</u>

The Draft General Permit requires that the WWTF conduct quarterly influent, effluent and sludge sampling for PFAS compounds. We understand that because PFAS chemicals are very persistent in the environment and in the human body, and that exposure to PFAS chemicals can lead to adverse human health effects there is an increased desire to better understand the flow of PFAS both into and out of the WWTF. However, this additional sampling and reporting requirement comes at a significant cost to the Town. To help reduce the burden of this additional sampling, we ask EPA to reconsider the sampling frequency of quarterly samples and reduce the frequency to twice per year. This frequency is then consistent with the frequency of the whole effluent toxicity testing required in the Draft General Permit, so it can be more easily coordinated within our operations schedule and with the necessary laboratories.

Response 137

See Response 13.

Comment 138

Footnote 12 and 20 of the Draft General Permit requires sampling and reporting of six PFAS compounds of the influent, effluent, and sludge, on a quarterly basis as well as individual industrial dischargers on an annual basis. This requirement takes effect within the first full calendar quarter after the permit's effective data. Notably, this requirement is effective immediately even though an analytical method is not yet approved by EPA for this testing. We have strong reservations about sampling using a non-approved method for the reasons stated below:

A) We have reached out to a number of local laboratories and found that none are currently offering testing via the recommended Draft Method 1633. While some have plans to offer this capacity soon, it is not clear whether this capability will be available by the timeframe laid out in the permit. Other labs clearly stated that it would not be offered until the method was approved by EPA. How can we be expected to meet this requirement without certainty that there is even a laboratory available to complete the analysis?
B) Without an approved method, the data cannot be validated, and therefore serves little benefit for regulatory purposes, especially when it comes at a significant expense to the Town. How does the EPA or Mass DEP anticipate using the collected data if it is from a non-approved method?
C) Recent individual NPDES permits issued by EPA and MassDEP for POTW dischargers in Massachusetts include language that delays the sampling requirement until an analytical method is approved. Specifically, this language is: "shall begin six (6) months after the Town has been notified by EPA of a multi-lab validated method for wastewater, or two (2) years after the effective date of the 2021 Federal NPDES Permit, whichever is earlier." Why is the same approach taken within the General Permit?

Based on the above reasons, we request that the sampling requirement be delayed until an analytical method is approved by EPA, similar to the language included in other recent MA NPDES Individual permits.

Response 138

See Response 97.

Comment 139

Footnotes 12 and 20 of the Draft General Permit, requires that the Permittee reports the results of all PFAS analytes included in the analytical method, beyond just the six listed in the permit, on the NetDMR. Draft method 1633 tests and reports 40 separate PFAS compounds. EPA notes in footnote 20 of the factsheet that there is no additional cost to the Permittee to collect this data in terms of analytical costs; it fails to acknowledge the significant increase in time that it will take to report the results of 40 compounds on the NetDMR system. We therefore, request that the additional requirement to report all analytes in NetDMR be removed from the permit. If this data is still necessary for EPA and removing the requirement is not possible, then we request EPA consider allowing reporting the analytical lab report as an attachment to the DMR instead.

Response 139

See Response 120.

Comment 140

In addition to the influent, effluent, and sludge PFAS sampling discussed in the comments above, paragraph C.3 of the Draft General Permit requires that the WWTF conduct annual sampling of PFAS compounds for all industrial dischargers that are associated with the list of industry types. The identification and subsequent sampling of PFAS compounds at an unidentified (and possibly unbounded) number of industrial discharges across the collection system places an unfair cost and significant labor burden on the WWTF. Not only does this sampling effort require time to conduct the sampling, but it also relies heavily on cooperation with the industrial users for access to their facilities for sample collection, assuming a convenient sampling location that isolates their flow even exists. The provided list of industries is broadly defined, especially the last bullet which states "Any Other Known or Expected Sources of PFAS", which means additional time spent by Town staff to identify these practices. Lastly, CWA § 308(a) states that "the owner or operator of any point source [shall be required to] … sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe)." Based on this quote, it is our understanding that the onus should be placed on the industrial users themselves, rather than the WWTF, to conduct annual PFAS sampling at the industrial locations. For these reasons, we request that this requirement be removed in its entirety from the Draft General Permit.

Response 140

See Response 36.

Comment 141

Section II, Footnote 19 of the Draft Permit includes new ambient phosphorus monitoring requirements in the receiving water immediately upstream of the facility. While we acknowledge the need to better understand total phosphorus levels in the Ware River, we request the following modifications to the sampling requirement to ease the additional burden this sampling will have on Town staff.

a. Development of a Quality Assurance Project Plan (QAPP): We request that a

QAPP not be required for the ambient sampling. A QAPP is a complicated document to put together, requiring us to procure the services of an engineering consultant at a large cost. Such a QAPP is not required for WET test sample collection, so it is not clear why it is even necessary as the data will be used similarly in the assessment of the WPCP effluent on the receiving water.
b. Dry day sampling: We request that the requirement to sample only following 72 hours of without rainfall be removed from the permit. First, this requirement is not consistent with other in-stream water quality testing, such as WET testing required by the permit. Second, it makes scheduling the sampling and laboratory services challenging as weather is not easily predictable more than three days in advance.

Response 141

See Responses 52 and 107.

Comment 142

As a follow up to our comment letter, I forgot to note one additional thing in the effluent limits table. If appears that the permit now specifies effluent flow limits whereas it previously just specified a flow limit. This particular plant only has an influent flow meter and sludge wasting volumes are small so there isn't much 'loss' of flow between influent and effluent. The Town asked if the flow limit could be left as it was stated in prior permits.[13]

Response 142

Influent flow and effluent flow, while related, are not identical. "Flow" is listed as an "Effluent Characteristic" in Ware's 2013 individual permit and in this General Permit "effluent flow" is listed as an "effluent characteristic". Therefore, in both cases EPA expects the effluent flow to be measured.

V. Comments from Ian Catlow, PE, Director, on behalf of the Town of Fairhaven, on April 26, 2022:

Comment 143

<u>Total Nitrogen Related Comments:</u>

The Town is under an Administrative Order on Consent (AOC) (Docket No. CWA-AOR01-FY18-04) for failing to meet the total nitrogen permit limit of 125 lb/d. The AOC established a compliance schedule whereby the WWTP has to be in compliance with the permit limit by October 1, 2026. The Town is currently under contract with a consulting engineer to design an upgrade to be compliant with the total nitrogen limit and plans to meet the limit by the compliance deadline. Since ammonia is a component of total nitrogen, we request that the compliance schedule for the new ammonia limit be extended to match the compliance schedule for the TN limit.

[13]EPA notes this comment was untimely under 40 C.F.R. § 124.13. *See also id.* at § 124.19(a)(2). EPA is nevertheless exercising its discretion to provide a response to this comment for the benefit of the public.

Response 143

The General Permit is designed to replace coverage under the individual permit. As the comment states, the facility is currently operating under an AOC. By its terms, the current AOC is not applicable if the Town no longer has coverage under its individual NPDES permit. Given that the nitrogen limit is already in effect under Fairhaven's current individual permit, the General Permit does not propose a schedule of compliance for the facility's nitrogen limit. However, the General Permit does include a 24-month compliance schedule for the new ammonia limit.

If you are unable to meet these limits once they become effective under the General Permit, EPA encourages the Town to reach out to EPA's Enforcement and Compliance Assurance Division (ECAD) to discuss a new administrative order.

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

Comment 144

We note that the permit adjusts the sampling requirement for total nitrogen from 3 times per week to 1 time per month. However, this requirement conflicts with the interim sampling and reporting requirements stated in the existing AOC. Please confirm which sampling frequency should be followed.

Response 144

As stated in Response 143, the AOC will no longer be applicable once coverage under the General Permit becomes effective. All sampling frequencies will be based on the General Permit.

Comment 145

Section III, Paragraph G.1 requires that the WWTP continue to operate all equipment to optimize nitrogen removal during the non-permitted season. The TN limit of 125 lb/d equates to an effluent concentration of 3 mg/L at the design average day flow rate. Based on a preliminary evaluation by the Town's consultant, a denitrification filter is the most cost-effective solution to meet this limit. Continuing to operate such a system during the non-permit season would add an undue burden on the Town as it is energy intensive and requires routine operator oversight and maintenance. Requiring year-round operation would also eliminate the winter season as an opportunity for system maintenance and filter repairs. Moreover, operating it without carbon addition, as the permit allows will yield only a marginal net benefit to the effluent. There appears to be no justification for this requirement as there is no permit limit during these months and discharging a higher TN during these months would not represent backsliding or anti degradation from the current WWTP operational performance. Therefore, we request that this requirement be removed from the permit.

Response 145

The requirement referenced in this comment is included in their 2017 individual permit and is carried forward into the General Permit. These limits, including the winter requirement to maximize nitrogen removal, are designed to protect the water quality

standards of the downstream receiving waters. Given that the Long Island Sound downstream of the discharge is impaired for nitrogen, EPA confirms that it is appropriate and necessary for the facility to maximize nitrogen removal in the winter months to the maximum extent possible, but without the need for carbon addition. Regarding maintenance, EPA supports the use of the winter months for necessary system maintenance and filter repairs and recognizes that nitrogen optimization would be compromised during periods of maintenance. As long as such maintenance is documented (in the annual report described in Part III.G.2) as being appropriate and/or necessary and the remainder of the facility is maximizing nitrogen removal to the maximum extent possible during such maintenance, this would not be considered a violation of this permit requirement.

Further, EPA disagrees with the comment and notes that this requirement also may not be relaxed due to anti-backsliding. Under Section 402(o) of the CWA, "a permit may not be renewed, reissued, or modified to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit" except in compliance with certain enumerated exceptions. An "effluent limitation" is defined as "any restriction…on quantities, rates, and concentrations" of a constituent." 33 USC § 1362(o). The requirement to optimize nitrogen removal is a restriction on a constituent and thus an "effluent limitation." Removing this requirement would clearly be a "less stringent" effluent limitation. Accordingly, anti-backsliding would apply to this requested action.

EPA also disagrees that antidegradation necessarily would not apply to this requested change. Because removing the nitrogen optimization could result in a new or increased discharge, EPA would need to confer with MassDEP with regard to its application of its antidegradation policy to this requested change.

Comment 146

Paragraph G.2 of the Draft Permit requires that the Town submit an annual report to EPA and MassDEP by February 1st each year that summarizes activities related to optimizing nitrogen removal, documents the annual nitrogen discharge load from the facility, and tracks trends relative to the previous calendar year and the previous five (5) calendar years. The AOC grants the Town an extended compliance schedule to achieve the total nitrogen permit limits and the current WWTP treatment process is not designed for nitrogen removal, so short term modification to the operation to optimize TN removal will require capital investment and runs counter to the ongoing efforts to design and construct a major upgrade to the WWTP for the permanent removal of TN in accordance with the permit limit. Given the overlap between the AOC and Draft permit TN reporting requirements and the conflict between the stated goals of both reports, we request that the nitrogen optimization reporting requirement be removed entirely. We plan to continue to submit the AOC required reports.

If this is not possible, we request that the submission date for the optimization report required by the draft permit be moved to be consistent with one of the existing AOC reporting deadlines, so only one report, that meets both requirements, needs to be produced and submitted. In addition, please modify the optimization requirement to delay optimization steps until after the design and construction of the permanent TN removal system.

Response 146

Regarding the AOC and related compliance schedules and optimization reports, see Response 143.

Regarding the optimization requirement, EPA notes that the facility must optimize nitrogen removal to the maximum extent feasible and specifies that "All available treatment equipment *in place* at the facility shall be operated…" (emphasis added). Therefore, the Permittee must optimize nitrogen removal even in the short-term, but this does not require capital investment as suggested in the comment.

Comment 147

We request modifications to the requirements of the nitrogen optimization report. Namely, these requests are as follows:

- Track trends relative to the previous three years instead of the previous five years. Reporting 5 years of data is not consistent with the records retention policies of maintaining data for 3-year period.
- Remove or clarify the requirement to "include a detailed explanation of the reasons why TN discharges have increased…". This language is ambiguous. To what degree of an increase requires a response? What constitutes a detailed explanation? The nature of wastewater treatment is dependent on a number of variables, many of which are outside the Town's control as Operators (change in influent conditions, weather fluxuations, etc). The task of pin-pointing a specific reason or reasons with certainty for a marginal increase, demands an expensive and time-consuming evaluation.
- Define what other additional optimization strategies the Town should evaluate to reduce the effluent total nitrogen discharge load. As we have already completed such an evaluation and implemented its recommendations, it is not clear what opportunities remain to reduce effluent total nitrogen.

Response 147

See Response 112.

Comment 148

Metals Related:

The Draft General Permit includes a new effluent limit for total copper. The limit is based on a reasonable potential analysis conducted by EPA and included in Appendix A of the Draft Authorization for the Town of Fairhaven. While we accept the need for the new copper limit based on the data collected over the past 5 years and the reasonable potential analysis conducted by EPA, we are concerned about the process modifications required to meet this permit limit within the 24-month compliance schedule offered by EPA in Section III, Paragraph F.1 of the General Draft Permit. Investing in a capital upgrade specifically to target copper removal within 24-months, when we are currently under design of a major plant upgrade to removal nitrogen is poor resource allocation for the Town. Instead, copper removal considerations can be included in the design of the nitrogen upgrade so that both of these issues can be addressed simultaneously. Therefore, we request that the compliance schedule extend to match the compliance schedule for total nitrogen established in the existing AOC of October 1, 2026.

Response 148

Regarding the nitrogen compliance schedule in the AOC, see Response 143.

Regarding the 24-month copper compliance schedule, see Response 131.

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

Comment 149

The proposed copper limit in the Draft Authorization for the Fairhaven WWTP is shown as 30.6 mg/L on a monthly average basis and 47.4 mg/L on a daily maximum basis. However, the site specific reasonable potential analysis (found in Appendix A of the Draft Authorization) shows copper effluent limits as 30.6 ug/L and 47.4 ug/L, respectively. There is an apparent conflict between the units for this limit. Please clarify which units apply for the copper permit limit. The Town may have additional comments on this issue after the apparent units error is resolved.

Response 149

EPA confirms that the units in the Draft Authorization are a typographical error. As noted in both the Appendix A of the Draft Authorization noted in the comment and the Attachment E of the Draft General Permit, these units are presented accurately as ug/L. Given that the permittee noted in Comment 148 above that "capital upgrade specifically to target copper removal" may be needed to meet the new copper limits, it is apparent that the Permittee correctly understood these limits to be in terms of µg/L rather than mg/L (which would not require any such investment). This typographical error will be corrected in the final authorization for this facility.

Comment 150

PFAS Sampling Related:

The Draft General Permit requires that the WWTF conduct quarterly influent, effluent and sludge sampling for PFAS compounds. We understand that because PFAS chemicals are very persistent in the environment and in the human body, and that exposure to PFAS chemicals can lead to adverse human health effects there is an increased desire to better understand the flow of PFAS both into and out of the WWTF. However, this additional sampling and reporting requirement comes at a significant cost to the Town. To help reduce the burden of this additional sampling, we ask EPA to reconsider the sampling frequency of quarterly samples and reduce the frequency to twice per year. This frequency is then consistent with the frequency of the whole effluent toxicity testing required in the Draft General Permit, so it can be more easily coordinated within the Town's operations schedule and with the necessary laboratories.

Response 150

See Response 13.

Comment 151

Footnote 12 and 20 of the Draft General Permit requires sampling and reporting of six PFAS compounds of the influent, effluent, and sludge, on a quarterly basis as well as individual industrial dischargers on an annual basis. This requirement takes effect within the first full

calendar quarter after the permit's effective data. Notably, this requirement is effective immediately even though an analytical method is not yet approved by EPA for this testing. We have strong reservations about sampling using a non-approved method for the reasons stated below:

A) We have reached out to a number of local, MassDEP approved laboratories and found that none are currently offering testing via the recommended Draft Method 1633. While some have plans to offer this capacity soon, it is not clear whether this capability will be available by the timeframe laid out in the permit. Other labs clearly stated that it would not be offered until the method was approved by EPA. How can we be expected to meet this requirement without certainty that there is even a laboratory available to complete the analysis?

B) Without an approved method, the data cannot be validated, and therefore serves little benefit for regulatory purposes, especially when it comes at a significant expense to the Town. How does the EPA or Mass DEP anticipate using the collected data if it is from a non-approved method?

C) Recent individual NPDES permits issued by EPA and MassDEP for POTW dischargers in Massachusetts include language that delays the sampling requirement until an analytical method is approved. Specifically, this language is: "shall begin six (6) months after the Town has been notified by EPA of a multi-lab validated method for wastewater, or two (2) years after the effective date of the 2021 Federal NPDES Permit, whichever is earlier." Why isn't the same approach taken within the General Permit?

Based on the above reasons, we request that the sampling requirement be delayed until an analytical method is approved by EPA, similar to the language included in other recent MA Individual NPDES permits.

Response 151

See Response 97.

Comment 152

Footnotes 12 and 20 of the Draft General Permit, requires that the Permittee reports the results of all PFAS analytes included in the analytical method, beyond just the six listed in the permit, on the NetDMR. Draft method 1633 tests and reports 40 separate PFAS compounds. EPA notes in footnote 20 of the factsheet that there is no additional cost to the Permittee to collect this data in terms of analytical costs; it fails to acknowledge the significant increase in time that it will take to report the results of 40 compounds on the NetDMR system. We therefore, request that the additional requirement to report all analytes in NetDMR be removed from the permit. If this data is still necessary for EPA and removing the requirement is not possible, then we request EPA consider allowing reporting the analytical lab report as an attachment to the DMR instead. This reduces data entry time for the Town as well as the potential for errors while transcribing lab data.

Response 152

See Response 120.

Comment 153

In addition to the influent, effluent, and sludge PFAS sampling discussed in the comments above, paragraph C.3 of the Draft General Permit requires that the WWTF conduct annual sampling of PFAS compounds for all industrial dischargers that are associated with the list of industry types. Currently, the Town of Fairhaven does not have any significant industrial dischargers and does not manage an industrial pretreatment program. Moreover, the Mattapossit Water Treatment Plant, which produces drinking water for the majority of the customers (both industrial and domestic) connected to the Town's collection system, has regularly been tested below the threshold for PFAS compounds, suggesting that PFAS contamination from drinking water is not a potential source for industrial users and to the WWTP. The identification and subsequent sampling of PFAS compounds at an unidentified (and possibly unbounded) number of industrial discharges across the collection system places an unfair cost and significant labor burden on the WWTF. Not only does this sampling effort require time to conduct the sampling, but it also relies heavily on cooperation with the industrial users for access to their facilities for sample collection, assuming a convenient sampling location that isolates their flow even exists. The provided list of industries is broadly defined, especially the last bullet which states "Any Other Known or Expected Sources of PFAS", which means additional time spent by Town staff to identify these practices. Lastly, CWA § 308(a) states that "the owner or operator of any point source [shall be required to] … sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe)." Based on this quote, it is our understanding that the onus should be placed on the industrial users themselves, rather than the WWTF, to conduct annual PFAS sampling at the industrial locations. For these reasons, we request that this requirement be removed in its entirety from the Draft General Permit.

Response 153

See Response 36.

Comment 154

Other Comments:

Section II, Paragraph E.4 requires the Town to "conduct a new dilution model or dye study to determine a defensible dilution factor for their discharge" in the fifth year of the permit term. The Draft Permit and the Fact Sheet state that the Permittee should coordinate with EPA and MassDEP in advance of conducting the model or dye study to confirm the methodology. We believe this requirement is both unjustified and ambiguous, and therefore should be removed from the permit entirely. Such a study, especially in such a complex receiving water as a tidal and flood controlled river, would require the Town to hire a consultant, with expertise in this area, for a cost well into the hundreds of thousands of dollars. Given that there are numerous other NPDES permitted dischargers into the Acushnet River and Buzzard's Bay, including the much larger New Bedford WWTF, New Bedford's CSOs, industrial dischargers in New Bedford and MS4s throughout the Acushnet River watershed, these costs are being unfairly burdened on the Town of Fairhaven when they should be distributed across all dischargers. Moreover, the ambiguous nature of this requirement, opens the Town up to an undefined problem to tackle. If EPA and MassDEP have recommended methodologies by which the Town should follow while completing this study, they should be defined in the permit so the Town clearly understands what is required.

In addition, the premise of this permit requirement suggests that EPA and MassDEP do not have confidence in the accuracy of the current dilution factor listed in the existing permit and Draft General Permit. The current dilution factor was the basis of the argument EPA cited to establish the stringent total nitrogen permit limit as part of the last permit cycle. Subsequently, this limit has led the Town to design and construct a major capital upgrade to the WWTF estimated to cost nearly $50 million. If this dilution factor is not accurate, then should the supporting calculations driving the total nitrogen, ammonia, and total copper effluent limits also be called into question? Should such a study, if required, be conducted before the Town makes a significant investment in its infrastructure to ensure it is being designed to achieve the proper design targets? (This question was asked of EPA during negotiation of the AOC and the approach was rejected at that time.) Moreover, what are the implications if the result of the proposed model or dye study yields a significant change to the dilution factor? Based on the timelines proposed, such a result would be discovered mid-way through construction of the major WWTF upgrade. If the DF increases, would the Town receive leniency with respect to the already established permit limits? On the other hand, if the dilution factor is found to be decreased, will the EPA subsequently reduce the permit limits to even more stringent levels, forcing the Town to invest in another capital upgrade only a year or two after a brand new WWTF upgrade that is no longer capable of meeting the effluent limits. Either outcome represents a significant waste of the Town's resources and would further burden the rate payers of Fairhaven.

Lastly, while EPA has claimed that the current TN permit limit of 125 lbs/day is based on a reasonable potential analysis conducted at the last permit renewal, it also results in an effluent TN concentration of 3 mg/L at the permitted design flow. A TN of 3 mg/L is widely accepted as the limit of technology for POTWs and in the event that a dilution factor suggested an even lower TN that lower effluent limit would not be practically achievable.

Response 154

First, EPA clarifies that the model or dye study does not need to incorporate all sources within the watershed but should be focused on the impact of this particular discharge. Given this narrow scope, EPA considers this requirement to be reasonable and would not result in the drastic cost presented in the comment.

Second, EPA asserts that the dilution factor used both in the development of the 2017 individual permit and this 2022 General Permit represent the best available information and were appropriately applied to the development of the permit limits cited in the comment.

Third, EPA notes that NPDES permits are subject to reissuance approximately every 5 years and EPA must ensure it has representative data in each permit reissuance to ensure all water quality standards continue to be protected under current conditions. By the time this new dilution model or dye study occurs in the 5th year of the permit term, the old dilution factors will be based on conditions over 20 years prior. EPA does not consider that these old estimates of available dilution will continue to be representative of current conditions at the time of the next reissuance of the General Permit. EPA recognizes that this update will have a modest cost that must be borne by the permittees subject to this requirement but considers this a necessary step to maintain permit coverage that is

protective of water quality standards. Further, EPA finds that requiring this within the current permit term for these dischargers will expedite the reissuance process for this General Permit.

Finally, EPA cannot predict at this time what any future permitting analysis based on hypothetical information may entail but recognizes that nitrogen cannot be reduced below what is technologically achievable.

W. Comments from Paul F. Cournoyer, Superintendent of Sewers, Town of Grafton Board of Sewer Commissioners, on April 26, 2022:

Comment 155

Lead: Grafton requests that the testing frequency for total lead be reduced to four times/year during the WET testing periods which is consistent with our current NPDES Permit. A test result of greater than 1.8 ug/l has only occurred twice during the past ten years. The remaining 38 test results were all reported as well under the discharge limits. It is our opinion that the two results of 4.4 ug/l in January 2016 and 1.9 ug/l in April 2016 were caused by construction related activities which occurred during initial phases of the treatment plant improvements project. We believe these results are outliers and not a true representation of our discharge.

Response 155

See Response 275.

Comment 156

Total Residual Chlorine Part II.B.9 — Requirements related to total residual chlorine should be applicable to only those facilities whose primary means of effluent disinfection is chlorine. Those using ultraviolet disinfection or other oxidants for effluent disinfection shall not be subject to these requirements and this should be noted.

Response 156

EPA confirms, as suggested by the comment, that Part II.B.9.c of the General Permit says the following:

> "Permittees authorized to conduct disinfection using an alternative to chlorine as the disinfectant are only subject to the TRC limitations and monitoring requirements whenever chlorine is added to the treatment process for disinfection or for other purpose. For the months in which chlorine is not added to the treatment process and the Permittee may enter "NODI" code 9 (*i.e.*, conditional monitoring) in the relevant discharge monitoring report."

Comment 157

Annual Nitrogen Reporting Part III.G.2- Requires permittees to submit an annual report documenting the annual nitrogen discharge load from the facility and tracking trends relative to the previous calendar year and the previous five calendar years. If TN discharges increase on an average annual basis a detailed explanation is required to explain. Understanding the variability in wastewater influent and effluent flows and loadings, and that the TN data is based solely on

one sample per month from November through March and one sample per week April through October, it is highly likely that one data point with an abnormally high (or low) concentration or abnormally high (or low) flows could skew the data. Please delete the last two sentences of Part III.G.2 and replace with "Report on any trends or anomalies in the data along with potential explanation of the anomalies."

Response 157

EPA disagrees with this comment and notes that one purpose of this report is to identify long-term trends and the associated cause of any such trends. The proposed sentence would not fulfill this purpose. However, if the permittee considers a trend to merely be an anomaly rather than due to a long-term load increase or operational change, they may indicate this in their report.

See Response 112.

Comment 158

A Sampling Plan and QAPP should not be required for the ambient phosphorus monitoring program.

The Draft General Permit imposes an ambient phosphorus monitoring program for facilities with a dilution factor greater than 1.1 and a final effluent concentration limit greater than 0.1 mg/L. The Draft General Permit calls for permittees to submit a sampling plan and QAPP for approval by EPA and MassDEP. These requirements are unnecessary and overly burdensome. A sampling plan is not needed because the monitoring requirements are clearly specified in the Draft General Permit, and the required monitoring is similar to that which Grafton currently undertakes to collect the ambient sample for WET testing. Grafton successfully completes the WET testing requirements per permit specifications without an approved sampling plan or QAPP. Since the phosphorus monitoring location can be concurrent with the ambient monitoring location used for the WET testing, there is no logic to requiring a sampling plan and QAPP for one analyte and not the others. Therefore, a site-specific monitoring plan and QAPP is not necessary to collect these data when the town is already collecting ambient data for the WET testing requirements, and these data are already used by EPA for the reasonable potential analysis calculations. Thus, this requirement is overly burdensome.

Notwithstanding this comment, should EPA require a sampling plan and QAPP for the ambient phosphorus monitoring program, the town notes that there are at least 24 facilities covered by the Draft General Permit that will require phosphorus monitoring. If all 24 facilities are required to develop an individual sampling plan and QAPP, each monitoring plan and QAPP will be largely identical since the program is prescribed by EPA in the Draft General Permit. It is an unnecessary burden on the regulated community (and the regulators who will have to approve the documents). To minimize this burden, we request that EPA:

Develop a QAPP template for this monitoring program that will cover all eligible facilities, and/or Review AquaQAPP - the Massachusetts Bay Estuaries Program's web-based application which helps monitoring program managers develop project-specific Quality Assurance Project Plans (QAPPs) for: fresh/marine/estuarine water quality that can be automatically approved by the regulators -for adequacy for use for the phosphorus monitoring program and inform permittees of the option to use it.

Response 158

See Responses 52 and 107.

Comment 159

For Part II A.19. The ambient phosphorus monitoring program should occur on a regular schedule and not be triggered antecedent precipitation conditions The Draft Permit's ambient phosphorus monitoring program requires monthly sampling from May through September with a 72-hour antecedent precipitation requirement. This requirement is difficult to implement in practice for a small WWTF that may have limited staff availability. The uncertain nature of running a weather-driven monitoring program makes it impossible to plan in advance the monitoring dates. Therefore, we request that EPA modify the proposed monitoring program to require monthly monitoring on a pre-determined day E.g., second Tuesday of the month. Since this program is anticipated to occur biannually for the length of the permit, it will collect adequate data to characterize the upstream phosphorus concentrations, even if a subset of the data happens to be collected on a wet weather day. This modification would allow Grafton and other permittees to better plan for required monitoring during each month.

Response 159

See Response 52.

Comment 160

PFAS Monitoring Requirements Part III.C.3 requires annual sampling of discharges from industrial discharges within the service area for the six identified PFAS compounds with results to be submitted in annual report. If high concentrations are detected that exceed some pre-determined level, is the permittee required to report this in a time frame other than annual reporting? What is the permittees obligation beyond sampling and reporting, understanding that currently IPP programs do not include PFAS?

Response 160

The General Permit does not require any additional reporting based on these results at this time. However, permittees may incorporate requirements on industrial users through regulatory mechanisms such as local limits, pretreatment programs, industrial discharge permits, and/or sewer use ordinances. These requirements may include increased PFAS monitoring, best management practices (BMPs), or local limits. Additionally, municipalities may encourage pollution prevention, product substitution, and good housekeeping practices to make meaningful reductions in PFAS releases to POTWs. Please note that the Massachusetts Office of Technical Assistance (https://www.mass.gov/environmental-assistance-services-for-businesses) offers free and confidential services to businesses including pollution prevention recommendations.

Comment 161

Part II.B Other Requirements

Part II.B Other Requirements, subparagraph 1, states, "The discharge shall not cause a violation of the water quality standards of the receiving water."

As required by the Clean Water Act, the permit writer has the burden to identify and apply applicable regulations and incorporate all necessary and appropriate terms, conditions, and limitations into the permit. Federal law requires that permitting agencies include limitations necessary to meet applicable water quality standards (WQS), including numeric effluent limits for any pollutant that has reasonable potential to cause a WQS violation. As such, we request that this narrative language be deleted from the permit.

Similarly, subparagraphs II.B.2, 3, 4 and 5, contain ambiguous, boilerplate, narrative language that opens the permittees up to lawsuits or enforcement actions, due to misunderstandings in the statutory requirements. Therefore, we request that this narrative language also be deleted from the permit.

Response 161

See Response 108 with regard to appropriateness of narrative permit terms.

With regard to the concerns of potential enforcement actions, EPA disagrees that the narrative language is so vague as to cause "misunderstandings." First, all permittees have been operating under a permit that contains some version of these narrative provisions . *See Ohio Valley Envtl. Coal. v. Fola Coal Co., LLC*, 845 F.3d 133, 144 (4th Cir. 2017) (finding that a permittee had fair notice of narrative water quality standards included in its permit due in part to the amount of time the permittee was bound by that language). The language in the permit clearly states what is required of the permittees, specifically that they shall not discharge pollutants that "settle to form objectionable deposits; float as debris, scum or other matter to form nuisances; produce objectionable odor, color, taste or turbidity; or produce undesirable or nuisance species of aquatic life;" "adversely affect the physical or chemical nature of the bottom, interfere with the propagation of fish or shellfish, or adversely affect populations of non-mobile or sessile benthic organisms." or "result in pollutants in concentrations or combinations in the receiving water that are toxic to humans, aquatic life or wildlife." These narrative standards, based directly on Massachusetts water quality standards at 314 CMR 4.01-.06, are consistent with the CWA and adequately puts the permittee on notice of its obligations. *See Upper Blackstone Water Pollution Abatement Dist. v. E.P.A.*, 690 F.3d 9, 33 (1st Cir. 2012) ("EPA regulations [at 40 C.F.R. § 122.41(d)(1)(i)] require permitting authorities to include in NPDES permits conditions which 'control all pollutants or pollutant parameters ... [that] are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.'"). Commenter has not provided any specific aspects of these provisions which it views as vague nor the source of such ambiguity. Commenter appears more generally to object to incorporation of water quality standards into permits as narrative terms, rather than numeric. As discussed in Response 108, however, Courts have repeatedly upheld the use of such permit terms. *See also In re: City of Lowell,* at *181*-186.

Comment 162

PFAS monitoring requirements should be reduced.

The draft permit includes a requirement for quarterly PFAS monitoring. Given the relatively small size of the facilities covered under the General Permit (Grafton has a design flow of 2.4

mgd) and the high cost of the PFAS monitoring, the monitoring requirements should be reduced to twice per year. This is consistent with EPA' s approach for the recently issued Region 1 Small Wastewater Treatment Facilities General Permit. In response to a similar comment from several permittees:

> ... 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 ....
>
> Small WWTF General Permit RTC at 105-106

The rationale used by EPA to support a reduction in the reporting frequency for the Small WWTF General Permit should be applied to facilities covered under the Medium WWTF General Permit.

Since the permit does not a have a provision to reduce testing frequency if values are below an undefined benchmark, Grafton would also request a similar approach used as part of the MassDEP drinking water testing program which allows for reduction in testing frequency if values are below levels related to the established standards for "PFAS-6". Such an approach would reduce laboratory costs if levels were low. Grafton requests that after two full years of testing, if PFAS levels are below 20 ng/1, then sampling be reduced to once per year.

Response 162

See Response 106.

Comment 163

EPA's revised 7Q10 calculation of low flow hydrology in a highly regulated system like the Blackstone River

The towns analysis of available gage data and calculated 7Q10 flows for the Blackstone River highlights the difficulties of applying standard statistical techniques to a highly regulated system like the Blackstone River, echoing the statements made by EPA in the 2012 Grafton Fact Sheet. The model used to develop the historically used 7Q10 flow can be used to reduce these uncertainties by better representing the impacts of regulation on 7Q10 flows. Therefore, we request that EPA retain the prior 7Q10 flow (68 cfs) developed in support of the Blackstone River Initiative model.

Response 163

As discussed in Response 101, EPA agrees that the existing 7Q10 flow based on the *Blackstone River Initiative Report* (2001)[14] is the best available information and Attachment E of the Final General Permit will be changed to include this 7Q10 of 68 cfs

[14] https://nepis.epa.gov/Exe/ZyPDF.cgi/940050N7.PDF?Dockey=940050N7.PDF

and a dilution factor of 19. However, EPA notes that the next reissuance of this permit may require conducting a new study to update the 7Q10 to account for any recent changes in upstream flow at that time.

Based on this change in 7Q10 and dilution factor, the more stringent limits for TRC are no longer necessary and the new C-NOEC limit was recalculated to be ≥ 5% (*i.e.*, 1/19). These changes will be updated in Attachment E of the Final General Permit.

X. Comments from Christopher Whelan, Town Manager, Town of Concord, on April 26, 2022:

Comment 164

The Town of Concord, MA ("Town" or "Concord") has reviewed the draft "2022 Medium Wastewater Treatment Facility General Permit" (MAG590000) ("GP") and the facility-specific "2022 Draft Authorization" (MAG590030) for Concord ("Draft Authorization") including the various appendices and attachments issued by U.S. Environmental Protection Agency (EPA). EPA has indicated that the Draft Authorization is not a draft permit but nonetheless is open for public comment.

The Town acknowledges the detailed evaluation and effort that EPA has made to update and reissue permit coverage for forty-four wastewater treatment facilities in Massachusetts, and that the GP, once issued, will reduce EPA's backlog of pending individual permit applications and expired permits and enable eligible facilities to maintain compliance with the Clean Water Act. We commend EPA for its work on the draft GP.

The Town notes that this effort by EPA includes carrying forward many aspects of individual permits that are currently in effect or administratively continued in accordance with 40 CFR § 122.6. As more fully explained below, the Town asks EPA to not carry forward the flow limit set in Concord's currently applicable individual permit. Concord's current individual permit does not reflect the design flow of Concord's WWTF. Instead, and based upon EPA's use of the "best available data," the Town requests EPA issue its final GP and Concord's final authorization using design flow information previously provided and available to EPA, and as supplemented with this letter.

The Town makes the following comments and requests for either clarification or changes in the draft GP and the Draft Authorization for Concord. The Town's comments are presented below by permit element.

Response 164

EPA acknowledges this comment and has responded below.

Comment 165

Effluent Flow: The Draft Authorization sets a proposed flow for Concord that retains the January 12, 2006 NPDES Permit's ("2006 Permit") rolling annual average flow of 1.2 MGD. The "best available data" to EPA, however, demonstrates that the authorized effluent flow should be an annual rolling average value of 1.40 MGD, not 1.2 MGD. The Town requests that the final GP, Attachment E (Design Flow), and final authorization, at Part II.A. Table 1.

(Effluent Limitations and Monitoring Requirements), "Rolling Average Effluent Flow," be changed from 1.2 MGD to 1.40 MGD for the following reasons:

a. The Town has been evaluating wastewater flow needs and options for almost the past two decades. See Fact Sheet to draft 2013 permit, pp. 3-5 of 44, and the Environmental Appeals Board's ("EAB") August 28, 2014 Order Remanding In Part and Denying Review In Part the 2013 Permit, p. 536. With its June 1, 2018 re-application for the Town's individual NPDES permit (Attachment 1: June 1, 2018 letter from Christopher Whelan to Olga Vergara), the Town submitted comprehensive documentation of flow related information. The letter and attachments provided three main elements related to wastewater flow:

   i. Updated and accurate flow design at the WWTF;
   ii. A summary and status of Concord's long evolving wastewater needs assessment consistent with the approved 2004 Comprehensive Wastewater Management Plan (CWMP); and
   iii. The ability to comply with MassDEP anti-degradation provisions.

   The Town's 2018 re-application, Form 2A NPDES, at Part A.6.a. Flow ("Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle")), states its WWTF has a "Design flow rate" of 1.40 mgd. While EPA never took action on the Towns re-application, the submitted data fully supports this flow increase request. The key elements for this request include the WWTF capacity analysis, wastewater planning needs, wastewater task force report, current planning efforts and supplemented by information outlined below.

b. NPDES permit flows are based upon "design" flow for the facility. 40 CFR § 122.45(b)(1) ("In the case of POTWs, permit effluent limitations, standards, or prohibitions shall be calculated based on design flow."). See, EPA's NPDES Permit Writers' Manual (September 2010) ("In general, regulations at § 122.45(b)(1) require using the design flow rate of the POTW to calculate limitations.").

c. In re-issuing Concord's 2006 Permit in 2013, EPA used the design flow figure provided in Concord's re-application at Part A.6.a., NPDES Form 2A, Permit Reissuance Application, to set the 2013 draft permit's flow at Part. I.A.1.

d. In 2014, the EAB made the following finding: "In applying for reissuance of its NPDES permit, Concord informed EPA that the "design flow rate" of its treatment plant – i.e., the wastewater flow rate the plant was "built to handle" – is 1.2 million gallons per day. Town of Concord, NPDES Form 2A, Permit Reissuance Application pt. A.6.a, at 3 (Sept. 2010); see 40 C.F.R. § 122.21(j)(1)(vi). **The Region used this figure to derive important permit elements**, such as available dilution in the Concord River and water quality-based effluent limits, per the regulatory requirement that "permit effluent limitations, standards, or prohibitions shall be calculated based on design flow." 40 C.F.R. § 122.45(b)(1); see Fact Sheet pts. V.B.4, .6, at 8, 10, 12-13, 15-18 & apps. B, D-E; RTC app. A. The Region also imposed an effluent limit on wastewater "flow," setting the limit equal to the design flow rate, as it had in previous iterations of Concord's permit. Permit pt. I.A.1, at 1; see, e.g., 2006 Permit

pt. I.A.1, at 1." EAB's August 28, 2014 Order Remanding In Part and Denying Review In Part, at page 536 (emphasis applied).

e. Where Concord, with its 2018 Permit Reissuance Application, informed EPA that its WWTF is "built to handle" 1.4 MGD and the "design flow rate" of its treatment plant is 1.4 MGD, EPA should use the figure provided in Concord's 2018 application, just as EPA did in 2013, "to derive important permit elements" for the GP and Concord's final authorization.

f. Evaluations of the treatment capacity for the Concord facility (2009 and 2015 - see Attachment 2: 2015 Flow Capacity Analysis) show that the facility is capable of properly treating 1.4 MGD or greater. This is based upon the two technical evaluations referenced which evaluated treatment capacity of each treatment unit.

g. The actual plant performance shows loadings of BOD and TSS significantly below the permitted levels. The data from 2020- 2022 show the effluent quality is well below permit values (see Attachment 3: 2020-2022 Effluent Data).

h. The effluent limits for BOD, TSS, total phosphorus, aluminum and C-NOEC can be set with the same mass limits with lower concentrations to maintain the existing permitted loads to the Concord River. This would be in keeping with anti-degradation policies and anti-backsliding provisions. Concord anticipates MassDEP's approval under 314 CMR 4.04 where, as proposed here, "existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected," and Concord proposes "no new or increased discharge[s] that would result in lower water quality."

i. The Town has aggressively pursued stormwater controls and recharge to increase local augmentation to local streams and groundwater. The moderate increase in effluent flow to the Concord River is more than offset by these recharge measures. The Town actively complies with the conditions of the EPA MS4 stormwater permit which enhances local recharge and stormwater treatment.

j. The Town is required to address inflow/infiltration as part of its NPDES permit as well as in its sewer operation and maintenance plan.

k. The increase in effluent would be from connection of failing septic systems, "in-fill" in areas within the centralized sewer system and selected connections associated with Town initiatives as noted below.

l. The Town of Concord has two MBTA commuter rail stations within its boundaries (West Concord and Concord Center). A Massachusetts state initiative focusing on making affordable housing available near local commuter stations to help transportation and "smart" housing challenges and to provide options for targeted development. The ability to connect these residential areas to the centralized sewer system would be a great benefit to enabling the successful attainment of the state's goals.

m. The Town completed a Comprehensive Wastewater Management Plan in 2004 and established a Wastewater Planning Task Force in 2009; both of these efforts reported additional flow needs by the Town not accounting for more recent and future needs. In 2021, the Town began an Integrated Water Resources Planning (IWRP) effort to investigate opportunities to plan their water systems in a more integrated and interconnected way. By doing so, the Town hopes to manage their water systems more holistically and draw upon potential regulatory and operational efficiencies across the systems. For example, the Town's efforts to reduce withdrawals from the underlying groundwater basin for drinking water needs to meet Water Management Act goals or possible increase in stormwater recharge through MS4 stormwater permit measures could have potential benefit on the stream flows which includes a designated (and healthy) cold-water fishery within the Concord River watershed. This might then allow for favorable consideration of an increased capacity at the WWTP to accommodate current and future needs. The Town requests that EPA would consider this evaluation, to be completed by January 2023, in the process of finalizing the GP and draft authorization for the Town.

n. The Town has established a dedicated sewer improvement fund (water bank) that can be invested in the creation of wastewater capacity, including offsets such as stormwater enhancements and mitigation, an option that would be realized when Concord's increased flow request be authorized.

For the reasons outlined above and as supported by the attachments to this letter, Concord requests that its final authorization include a flow limit of 1.40 MGD (annual rolling average) at Table 1, Part II. A and at GP Attachment E (Design Flow).

In describing how EPA set effluent limitations in the 2022 Draft GP (and presumably the draft authorizations), EPA said it used the "best available data." EPA's GP Fact Sheet, page 15 of 48 ("EPA used the best available data to characterize each discharge and each receiving water and to identify the pollutants of concern and evaluate the need for effluent limitations"). "The best available data in most cases were data submitted by the Permittees (e.g., in permit applications, monthly discharge monitoring reports [DMRs], annual reports, and/or whole effluent toxicity [WET] test reports) from July 2016 through June 2021 (i.e., during the most recent 60-month "review period")." GP Fact Sheet. The information referenced in this letter, previously provided to EPA, including with Concord's 2018 permit reissuance application, should have been considered as such "best available data" by EPA in setting effluent limitations for the draft GP and Draft Authorization.

Concord notes that the 1.2 MGD flow limit is established by its 2006 Permit is now over 16 years old. In re-issuing the 2006 Permit in 2013, EPA carried forward the 1.2 MGD flow effluent limit (Part I. A. 1.) of the 2006 Permit to Concord's draft 2013 permit. The Town timely petitioned the EAB for review of the permit on September 9, 2013, and in its Petition, Concord contested the Flow Effluent Limit at Part I. A. 1. This contested condition was stayed as result of Concord's appeal and the EAB's August 28, 2014 Order Remanding In Part and Denying Review In Part, and the condition at Part I.A.1. of the previous permit, issued January 12, 2006, remains in effect. See contested conditions letter dated November 21, 2013, at Attachment 1. As such, a permit condition set over 16 years ago and still in effect today should not be considered

by EPA to be "the best available data", especially in the face of the history described here, and should not be carried forward to the final GP and Concord's final authorization.

Finally, prior to EPA's issuance of the draft 2013 Permit, the Town sought EPA's guidance on its wastewater capacity issues and circumstances giving rise to the Town's need to increase authorized discharge flow. EPA said in the 2013 Fact Sheet that "EPA is committed to working with and assisting the Town as it undertakes its planning process." In submitting its re-application in 2018, the Town informed EPA that it was "following the steps described to us by EPA staff from our meetings during the appeal of our last permit (c. 2012 through 2014), and in this permit renewal application requesting an increase in the discharge flow limit." Thus, the Town's request for an increase to the authorized discharge flow should come as no surprise to EPA and the Town asks EPA to effectuate this long-sought change.

To the extent that a formal request for modification of an NPDES permit is needed by EPA to effectuate this requested change from the Draft GP and Draft Authorization to EPA's final GP and final authorization, please consider this letter to be a request for modification pursuant to 40 C.F.R. § 122.62 (authorizing modification of NPDES permits).

Response 165

EPA acknowledges that the Concord WWTF has been upgraded to a design flow of 1.4 MGD and the Town requests that the flow limit in the General Permit be increased from 1.2 MGD which is currently in effect under their individual permit. EPA appreciates the steps taken by the Town to implement this increased design flow into their NPDES permit. However, as a substantive matter, the Town's flow increase request is not yet perfected, as it lacks attendant data and information to fully determine the impact of a flow increase on existing and designated uses, including an evaluation of the receiving water's assimilative capacity for all pollutants or combination of pollutants. This threshold finding is necessary to conduct the antidegradation analysis required under the Commonwealth's antidegradation requirements.

<u>Implementation Process</u>

In considering wastewater effluent flow increases, EPA's decisions must be made in accordance with state water quality standards, which specify antidegradation policies and procedures for allowing new or increased discharges of pollutants. Federal regulations require each state to develop methods for implementing antidegradation policies. *See* 40 CFR § 131.12(b). To that end, Massachusetts developed "Implementation Procedures for the Antidegradation Provisions of the Massachusetts Surface Water Quality Standards, 314 CMR 4.00."1 These procedures provide instruction for applying the state's antidegradation policies, specifically, for reviewing new or increased discharges from point sources, including wastewater treatment plants, to surface waters of the Commonwealth. In summary, the procedures include the following steps for considering such new discharges.

1. Determine applicability of specific antidegradation designations by pollutant. Therefore, a waterbody may be a high quality (Tier 2) water for one pollutant of concern and at or above the criteria (Tier 1) for another. These designations are determined using new or existing data. MassDEP may require an applicant to obtain

sufficient water quality data to demonstrate the receiving water characteristics for any parameter to be affected by the proposed new or increased discharge.

2. If the level of a particular pollutant in a water body is at or above the water quality criteria (Tier 1), then no lowering of water quality may occur. In that case, any loading of that pollutant from the new or increased discharge must be at a level at or below the water quality criteria.

3. If the level of a pollutant is below the water quality criteria (Tier 2), then there is remaining assimilative capacity remaining in the receiving water. In that case, new or increased discharges of the pollutant are allowed where either the pollutant load increase is determined to be insignificant or the lowering of water quality is of economic or social importance. In the case of POTWs, if the flow increase subject to the State Revolving Fund (SRF) process, is in accordance with a Comprehensive Wastewater Management Plan or Project Evaluation Report, has been subject to public participation and is approved by MassDEP, then it is presumed that the requirement of social or economic importance has been met.

Effluent Dominated Rivers

Consistent with state water quality standards establishing the critical hydrological condition under which water quality criteria must be met and scientific literature on effluent dominated water bodies,[15] "effluent dominated" rivers or streams are those that under low flow 7Q10 critical conditions consist of greater than 50 percent wastewater treatment plant effluent. This condition occurs when the low flow of a receiving water is less than the flow of effluent from one or more wastewater treatment plants discharging into it. In Massachusetts, the ratio of wastewater effluent to receiving water flow is affected by precipitation patterns, urbanization and water withdrawals within the watershed. The Concord River in the vicinity of the Concord discharge is effluent dominated.

Contaminants of Emerging Concern (CECs)

Contaminants of emerging concern (CECs), including pharmaceuticals and personal care products (PPCPs), are increasingly being detected at low levels in surface water, and there is concern that these compounds may have an impact on aquatic life. It is important for EPA to be able to evaluate the potential impact of CECs and PPCPs on aquatic life and have an approach for determining protective levels for aquatic organisms.[16] This is especially true in effluent dominated rivers as the portion of CECs and PPCPs are higher than in rivers less influenced by wastewater treatment plant effluent.

National studies conducted by EPA have demonstrated that domestic sources, as well as industrial sources, contribute toxic constituents to POTWs. These constituents include

[15] Boyle, Terence P. and Harold D. Fraleigh, Jr, *Natural and anthropogenic factors affecting the structure of the benthic macroinvertebrate community in an effluent-dominated reach of the Santa Cruz River, AZ*, Elsevier Ecological Indicators 3 (2003) pages 93-117.
[16] https://www.epa.gov/wqc/contaminants-emerging-concern-including-pharmaceuticals-and-personal-care-products

metals, chlorinated solvents, aromatic hydrocarbons, PPCPs, CECs and others. Some of these constituents may cause synergistic effects, even if they are present in low concentrations. There are many CECs and PPCPs that act as so-called endocrine disruptors (EDCs). EDCs are compounds that alter the normal functions of hormones resulting in a variety of health effects. EDCs can alter hormone levels leading to reproductive effects in aquatic organisms. Evaluating these effects may require testing methodologies not typically available along with endpoints not previously evaluated using current guidelines.[17]

The CECs may also demonstrate low acute toxicity but cause significant reproductive effects at very low levels of exposure. In addition, the effects of exposure to aquatic organisms during the early stages of life may not be observed until adulthood. Therefore, traditional toxicity test endpoints may not be sufficiently comprehensive for criteria derivation for these chemicals and the chemicals may also have specific modes of action that may affect only certain types of aquatic animals (*e.g.*, vertebrates such as fish).[18]

In addition, CECs can be transformed in natural and engineered environments. Transformation processes in the environment include biodegradation, chemical oxidation and reduction, hydrolysis, and photolysis. While these processes can reduce contaminant loadings, some of the by-product of CEC transformation have been found to be more toxic than the parent CECs, raising concerns about their presence in the environment.[19]

Massachusetts Water Quality Criteria Applicable to CECs

The majority of CECs are not specifically regulated by water quality criteria. However, where there is the potential for any CEC or group of CECs to cause or contribute to the deterioration of designated uses in a receiving water, they can be considered "toxic pollutants," per Massachusetts WQSs at 314 CMR 4.01, which defines toxic pollutants as follows:

> Toxic Pollutants. Any pollutant or combination of pollutants, including disease causing agents, that are capable of producing an adverse effect in an organism or its offspring including food chain effects, according to information available to the Department. The effect may be the result of direct or indirect exposure and may injure structure, function or cause death to the organism. These pollutants include, but are not limited to, those identified in 314 CMR 3.17. (Massachusetts Surface Water Discharge Permit Program, Toxic Pollutants).

While Massachusetts WQSs do not include numeric criteria for most CECs, a narrative criterion, applicable to all state waters, is provided at 314 CMR 4.05(5)(e) which says:

> Toxic Pollutants. All surface waters shall be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife.

[17] Ibid.
[18] Ibid.
[19] Noguera-Oviedo, Katie and Diana S. Aga, *Lessons Learned From More Than Two Decades of Research on Emerging Contaminants in the Environment,* Elsevier Journal of Hazardous Materials, 316 (2016), page 245.

Where numeric criteria have not been adopted by the state or recommended by EPA, the Massachusetts WQSs, in the same paragraph, provide for the development of site-specific criteria. EPA is not aware of any site-specific criteria for CECs that have been adopted by Massachusetts or for which Massachusetts has provided any guidance on.

Impact of Wastewater Effluent on Effluent Dominated River Ecosystems

While it is clear that aquatic life downstream of wastewater treatment plants in effluent dominated rivers is negatively impacted by unregulated pollutants such as PPCPs and other CECs, it is not clear how to ameliorate that impact at this time. A summary of the literature related to the ecological impact of effluent dominance on rivers by Hamdhani Hamdhani and others, published in 2020[20] included the following conclusions related to trace organic contaminants (TrOCs)[21]:

- Effluent-fed streams frequently exhibit high concentrations of trace organic contaminants (TrOCs), which can significantly affect stream ecosystems.
- Despite improved wastewater treatment technologies, many TrOCs pass through treatment and persist in streams to various degrees. For example, pharmaceuticals accumulated in primary producers, invertebrates, and fish. Invertebrates may uptake pharmaceutical directly through the water, while update in fish occurs via the prey they eat. Exposure to TrOCs in the aquatic environmental may result in bioaccumulation and biomagnification. TrOCs caused changes in fish at cell, organ, organism and community levels. Steroidal oestrogens led to feminization of male fish, resulting in more female and intersex fish in populations.[22]

Research indicates that technologies typically used in wastewater treatment in Massachusetts (such as activated sludge, coagulation and flocculation) are not highly effective at removing CECs from wastewater. A review published in 2008 summarized the CEC removal efficiency of various treatment technologies (see the table below and found that even advanced treatment system (such as flocculation to remove total phosphorus) was only able to remove 40% or less of selected CECs from wastewater.[23]

[20] Hamdhani H, Eppeheimer DE, Bogan MT. Release of treated effluent into streams: *A global review of ecological impacts with a consideration of its potential use for environmental flows*, Freshwater Biology. 2020:65:1657-1670.
[21] Ibid. Table 1 on page 1663. In the context of Hamdhani, et al, 2020, TrOCs included endocrine disruptors, pharmaceuticals, and biocides.
[22] Ibid. pages
[23] Fono, Lorien, Emerging compounds: A concern for water and wastewater, American Water Works Association, November 2008, pages 50-57.

TABLE 2 Summary of CEC removal by a suite of treatment technologies

■ = > 90% Removed
■ = 40–70% Removed
■ = < 40% Removed

Classification	AS	AC	BAC	O_3/AOPs	UV	Coagulation/ Flocculation	Softening/ Metal Oxides	NF	RO
Pesticides	■	■	■	■	■	■	■	■	■
Industrial chemicals	■	■	■	■	■	■	■	■	■
Steroids	■	■	■	■	■	■	■	■	■
Metals	■	■	■	■	■	■	■	■	■
Inorganics	■	■	■	■	■	■	■	■	■
Organometallics	■	■	■	■	■	■	■	■	■
Antibiotics	■	■	■	■	■	■	■	■	■
Antidepressants	■	■	■	■	■	■	■	■	■
Anti-inflammatory	■	■	■	■	■	■	■	■	■
Lipid regulators	■	■	■	■	■	■	■	■	■
X-ray contrast media	■	■	■	■	■	■	■	■	■
Psychiatric control	■	■	■	■	■	■	■	■	■
Synthetic musks	■	■	■	■	■	■	■	■	■
Sunscreens	■	■	■	■	■	■	■	■	■
Antimicrobials	■	■	■	■	■	■	■	■	■
Surfactants/detergents	■	■	■	■	■	■	■	■	■

Adapted from Snyder et al, 2003

AS—activated sludge, AC—activated carbon, BAC—biological activated carbon, CEC—compounds of emerging concern, NF—nanofiltration, O_3/AOP—Ozone/advanced oxidation processes, RO—reverse osmosis, UV—ultraviolet irradiation

Source: Fono, Lorien, Emerging compounds: A concern for water and wastewater, American Water Works Association, November 2008, page 55.

Locally, in a study of endocrine disruption in largemouth and smallmouth bass inhabiting Northeastern United States National Wildlife Refuges fish tissue samples were collected from the Assabet Rivers, an effluent dominated stream in Massachusetts. The results indicated statistically significant endocrine disruption in of male largemouth bass.[24] A more in-depth discussion of these Assabet River fish samples was published in a working paper by OARS for the Assabet Sudbury and Concord in 2014, which provided sampling location maps and reported that 33% (3 out of 9) of the male largemouth bass sampled from the Assabet River were intersex.[25]

[24] Iwanowicz, L.R, V.S. Blazer, A.E. Pinkney, C.P. Guy, A.M. Major, K. Munney, S. Mierzykowski, S. Lingenfelser, A. Secord, K. Patnode, T.J. Kubiak, C. Stern, C.M. Hahn, D.D. Iwanowicz, H.L. Walsh, and A. Sperry, *Evidence of Estrogenic Endocrine Disruption in Smallmouth and Largemouth Bass Inhabiting Northeast U.S. National Wildlife Refuge Waters: A Reconnaissance Study*, Ecotoxicology and Environmental Safety, Elsevier, Volume 124, February 2016, page 56.

[25] Beede, Susan, *Working Paper - Intersex Fish in the Sudbury, Assabet, and Concord Rivers*, OARS for the Assabet, Sudbury and Concord Rivers, December 29, 2014, pages 3-4.

Newer research suggests that there is no one treatment technology that would effectively treat the broad range of CECs present in wastewater.[26] Therefore much research is needed before wastewater treatment plants can be expected to remove CECs to the extent that would significantly diminish the environmental effect of CECs in wastewater effluent in effluent dominated rivers.

Regulatory response to requests for increases in wastewater effluent discharge flow to effluent dominated rivers

Since EPA and MassDEP must ensure, when granting flow increases in general, that all water quality standards will be met, including antidegradation requirements, it has been EPA and MassDEP's position to require requests for increases of effluent flow to effluent dominated rivers to be accompanied by an evidence-based demonstration that an increased discharge of pollutants, or combination of pollutants, will not cause a violation of water quality standards, including with respect to toxics, and fully protect existing uses.

Prior to 2010, EPA and MassDEP utilized a "hold-the-load" approach on a pollutant-by-pollutant basis, under which a flow increase could potentially be authorized by including mass limitations on all pollutants in the discharge derived using the existing flow. Our scientific understanding of new and emerging contaminants has deepened over time, and we have concluded that this approach is no longer protective of water quality due to the accumulation of pollutants within waterbodies over time. Although we now know from the literature that there are most likely substantial impacts on water quality and, therefore, associated existing and designated uses, as a result of CECs in wastewater effluent in effluent dominated rivers, given the lack of statewide or site-specific numeric criteria for the broad range of CECs, there is no process currently available to evaluate which Tier a water would belong to for each CEC or how much assimilative capacity, if any, remains in a receiving water. Such processes will be evaluated for use by permitting authorities moving forward.

In order to obtain a wastewater effluent flow increase, an applicant must make a satisfactory showing under the Commonwealth's Antidegradation Implementation Procedures, as described above. The first step in that analysis is to determine applicability of specific antidegradation designations by pollutant. Therefore, a waterbody may be a high quality (Tier 2) water for one pollutant of concern and at or above the criteria (Tier 1) for another. These designations are determined using new or existing data. MassDEP may require an applicant to obtain sufficient water quality data to demonstrate the receiving water characteristics for any parameter to be affected by the proposed new or increased discharge.

Therefore, in order for EPA to increase the permitted flow from the Facility, MassDEP must first complete an antidegradation analysis, pursuant to 314 CMR 4.04 and MassDEP's "Implementation Procedures for the Antidegradation Provisions of the

[26] Tahir Rasheed, Muhammad Bilal, Faran Nabeel, Muhammad Adeel, Hafiz M.N. Iqbal, *Environmentally-related contaminants of high concern: Potential sources and analytical modalities for detection, quantification, and treatment*, Environment International 122 (2019), Elsevier, page 62-63.

Massachusetts Surface Water Quality Standards, 314 CMR 4.00",[27] which reflect federal requirements at 40 CFR §131.12. It is MassDEP and EPA's joint position that the Town has yet to provide the information necessary to analyze and justify an increase of treated wastewater effluent flow from the Facility. If the Town chooses to move forward with an antidegradation analysis, accompanied by the necessary data and analysis, the Town may then request a corresponding increase in the effluent flow limit through a permit modification or, alternatively, wait until permit reissuance proceedings.

Comment 166

Total Recoverable Aluminum: The "draft authorization" includes an effluent total recoverable aluminum limit of 0.56 mg/l average monthly if the MassDEP Surface Water Quality Standards (SWQS) promulgated on November 12, 2021, are not formally approved by EPA prior to the issuance of the final general permit. If the SWQS are approved prior to final issuance, the permit will not contain a total recoverable aluminum limit. In addition, the draft permit contains provisions that would allow for an extension of the time frame for compliance and the ability to request a modification to the issued permit. Concord strongly urges EPA to delay issuance of any final GP and "authorization" until they have settled the MA SWQS approval process. This would remove the confusion of which facilities have a limit and make it an administratively much smoother process. The MassDEP spent a significant amount of time and effort to get the watershed specific criteria in-place and EPA will support that effort by timely review of the SWQS and make the NPDES permit process clearer.

Response 166

At the time of issuance of this General Permit, the revised 2021 Massachusetts WQS for aluminum have been approved by EPA. Therefore, the limits indicated in Attachment E of the Draft General Permit under the heading "Modified Limit(s) if new WQS approved before issuance" will apply.

Comment 167

pH Limits and Study: The draft "authorization" contains an effluent pH limit of 6.0-8.3 standard units. Concord agrees with this limit and acknowledges that is will reduce the use of chemicals used to increase pH during certain process periods. The Concord River provides sufficient flow to buffer any pH variability and will not be impacted by the effluent pH values. The draft requires that Concord conduct a "pH study" within three years of the effective date of final permit. Concord has provided such justification in the past and believes that the Town has sufficient information to satisfy this condition. Concord will confer with MassDEP and make any adjustments or additional studies that might be deemed necessary.

Response 167

EPA acknowledges this comment.

Comment 168

Total Residual Chlorine Part II.B.9: Requirements related to total residual chlorine should be applicable to only those facilities whose primary means of effluent disinfection is chlorine.

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

Those using ultraviolet disinfection or other oxidants for effluent disinfection shall not be subject to these requirements and this should be noted.

Response 168

See Response 156.

Comment 169

PFAS Testing: The draft GP including the Concord "draft authorization" (along with several recently issued individual NPDES permits) require PFAS testing of the influent, effluent, sludge, and selected industries. This is also a main element in the MassDEP permit program. The need for data on PFAS is well known and acknowledged. The testing at the WWTF is on a quarterly basis beginning the first full year after final permit issuance. The industrial source sampling is once per year. Concord makes the following comments on this approach:

a. Part III. C. 3. of the GP and Draft Authorization require quarterly sampling beginning the first full year after final permit issuance. PFAS sampling is expensive. Concord requests the sampling frequency be reduced to twice per year during the third and fourth quarter (as authorized for small WWTF under their General Permit RTC @105 to 106).
b. The permit does not a have a provision to reduce testing frequency if values are below an undefined benchmark. This approach is part of the MassDEP drinking water testing program which allows for reduction in frequency if values are below levels related to the established standards for "PFAS-6". Such an approach would reduce laboratory costs if levels were low. Concord requests that after two full years of testing, if the PFAS-6 levels are below 20 ng/l, then sampling be reduced to once per year.
c. The current testing protocol will be applied to all WWTF's in Massachusetts regardless of effluent flow thus creating an imbalance in costs based upon operating costs. The testing should be staggered to reflect flow and percent cost to operations.
d. The draft permit lists six PFAS compounds (the "6" regulated by the MassDEP drinking water regulations) to be tested and reported. Attachment H lists 40 PFAS analytes that are part of draft method 1633. The forty results are required to be reported in the NetDMR system. Concord requests that the permit simply state that the permit requires reporting the 40 PFAS analytes in draft method 1633 and that the list automatically changes if the multi-laboratory method anticipated to be approved in 2022 has a different list. To have the "PFAS-6" listed in the permit but requiring reporting of forty analytes may lead to confusion.
e. Part III. C. 3. of the GP and Draft Authorization require the Permittee to "commence annual sampling of the following types of industrial discharges into the POTW:
    - Commercial Car Washes
    - Platers/Metal Finishers
    - Paper and Packaging Manufacturers
    - Tanneries and Leather/Fabric/Carpet Treaters
    - Manufacturers of Parts with Polytetrafluoroethylene (PTFE) or teflon type coatings (i.e. bearings)
    - Landfill Leachate
    - Centralized Waste Treaters
    - Contaminated Sites
    - Fire Fighting Training Facilities

- Airports
- Any Other Known or Expected Sources of PFAS

PFAS sampling is expensive. Concord requests "annual" be replaced with "regular" sampling.

Concord further requests that "Contaminated Sites" be modified as follows: Contaminated Sites with reportable releases of PFAS as compiled by MassDEP and found at Cleanup of Sites & Spills and Waste Site & Reportable Releases Data Portal https://eeaonline.eea.state.ma.us/portal#!/search/wastesite (The Town notes there are no such sites in Concord).

Concord further requests that "Any Other Known or Expected Sources of PFAS" be deleted because the term is too vague to be effectively carried out.

Response 169

See Responses 13, 21 and 80.

Regarding sampling frequency for industrial users, EPA disagrees that "regular" sampling is appropriate because it is too vague to implement and may not result in sufficient data.

Regarding "Contaminated Sites," EPA clarifies that this refers to "Known or Suspected PFAS Contaminated Sites" and has updated the Final General Permit accordingly. EPA agrees that such contaminated sites may include but are not necessarily limited to the list compiled by MassDEP as noted in the comment.

Regarding "Any Other Known or Expected Sources of PFAS," permittees should require such monitoring for any other industrial users that they have reason to believe may be a source of PFAS to the POTW. This will allow permittees to include specific facilities or categories of facilities that EPA may not be aware of at this time. Also see Response 36.

Comment 170

SSO Notification Requirements: The draft GP and authorization designates time frames for reporting sanitary sewer overflows (SSOs) including notification of downstream water suppliers of any SSO events. There is a long-standing SSO reporting system that MassDEP has had in place. In addition, MassDEP recently passed regulations (314 CMR 16.00) for public notification of certain SSO events as well as a continuance of all SSO events as outlined in 314 CMR 12.00. The new regulations require more detailed reporting and different time frames than are listed in the draft permits. Concord requests that the SSO section of the draft permit reflects the recent requirements of MassDEP. This will avoid confusion on when, how and to whom notifications must be made.

Response 170

See Response 81.

Comment 171

Permit Reporting Requirements: The reporting requirements in Section V list many different electronic submittal systems for various data, effluent test results and administrative changes. It would be beneficial to all permit holders to have a table included as an appendix to the permit which lists the elements that are required to be reported, the time frame and due dates, and the link to the electronic reporting system. In addition, under section VI, if a permittee submits a "Notice of Termination" they are required to submit that notice to the MassDEP office in Worcester, MA (section VI points to State Agency addresses in section V). Concord suggests EPA check to see if that is the proper office for such notifications to be sent, rather than MassDEP Northeast Region office or MassDEP Headquarters office.

Response 171

See Response 82.

Comment 172

A Sampling Plan and QAPP should not be required for the ambient phosphorus monitoring program: The Draft General Permit imposes an ambient phosphorus monitoring program for facilities with a dilution factor greater than 1.1 and a final effluent concentration limit greater than 0.1 mg/L. The Draft General Permit calls for permittees to submit a sampling plan and QAPP for approval by EPA and MassDEP. These requirements are unnecessary and overly burdensome.

A sampling plan is not needed because the monitoring requirements are clearly specified in the Draft General Permit, and the required monitoring is similar to that currently undertaken to collect the ambient sample for WET testing. Concord is successfully completing the WET testing requirements per permit specifications without an approved sampling plan or QAPP. Since the phosphorus monitoring location can be concurrent with the ambient monitoring location used for the WET testing, there is no logic to requiring a sampling plan and QAPP for one analyte and not the others. Therefore, a site-specific monitoring plan and QAPP is not necessary to collect these data when the town is already collecting ambient data for the WET testing requirements, and these data are already used by EPA for the reasonable potential analysis calculations. Thus, this requirement is overly burdensome.

Notwithstanding this comment, should EPA require a sampling plan and QAPP for the ambient phosphorus monitoring program, the town notes that there are at least 24 facilities covered by the Draft General Permit that will require phosphorus monitoring. If all 24 facilities are required to develop an individual sampling plan and QAPP, each monitoring plan and QAPP will be largely identical since the program is prescribed by EPA in the Draft General Permit. It is an unnecessary burden on the regulated community (and the regulators who will have to approve the documents). To minimize this burden, we request that EPA:

- Develop a QAPP template for this monitoring program that will cover all eligible facilities, and/or
- Review AquaQAPP – the Massachusetts Bay Estuaries Program's web-based application which helps monitoring program managers develop project-specific Quality Assurance Project Plans (QAPPs) for fresh/marine/estuarine water quality that can be automatically approved by the regulators - for adequacy for use for the phosphorus monitoring program and inform permittees of the option to use it.

Response 172

See Responses 52 and 107.

Comment 173

The Town of Concord appreciates the opportunity to submit comments on the draft "Medium General Permit" and the "draft authorization" specific for the Town of Concord. The Town wants to ensure that it is establishing standing in the review of the draft permits and that it retains its legal rights. Please inform the Town of any problems relating to its "standing" in the review of these documents.

Response 173

See Response 84.

Y. Comments from Ian Catlow, PE, on behalf of the Town of Scituate, on April 26, 2022:

Comment 174

PFAS Sampling Related:

The Draft General Permit requires that the WWTF conduct quarterly influent, effluent and sludge sampling for PFAS compounds. We understand that because PFAS chemicals are very persistent in the environment and in the human body, and that exposure to PFAS chemicals can lead to adverse human health effects there is an increased desire to better understand the flow of PFAS both into and out of the WWTF. However, this additional sampling and reporting requirement comes at a significant cost to the Town. To help reduce the burden of this additional sampling, we ask EPA to reconsider the sampling frequency of quarterly samples and reduce the frequency to twice per year. This frequency is then consistent with the frequency of the whole effluent toxicity testing required in the Draft General Permit, so it can be more easily coordinated within the Town's operations schedule and with the necessary laboratories.

Response 174

See Response 13.

Comment 175

Footnote 12 and 20 of the Draft General Permit requires sampling and reporting of six PFAS compounds of the influent, effluent, and sludge, on a quarterly basis as well as individual industrial dischargers on an annual basis. This requirement takes effect within the first full calendar quarter after the permit's effective data. Notably, this requirement is effective immediately even though an analytical method is not yet approved by EPA for this testing. We have strong reservations about sampling using a non-approved method for the reasons stated below:

a) We have reached out to a number of local, MassDEP approved laboratories and found that none are currently offering testing via the recommended Draft Method 1633. While some have plans to offer this capacity soon, it is not clear whether this capability will be available by the timeframe laid out in the permit. Other labs clearly

stated that it would not be offered until the method was approved by EPA. How can we be expected to meet this requirement without certainty that there is even a laboratory available to complete the analysis?

b) Without an approved method, the data cannot be validated, and therefore serves little benefit for regulatory purposes, especially when it comes at a significant expense to the Town. How does the EPA or Mass DEP anticipate using the collected data if it is from a non-approved method?

c) Recent individual NPDES permits issued by EPA and MassDEP for POTW dischargers in Massachusetts include language that delays the sampling requirement until an analytical method is approved. Specifically, this language is: "shall begin six (6) months after the Town has been notified by EPA of a multi-lab validated method for wastewater, or two (2) years after the effective date of the 2021 Federal NPDES Permit, whichever is earlier." Why isn't the same approach taken within the General Permit?

Based on the above reasons, we request that the sampling requirement be delayed until an analytical method is approved by EPA, similar to the language included in other recent MA Individual NPDES permits.

Response 175

See Response 97.

Comment 176

Footnotes 12 and 20 of the Draft General Permit, requires that the Permittee reports the results of all PFAS analytes included in the analytical method, beyond just the six listed in the permit, on the NetDMR. Draft method 1633 tests and reports 40 separate PFAS compounds. EPA notes in footnote 20 of the factsheet that there is no additional cost to the Permittee to collect this data in terms of analytical costs; it fails to acknowledge the significant increase in time that it will take to report the results of 40 compounds on the NetDMR system. We therefore, request that the additional requirement to report all analytes in NetDMR be removed from the permit. If this data is still necessary for EPA and removing the requirement is not possible, then we request EPA consider allowing reporting the analytical lab report as an attachment to the DMR instead. This reduces data entry time for the Town as well as the potential for errors while transcribing lab data.

Response 176

See Response 120.

Comment 177

In addition to the influent, effluent, and sludge PFAS sampling discussed in the comments above, section III, paragraph C.3 of the Draft General Permit requires that the WWTF conduct annual sampling of PFAS compounds for all industrial dischargers that are associated with the list of industry types. Currently, the Town of Scituate does not have any significant industrial dischargers and does not manage an industrial pretreatment program. The identification and subsequent sampling of PFAS compounds at an unidentified (and possibly unbounded) number of industrial discharges across the collection

system places an unfair cost and significant labor burden on the WWTF. Not only does this sampling effort require time to conduct the sampling, but it also relies heavily on cooperation with the industrial users for access to their facilities for sample collection, assuming a convenient sampling location that isolates their flow even exists. The provided list of industries is broadly defined, especially the last bullet which states "Any Other Known or Expected Sources of PFAS", which means additional time spent by Town staff to identify these practices. Lastly, CWA § 308(a) states that "the owner or operator of any point source [shall be required to] … sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe)." Based on this quote, it is our understanding that the onus should be placed on the industrial users themselves, rather than the WWTF, to conduct annual PFAS sampling at the industrial locations. For these reasons, we request that this requirement be removed in its entirety from the Draft General Permit.

Response 177

See Response 36.

Comment 178

The Town is eager to discuss resolution of the above issues with EPA and MassDEP however we have submitted this letter to protect the Town's rights should these issues not be resolved favorably and an appeal is needed.

Response 178

See Response 84.

Z. Comments from Geraldine R. Swanson, MPA, Public Health Director, Southampton Board of Health, Town of Southampton, on February 10, 2022:

Comment 179

Regarding your recent letter referenced above, please be advised that the Town of Southampton is not a "Co-Permittee" to the Easthampton WWTF NPDES Permit for the following reasons:

1. Southampton has no "Publicly Owned Treatment Works" (POTW's), i.e., does not own nor operate any sanitary sewers, sewage pump stations, or related facilities.

2. Any and all sewage from Southampton businesses which is accepted into the Easthampton POTW is done so directly by the City of Easthampton.

3. Any and all "Treatment Works" involved in the conveyance of sanitary sewage from Southampton to Easthampton is privately owned and operated by the users of said facilities.

Please rescind your inclusion of the Town of Southampton in Easthampton's NPDES permitting process. Thank you.

Response 179

EPA agrees that Southampton should not be included as a co-permittee because they do not own or operate any publicly-owned sewer system. See Response 42.

AA. Comments from Wayne A. Chouinard, Chair, Wastewater Advisory Committee to the MWRA, on March 29, 2022:

Comment 180

The Wastewater Advisory Committee to the MWRA has the following comments about this permit as it applies to the MWRA's Clinton plant:

1. **Please ensure that the new permit is based on EPA regulations, and not impracticably burdensome.**
2. **Co-permittees remain an issue**.

While WAC shares the EPA's concern that municipalities that discharge to MWRA control inflow and infiltration (I/I) to maximize the effectiveness of the current sewer infrastructure and prevent sanitary sewer overflows (SSOs), we continue to be concerned about employing the mechanism of co-permittees in this and other permits.

As we stated in our comments for the current permit: Clinton and Lancaster, were added as co-permittees in the 2000 permit. The co-permitting was done in the Agency's belief that MWRA would be better able to supervise an effective I/I reduction program for the town's system via direct regulation through the permit.

As EPA notes in its appendices, co-permitting the two towns did **not** produce the results EPA and MWRA had hoped for. It has **still not** produced those results.

One reason was noted in our previous comment letter: the primary motivation shared by other MWRA communities—setting sewer fees with a formula that includes volume of flow—is lacking in Clinton (Lancaster contributes between 8-10% of flow). Because of the MWRA's unique history, and the need to keep the water supply clean, the Authority may not charge Clinton based on flow.

By contrast, MWRA has a successful cooperative agreement—finalized in 2001 with the consent of EPA—with the cities and towns that send wastewater to the Deer Island plant. Because these communities' sewer fees are determined using flow as a factor, and because the Authority continues to fund and provide technical assistance for I/I removal, the amount of flow at Deer Island continues to drop, despite population growth in these municipalities.

Instead of naming Lancaster and Clinton in the Clinton permit, WAC suggests using incentives that will result in a similarly cooperative relationship between MWRA and the two municipalities.

Establishing a sewage fee based at least partially on flow requires a change in the law which established the MWRA. Such legislation would require an act of the Massachusetts General Court and is not an option at present.

WAC shares EPA's concern about I/I, however we would prefer that any action by the EPA to reduce I/I in the Lancaster and Clinton collection systems be independent and not part of the MWRA NPDES permit. If the municipalities are included, the permit should be clear that each party is only responsible for the pipes they control—should a penalty be assessed, it should go only to the body that incurred the violation, not to the co-permittees.

Thank you for the opportunity to comment on the draft permit.

Response 180

First, EPA confirms that the requirements of the permit are based on regulations and are not impractically burdensome. EPA cannot respond in more detail given that the comment does not clearly specify any particular requirement or concern.

Regarding co-permittees, EPA considers that the approach to include satellite collection systems (such as those owned by Clinton and Lancaster) is necessary to ensure proper operation and maintenance of the full collection system of the POTW. See Response 42.

The comment proposes alternate mechanisms for incentivizing these activities but notes that such pathways would require additional legislation. EPA considers this suggestion to be outside the scope of this NPDES permit.

Regarding liability, see Responses 43 and 56.

BB. Comments from Lou Taverna, Chairman, MWRA Advisory Board, on April 25, 2022:

Comment 181

The MWRA Advisory Board has initially reviewed the Draft National Pollutant Discharge Elimination System (NPDES) Permit no. MAG590000 for medium wastewater treatment facilities in Massachusetts ("the GP") which was noticed on February 8, 2022, the accompanying Fact Sheet, and the Draft Authorization to Discharge MAG590033 for the Clinton Wastewater Treatment Plant ("CWWTP"), and is providing the following comments in accordance with 40 C.F.R. §124.13.

As a preface, the Advisory Board was created in the same legislation that created the Massachusetts Water Resources Authority (MWRA). Our role is to represent the interests of the communities and their ratepayers.

It is important to understand the history behind the MWRA's ownership of CWWTP. Prior to 1987, responsibility of the operation of this plant was with the Commonwealth of Massachusetts through its Metropolitan District Commission Water Division. The State Legislature, in order to meet federal requirements and ensure federal funding, turned over responsibility for the construction and operation of the existing/new plant to the MWRA. MWRA ratepayers pay for all but $500,000 of the costs associated with the plant. Moreover, Clinton, which contributes $0 to the wastewater treatment plant, separately manages, maintains, and controls its own water and wastewater systems. This unique relationship and the financial burden it places upon ratepayers

makes any changes in operations or management of the CWWTP of particular interest and concern for the Advisory Board on behalf of its member communities and its ratepayers.

Response 181

EPA acknowledges this comment.

Comment 182

Comments on inclusion of co-permittees in the draft NPDES general permit

The area of greatest concern to the Advisory Board is the inclusion of co-permittee language in the GP, and its application to the CWWTP. The Advisory Board echoes the MWRA's concerns and arguments that EPA's interpretation of the Clean Water Act (CWA) to include municipal satellite sewage collection systems is erroneous and flawed. Basic common sense can see that neither Clinton nor Lancaster directly discharge to the waters of the United States and, therefore, are not point sources. EPA seems to rely upon the insertion of the word "pipes" in the definition of the term "discharge of pollutant(s)" in Section 33 U.S.C. §1362 of the CWA and 40 C.F.R 122.2 to justify inclusion of municipal satellite sewage collection systems in the GP; however, it conveniently ignores the qualification that such pipes and conveyances "do not lead to" a treatment works. This misread of the CWA makes the inclusion of co-permittees a vast overreach of its authority under the CWA. It appears to be a "back door" method of gaining control and access to regulate municipal satellite sewage collection systems. Should EPA desire this, it should go through the appropriate process and channels: legislative action to specifically grant this authority that is vetted and passed through Congress, which allows for a public process, and not through the inclusion of one word in NPDES permits that relies upon a flawed interpretation of existing legislation.

Beyond the legal argument that the MWRA has advanced challenging this inclusion, there are clearly practical concerns with future implementation of any co-permittee language in any NPDES permit, and its impact upon the relationship between MWRA and its member communities.

The MWRA and its member communities have clearly defined roles and responsibilities as it relates to the treatment and transport of wastewater, combined sewer overflows (CSOs), and sanitary sewer overflows (SSOs). Moreover, the communities fund any of the projects or operations that fall under the purview of the MWRA. This financial relationship is the linchpin of the Advisory Board's authority and role in advocating for community interests and holding the MWRA accountable in the conduct and management of its programs and operations. The Advisory Board has long been concerned that EPA's inclusion of co-permittee language in NPDES permits would be the first step in pushing the MWRA into the active management of local systems on its behalf. In effect, this would make MWRA a regulator and enforcer of its communities rather than responsible and accountable to its communities. EPA currently maintains that it has no interest in doing so; however, the language governing responsibilities of each entity is vague and contains enough "gray area" to allow for unintended future consequences by subsequent interpreters of the permit. The language included in the GP does not sufficiently guard against these concerns.

The MWRA Advisory Board strongly opposes the inclusion of any co-permittee language in the GP and believes all such language should be removed from the final permit.

Response 182

See Responses 42 and 43.

Comment 183

General comments

The Advisory Board would also like to voice support for all MWRA's additional comments on the GP; however, we would like to add specific comments on two of their items of concern.

Response 183

EPA acknowledges this comment and has responded below.

Comment 184

Comments on Part II.A. Table 1

Phosphorus

As we mentioned before, the Advisory Board's role is to represent the interests of our communities and their ratepayers. One general approach we've advocated for consistently over the years is balancing the costs that will be borne by MWRA communities and the benefits that would be achieved.

As noted earlier in our summary of the history and financial relationship between MWRA and the Town of Clinton, MWRA ratepayers fund all but $500,000 of the costs to operate and maintain the CWWTP. Increased costs to the CWWTP, therefore, impact our sewer communities and ratepayers and should be limited to only those that are absolutely necessary.

As the MWRA describes in its comments, ambient monitoring for phosphorus at the CWWTP is unnecessary because the waters in which the CWWTP discharges is not impaired for phosphorus. As in all things, the benefits should justify the costs, and this provision does not meet these criteria. The Advisory Board recommends removing this language from the permit.

Response 184

See Response 47. Therefore, EPA considers this ambient monitoring to be justified.

Comment 185

Total Nitrogen

Similarly, the GP requires monitoring and reporting of nitrate+nitrite, Total Kjeldahl nitrogen, and reporting of total nitrogen concentration and load, for all permittees. The Advisory Board supports MWRA's recommendation that this requirement be eliminated for permittees who are not discharging into waters designated by the Massachusetts Department of Environmental Protection (MassDEP) as impaired due to nitrogen. The MWRA acknowledges in its comments that while this monitoring would not likely be onerous, it is unsupported by the fact that not all receiving waters have water quality problems due to excessive nitrogen loading. Should MassDEP determine that a water body is impaired by excessive nitrogen loading, the development of a Total Maximum Daily Load (TMDL) would be the appropriate next step. The

GP should not include extensive monitoring and reporting simply for the sake of monitoring and reporting, but rather clearly justify the reason for this work to be conducted.

Response 185

See Response 46.

Comment 186

Comments on Part III.D. Industrial Pretreatment Program

The Advisory Board concurs with the MWRA's comments on the proposed changes to the pretreatment annual report. Once again, there doesn't appear to be any meaningful benefit, and in the MWRA's case there is a distinct disbenefit for changing the reporting period from fiscal year to calendar year and reducing the amount of time to complete the report. This modification would unnecessarily burden the MWRA's Industrial Pretreatment Program and require additional resources and costs to meet these new requirements. We recommend that the GP language be revised to allow permittees to submit the annual report on their existing schedule.

Response 186

See Response 58.

CC. Comments from Karla Sangrey, Engineer Director / Treasurer, Upper Blackstone Clean Water, April 26, 2022

Comment 187

Upper Blackstone Clean Water appreciates the opportunity to provide comments on the subject draft NPDES permits (Permit). I hope you will give our comments consideration as you move to finalize this general permit.

Revised 7Q10 calculations, Attachment E – Blackstone River

EPA's revised 7Q10 calculation contradicts previous agency rationale and may not be representative of low flow hydrology in a highly regulated system like the Blackstone River. The Permit recalculates the 7Q10 flow used to establish the Water Quality Based Effluent Limits (WQBELs). Analysis of available gage data and calculated 7Q10 flows for the Blackstone River, as included in the Grafton WWTF comments, highlight the difficulties of applying standard statistical techniques to a highly regulated system like the Blackstone River, echoing the statements made by EPA in the Fact Sheet for the Grafton permit in 2012. The model used to develop the historical 7Q10 flow can be used to reduce these uncertainties by better representing the impacts of regulation on 7Q10 flows. We request that EPA retain the prior 7Q10 flow developed in support of the Blackstone River Initiative model or justify why the previously stated rationale for not using the 7Q10 flow calculated from available gage data was discounted in favor of the revised 7Q10 calculation methodology.

Response 187

See Response 163.

Comment 188

The Permit includes a requirement for quarterly PFAS monitoring. Given the relatively small size of the facilities covered under the General Permit and the high cost of the PFAS monitoring, the monitoring requirements should be reduced to twice per year. This is consistent with EPA's approach for the recently issued Region 1 Small Wastewater Treatment Facilities General Permit. The rationale used by EPA to support a reduction in the reporting frequency for the Small WWTF General Permit should be applied to facilities covered under the Medium WWTF General Permit.

Response 188

See Response 106.

Comment 189

The permit does not a have a provision to request a reduced testing frequency for PFAS monitoring if values are below a benchmark. The MassDEP drinking water testing program allows for reduction in frequency if values are below levels related to the established standards for "PFAS-6". Please consider the provision that after two full years of testing, if the PFAS-6 levels are below 20 ng/l, then the Permittee may request sampling be reduced to once per year.

Response 189

See Response 21.

Comment 190

The Permit lists six PFAS compounds (the "6" regulated by the MassDEP drinking water regulations) to be tested and reported. Attachment H lists 40 PFAS analytes that are part of draft method 1633. The forty results are required to be reported in the NetDMR system. It would be clearer for the permit to state that PFAS reporting is required per draft method 1633 and that the list automatically changes if the multi-laboratory method anticipated to be approved in 2022 has a different list. To have the "PFAS-6" listed in the permit but requiring reporting of forty analytes leads to confusion.

Response 190

See Response 80.

Comment 191

Part III. C. 3. And D. 7. of the Permit require the Permittee to "commence annual sampling of the following types of industrial discharges into the POTW:

Commercial Car Washes
Platers/Metal Finishers
Paper and Packaging Manufacturers
Tanneries and Leather/Fabric/Carpet Treaters
Manufacturers of Parts with
Polytetrafluoroethylene (PTFE) or Teflon type
coatings (i.e. bearings)
Landfill Leachate
Centralized Waste Treaters

Contaminated Sites
Fire Fighting Training Facilities
Airports
Any Other Known or Expected Sources of PFAS"

Please consider revising "Any Other Known or Expected Sources of PFAS" to some clearer approach, such as a reference to an EPA list of industries/categories that may change over time based on the state of the science.

Response 191

See Responses 36 and 169.

Comment 192

Annual Nitrogen Reporting
Part III.G.2 requires permittees to submit an annual report documenting the annual nitrogen discharge load from the facility and tracking trends relative to the previous calendar year and the previous five calendar years. If TN discharges increase on an average annual basis a detailed explanation is required to explain. Understanding the variability in wastewater influent and effluent flows and loadings, and that the TN data is based solely on one sample per month from November through March and one sample per week April through October, it is highly likely that one data point with an abnormally high (or low) concentration or abnormally high (or low) flows could skew the data. Please delete the last two sentences of Part III.G.2 and replace with "Report on any trends or anomalies in the data along with potential explanation of the anomalies."

Response 192

See Responses 112 and 157.

Comment 193

The Permit imposes an ambient phosphorus monitoring program for facilities with a dilution factor greater than 1.1 and a final effluent concentration limit greater than 0.1 mg/L. The Draft General Permit calls for permittees to submit a sampling plan and QAPP for approval by EPA and MassDEP. These requirements are unnecessary and overly burdensome. A sampling plan is not needed because the monitoring requirements are clearly specified in the Permit, and the required monitoring is similar to that currently undertaken to collect the ambient sample for WET testing. Communities successfully complete the WET testing requirements per permit specifications without an approved sampling plan or QAPP. Since the phosphorus monitoring location can be concurrent with the ambient monitoring location used for the WET testing, there is no logic to requiring a sampling plan and QAPP for one analyte and not the others. Therefore, a site-specific monitoring plan and QAPP is not necessary to collect these data when the town is already collecting ambient data for the WET testing requirements, and these data are already used by EPA for the reasonable potential analysis calculations. Thus, this requirement is overly burdensome.

Response 193

See Response 52.

Comment 194

The Permit's ambient phosphorus monitoring program requires monthly sampling from May through September with a 72-hour antecedent precipitation requirement. This requirement is difficult to implement in practice for a small WWTF that may have limited staff availability. The uncertain nature of running a weather-driven monitoring program makes it impossible to plan in advance the monitoring dates. Therefore, we request that EPA modify the proposed monitoring program to require monthly monitoring on a pre-determined date. Since this program is anticipated to occur biannually for the length of the permit, it will collect adequate data to characterize the upstream phosphorus concentrations, even if a subset of the data happen to be collected on a wet weather day. This modification would allow Grafton and other permittees to better plan for required monitoring during each month.

Response 194

See Response 52.

DD. Comments from Mickey Nowak, Executive Director, Massachusetts Water Environment Association, on April 26, 2022:

Comment 195

1. The PFAS testing listed on Page 5 and 7 should be reduced from 4 times per year to 2 time per year for medium facilities. I fully understand that PFAS compounds in wastewater are important, and that the MA DEP and US EPA is still trying to wrap their arms around the issue, but I also doubt that cutting Medium Sized Facilities 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 large facilities such as Deer Island, GLSD, or UBCW? The testing adds significant costs (manpower and lab charges) to a facilities budget for very little in return.

Response 195

See Response 106.

Comment 196

2. MAWEA would like to comment on the two paragraphs below from page 25 of the MSGP.

7. Under 40 CFR § 503.9(r), the Permittee is a "person who prepares sewage sludge" because it "is … the person who generates sewage sludge during the treatment of domestic sewage in a treatment works …." If the Permittee contracts with another "person who prepares sewage sludge" under 40 CFR § 503.9(r) – i.e., with "a person who derives a material from sewage sludge" – for use or disposal of the sludge, then compliance with Part 503 requirements is the responsibility of the contractor engaged for that purpose. If the Permittee does not engage a "person who prepares sewage sludge," as defined in 40 CFR § 503.9(r), for use or disposal, then the Permittee remains responsible to ensure that the applicable requirements in Part 503 are met. 40 CFR § 503.7. If the ultimate use or disposal method is land application, the Permittee is responsible for providing the person receiving the sludge with notice and necessary information to comply with the requirements of 40 CFR § 503 Subpart B.

8. The Permittee shall submit an annual report containing the information specified in the 40 CFR Part 503 requirements (§ 503.18 (land application), § 503.28 (surface disposal), or § 503.48 (incineration)) by February 19 (see also "EPA Region 1 - NPDES Permit Sludge Compliance Guidance"). Reports shall be submitted electronically using EPA's Electronic Reporting tool ("NeT") (see "Reporting Requirements" section below).

We agree that it is NOT the responsibility if the wastewater facility (the generator) to supply analytical data if they contract with a third party for disposal. However, this is in conflict with the two paragraphs below (in bold italic) from Page 29 of the US EPA's "NeT-Biosolids User's Guide Version 9 - Updated 08/20/2021".

Facilities that use a third-party handler, preparer, or applier will need to obtain the reporting data to successfully complete the Annual Biosolids report. For example, if a POTW selects "Land Application / Agricultural Land Application / Bulk / Third-Party" it will be required to enter data for the compliance monitoring events. The POTW may need to contact the third-party handler, preparer, or applier to complete the report.

Due to historical practices prior to electronic reporting, POTWs that utilize a third-party handler, preparer, or applier may not have monitoring data for the sewage sludge that is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. However, current electronic reporting requires a POTW that utilizes a third-party handler, preparer, or applier to report monitoring data. A POTW must collect the sewage sludge monitoring data from the third-party handler, preparer, or applier, which performed the handling, preparing, and ultimate disposition, and then include this data on the annual form. EPA requests that filers provide helpful explanatory information in the "Additional Information" section at the bottom of the form.

No facilities in Massachusetts report in that manner. For "Management Practice" they are using "Other Management Practice", so they don't have to enter the onerous amount of analytical data required. As a matter of fact third party handlers are telling facilities to use "Other Management Practice" so they don't have to reproduce what the third party handler is already reporting in their biosolids submission.

If a facility was to use a third party for incineration I do not see any way for them to use the "Management Practice" of "Incineration" without supplying the analytical data which is not their responsibility. I would also like to point out some absurdities of requiring a facility to obtain analytical data from a third party and reporting it in their submission.

Example 1. The permittee MA0101613 sends sludge to 4 different incinerators. They have to obtain analytical data from 4 different third party handlers and report it. This is a very onerous requirement.

Example 2. Third Party Handler Synagro Waterbury CT has 90 facilities bring sludge to them for incineration. The analytical data has to be submitted 91 times? Once by Third Party Handler Synagro Waterbury CT and then 90 additional times by their customers?

I think that the data submitted in the Annual Biosolids Reports provides very important information to the States in their effort to manage their sludge disposal policies but in its present

form it falls short of providing good data. The EPA should get its house in order on this issue so that facilities can submit correctly in 2023.

Response 196

EPA is aware of the burden of reporting requirements for POTWs that send their sludge off-site. Facilities that generate sludge and use a 3rd party for use or disposal must submit annual biosolids reports even though there may be duplication of data and difficulties acquiring that information from the 3rd party. Therefore, EPA is considering improvements to the process, but in the meanwhile, all facilities that meet reporting requirements in Part 503 must continue to submit an annual biosolids report. These annual biosolids reports should correctly describe use and disposal methods utilized including any additional reporting requirements associated with those practices such as analytical data from incinerators. It appears that EPA likely disagrees with third party handlers if they are telling POTWs to choose "other management practices" for the situation described in the comment.

EE. Comments from Emily Remmel, Director of Regulatory Affairs, National Association of Clean Water Agencies (NACWA), on April 26, 2022:

Comment 197

The National Association of Clean Water Agencies (NACWA) appreciates the opportunity to provide comments to the U.S. Environmental Protection Agency (EPA) Region 1's proposed draft National Pollutant Discharge Elimination System (NPDES) General Permit for Medium Wastewater Treatment Facilities in Massachusetts (MAG590000) published in the Federal Register.[1]

Because this is the first draft general permit issued by EPA itself, it will also likely be the lodestar for state CWA-authorized permitting agencies to follow. NACWA has significant concerns that this draft general permit could trigger a tidal wave of similar prescriptive PFAS monitoring and reporting requirements across the country, as well as drive compliance and enforcement measures in future permit iterations.

[1] 87 Fed. Reg. 7175 (Feb. 8, 2022).

Response 197

EPA acknowledges this comment and notes that this permit is not the first to contain PFAS monitoring requirements. EPA has been including such requirements in many recently-issued permits such as the Small WWTF General Permit (MA-NHG580000) and several other individual permits issued in both MA and NH.

Comment 198

The Potential Implications of Leveraging the NPDES Permit Program to Address PFAS

EPA's current PFAS Strategic Roadmap aims to "leverage NPDES permits to reduce PFAS discharges" and seeks to "obtain[] more comprehensive information," where PFAS are expected or suspected to be present in wastewater or stormwater discharges.[2] This effort builds upon the

previous EPA Administration's Office of Water recommendation that NPDES permit writers begin considering PFAS strategies to incorporate into federally-issued permits (2020 OW Interim Strategy).[3] This 2020 OW Interim Strategy recommended phased-in monitoring and best management practices, *as appropriate*, when PFAS is only *expected to be present* in point source wastewater discharges.[4]

Obtaining this information on a utility driven or voluntarily basis is one thing but mandating the collection and reporting of PFAS presence in influent, effluent, biosolids, and industrial influent—for utilities with and without an industrial pretreatment program—under the regulatory weight of a NPDES permit, is quite another.

Our members do not produce, manufacture, or profit from PFAS chemicals and instead de facto "receive" these chemicals through the raw influent that arrives daily at the treatment plant. This influent can come from domestic, industrial, and commercial sources and may contain PFAS from trace to higher concentrations, depending on the nature of the discharge to the sewer system. Although the influent is not generated by the utility, the utility has no discretion in the influent it receives and is responsible for treating under the CWA.

Municipal clean water utilities were not traditionally designed or intended with PFAS treatment capabilities in mind. To complicate matters, there are currently no cost-effective techniques available to treat or remove PFAS given the sheer volume of wastewater or biosolids managed daily by clean water utilities. Even if all industrial inputs to the treatment plant are eliminated, there is a significant probability that PFAS would be detected at trace concentrations merely from domestic inputs.

While the public clean water community is not responsible for generating or profiting from PFAS or the PFAS-containing commercial products, public utilities would bear considerable economic costs for treating and removing these chemicals if required to do so at the POTW—costs that would be passed onto ratepayers. Doing so would, in essence, make the public pay for the pollution costs of private entities that have financially profited from manufacturing and placing PFAS chemicals into commerce.

Given these concerns and the lack of realistic treatment options for POTWs, controlling PFAS at its source is likely the most viable and responsible regulatory option. Under the CWA, NACWA strongly supports EPA using its authority to evaluate and, as necessary, develop effluent limitation guidelines (ELGs) and pretreatment standards for industrial categories discharging PFAS-containing wastewater directly or through municipal sewer systems. Industries that discharge their wastewater to municipal wastewater treatment plants would be regulated through the National Pretreatment Program, a successful cooperative effort among federal, state, and local clean water utility authorities that gives clean water utilities the ability to develop local limits to better meet the needs of their specific treatment facilities.

Using national ELGs and pretreatment standards would also help to establish an approach for regulating PFAS where the industrial creators and users of these chemicals are responsible for the cost to remove them from wastewater, rather than shifting this cost to municipal ratepayers. Identifying industrial PFAS sources is critical to this process, but as it relates to the draft permit at issue, NACWA encourages EPA Region 1 to consider the broader NPDES implications these

monitoring requirements may have on the municipal clean water community absent any pretreatment standards.

[2] PFAS STRATEGIC ROADMAP: EPA'S COMMITMENTS TO ACTION 2021-2024 14 (October 18, 2021), available at https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf
[3] Mem. from EPA Assistant Admin. David P. Ross to EPA Regional Admins, Recommendations from the PFAS NPDES Regional Coordinators Committee Interim Strategy for Per- and Polyfluoroalkyl Substances in Federally Issued National Pollutant Discharge Elimination System Permits (November 22, 2020), available at https://www.epa.gov/sites/default/files/2020-11/documents/pfas_npdes_interim_strategy_november_2020_signed.pdf
[4] Id. at 2.

Response 198

EPA acknowledges that POTWs are generally not the source of PFAS just as POTWs are generally not the source of nutrients, toxics or a variety of other regulated pollutants that are discharged through the POTW. Likewise, EPA understands that POTWs are typically not designed to treat or remove PFAS and notes that this permit does not include any requirement to treat or remove PFAS. However, neither of these points undermine EPA's authority to establish necessary monitoring requirements for PFAS or any other pollutant.

Regarding cost, see Response 80.

Regarding source reduction, see Response 18, 48 and 160.

Regarding ELGs and source control through pretreatment, EPA acknowledges the commenters support for these actions and confirms that these are the goals of collecting PFAS data through NPDES permits. See Response 97 regarding EPA's PFAS Strategic Roadmap.

Comment 199

Draft Permit is a PFAS Fact-Finding Mission; Without Additional Guidance or Resources, Significant Burdens Are Placed on POTWs to Identify Potential Sources

While EPA's motives are to proactively use the NPDES permit authorities to gather ample PFAS data to inform future regulatory actions or policy, the burden to collect this information is placed squarely on Massachusetts' medium-sized municipal clean water community and its ratepayers.[5]

Using the NPDES permitting approach as a PFAS fact-finding mission may indeed help EPA and/or states identify upstream source contributors of PFAS and ultimately reduce PFAS discharges on a larger scale, but a mandatory and comprehensive monitoring approach must be designed with flexibility and minimal risk for permittees.

POTWs with established industrial pretreatment programs have shown early success in voluntarily mitigating PFAS concentrations coming into their systems and subsequently reducing concentrations in effluent and recovered residuals, but these success stories are often from mature programs at large utilities with sufficient resources and staff to implement local programs.

Success has also been achieved through utility and industry partnerships where the industrial user takes steps to proactively reduce or eliminate PFAS from their discharges.

POTWs without industrial pretreatment programs will need significant resources to pinpoint and investigate upstream PFAS sources—even if these industries are generally identified or listed PFAS in their permit. Municipal clean water utilities often have little knowledge of PFAS-discharging industries within their service areas, especially those industries that are not significant industrial users (SIU) under the CWA pretreatment program.
For example, the draft permit requires medium-sized utilities to annually sample "contaminated sites" or "manufacturers of parts with polytetrafluoroethylene or Teflon type coatings." A medium sized utility that does not have a pretreatment program will likely have trouble identifying and sampling these types of industrial users, if they even exist within their service area. This is especially true if the industry is not manufacturing PFAS per se but is simply using it in the production of another product or commercial service.

Further, the draft permit requires sampling of "any other known or expected sources of PFAS." This is arbitrary and capricious on its face and is also potentially indefinite given that PFAS is produced and manufactured for innumerable commercial uses.

Before EPA Region 1 finalizes the Massachusetts draft permit and before state permit writers begin to incorporate similar requirements elsewhere, EPA must provide the much-needed guidance and financial support for utilities attempting to collect this informational data within their service area. Otherwise, NACWA members are on a fool's errand, spending considerable and limited ratepayer dollars with no real benefit to finding sources or mitigating PFAS concentrations coming into their systems.

EPA Region 1 should consider guidance for utilities to structure a PFAS source identification program that could include how to begin outreach to upstream sources, how to develop pollution minimization plans, and how to monitor, report, and work productively with upstream sources to address PFAS in their service areas.

[5] PFAS STRATEGIC ROADMAP, supra note 2, at 13.

Response 199

First, EPA acknowledges that PFAS monitoring, like all monitoring requirements, are a type of "fact-finding" requirement to generate information necessary to properly implement the CWA. In this case, PFAS monitoring requirement is intended to generate PFAS data that may be used for a variety of purposes including use in future NPDES permits and in the development of ELGs.

Regarding "Any other known or expected sources of PFAS," see Responses 36 and 169.

Comment 200

Absent Multi-Laboratory Validation Method and Promulgation Under the CWA, Data Accuracy and Confidence Fails

It is imperative that the municipal clean water community has reliable and accurate analytical methods in order to have the scientific confidence that their monitoring efforts reflect the true PFAS concentrations found in the environment.

While EPA's Strategic Roadmap points to Method 1633—an analytical technique to measure 40 different PFAS chemicals in wastewater, surface water, biosolids, and sediment among other environmental matrices—this method has not been promulgated under the CWA Part 136's Methodologies. And, while it cannot be used for CWA compliance or enforcement efforts at this time, NACWA has additional concerns that the data collected, accurate or not, could have far reaching consequences.

This draft permit is the first-ever EPA issued NPDES general permit to include mandatory quarterly monitoring requirements for six PFAS analytes in influent, effluent, and biosolids using draft Method 1633. In addition to the six PFAS listed, utilities are to also report "all other PFAS required to be tested as part of the method" which includes up to forty different PFAS analytes.[6]

While EPA's 2020 OW PFAS Memo acknowledged that NPDES monitoring requirements were likely ahead for POTWs, monitoring requirements were not to be triggered until at *a time after EPAs multi-lab validated methods are available to the public*. To date, EPA has not published its multi-lab validation study.

Region 1's draft General Permit requires medium-sized utilities to report PFAS concentrations the first full calendar quarter after the effective date, which could be *before* the multi-laboratory validation study is finalized sometime later this year. This approach—to require monitoring, analysis, and reporting ahead of promulgating a rule under the CWA—runs counter to longstanding Agency policy establishing robust and scientifically confident analytical techniques for pollutant monitoring. It also places utilities in a risky liability situation where a utility officer must electronically report that the pollutant concentrations were prepared under their direction or supervision and the information submitted is to the best of their knowledge and belief, true, accurate, and complete. If the methodology itself is flawed, the Discharge Monitoring Report data could also be reported in error.

Confidence in the laboratory method is essential for EPA's second PFAS-related regulatory initiative, developing ELGs and pretreatment standards for industries that discharge wastewater containing PFAS. Since an approved PFAS test method for wastewater is needed to implement ELGs and pretreatment standards—and this implementation will likely require significant investment from industries and utilities—EPA must ensure that its method can be fully trusted.

Yet, EPA has given the green light for this method to be used for monitoring purposes in individual or general NPDES permits. NACWA urges EPA Region 1 to provide a grace period to monitor for PFAS using Method 1633 until the methodology passes the multi-laboratory validation stage and a formal promulgation under the CWA occurs.

Response 200

See Responses 97 and 119.

Comment 201

Required Reporting Without Broader Context Runs Risk to be Publicly Misinterpreted

NACWA is concerned that once PFAS monitoring and reporting requirements are placed into permits, which this draft general permit does, this data will be uploaded online. It will be done without the confidence of multi-lab validated methodology and without any context, running the risk of being publicly misinterpreted.

In an effort to improve transparency of PFAS pollution, EPA is creating a PFAS Analytical Tool that is user-friendly and part of EPA's Enforcement and Compliance History Online (ECHO) database—a web-based tool to identify NPDES permits of interest and investigate pollution sources or trends in compliance and enforcement data.

NACWA is concerned that the medium-sized utilities in Massachusetts will be among the first in the country to have their monitoring data, which are informational only and not to be used for compliance or enforcement purposes, automatically uploaded via their electronic Discharge Monitoring Reports (eDMRs) and published online where the public could misconstrue this information.

NACWA members are witnessing firsthand that the *mere presence* of PFAS, even at extremely low parts per billion (ppb) or parts per trillion (ppt) levels, can generate significant concern over how public clean water utilities manage their daily operations and their residuals.
If the effort is to gain information on PFAS sources and quantities, NACWA encourages EPA Region 1 to not require reporting under eDMRs and rather have utilities report this information directly to the Region. While this information may still be collected with a Freedom of Information Act (FOIA) request, it will not be as readily available without any context on what PFAS concentrations mean or the limitations currently for POTWs to treat or mitigate these emerging contaminants.

[6] See MAG590000 - Attachment H: PFAS Analyte List (identifying 40 PFAS analytes as part of draft Method 1633), available at https://www3.epa.gov/region1/npdes/mwwtfgp/draft-medium-wwtf-gp-att-h.pdf.

Response 201

First, EPA agrees that EPA's Enforcement and Compliance History Online (ECHO) database is a web-based tool to identify NPDES permits of interest and investigate pollution sources or trends in compliance and enforcement data. It is not designed specifically for PFAS but to ensure transparency for all reported pollutants.

However, EPA does not agree that excluding PFAS data from this tool would serve the public appropriately. Rather, EPA considers it appropriate to make these data available to the public in combination with other supporting information related to PFAS that can be found on our publicly available website[28] to provide context.

[28] https://www.epa.gov/pfas

FF. Comments from Philip D. Guerin, President and Chairman, Massachusetts Coalition for Water Resources Stewardship, on April 26, 2022:

Comment 202

The Massachusetts Coalition for Water Resources Stewardship (MCWRS) appreciates the opportunity to provide comments on the draft NPDES Medium Wastewater Treatment Facilities General Permit for Massachusetts (Permit #MAG 590000).

MCWRS is a non-profit, membership organization which advocates for municipal interests in areas related to wastewater, stormwater and drinking water. MCWRS members include municipalities, water and wastewater districts, authorities and commissions, stormwater coalitions, consulting engineering firms and legal firms. MCWRS advocates for programs, regulatory approaches and legislation that advances the triple bottom line perspective to achieve environmental improvements using fiscally sound means that support improved quality of life for residents of the Commonwealth of Massachusetts.

The Draft NPDES Medium Wastewater Treatment Facilities General Permit for Massachusetts covers publicly owned wastewater treatment facilities discharging from 1-5 million gallons per day. There are presently 44 eligible facilities in Massachusetts including some that are operated by MCWRS members. MCWRS offers the following specific comments on the subject draft permit:

Response 202

EPA acknowledges this comment.

Comment 203

1. PFAS monitoring and reporting requirements

1.1. The draft permit includes a requirement for quarterly PFAS monitoring. Though 6 compounds are listed in the permit, the testing methodology 1633 results in the requirements to test for 40 compounds in the influent, effluent and biosolids. Given the relatively small size of the facilities covered under the General Permit and the high cost of the PFAS monitoring, the monitoring requirements should be reduced to twice per year. This is consistent with EPA's approach for the recently issued Region 1 Small Wastewater Treatment Facilities General Permit. The rationale used by EPA to support a reduction in the reporting frequency for the Small WWTF General Permit should be applied to facilities covered under the Medium WWTF General Permit.

1.2. The permit does not a have a provision to reduce testing frequency if values are below an undefined benchmark. This approach is part of the MassDEP drinking water testing program which allows for reduction in frequency if values are below levels related to the established standards for "PFAS-6". Such an approach would reduce laboratory costs if levels were low. MCWRS recommends that after two full years of testing, if the PFAS-6 levels are below 20 ng/l, then sampling be reduced to once per year.

1.3. The draft permit lists six PFAS compounds (the "6" regulated by the MassDEP drinking water regulations) to be tested and reported. Attachment H lists 40 PFAS analytes that are

part of draft method 1633. The forty results are required to be reported in the NetDMR system. MCWRS recommends that the permit simply state that the permit requires reporting the 40 PFAS analytes in draft method 1633 and that the list automatically changes if the multi-laboratory method anticipated to be approved in 2022 has a different list. To have the "PFAS-6" listed in the permit but requiring reporting of forty analytes leads to confusion.

1.4. Part III. C. 3. of the GP and Draft Authorization require the Permittee to "commence annual sampling of the following types of industrial discharges into the POTW:

• Commercial Car Washes
• Platers/Metal Finishers
• Paper and Packaging Manufacturers
• Tanneries and Leather/Fabric/Carpet Treaters
• Manufacturers of Parts with Polytetrafluoroethylene (PTFE) or Teflon type coatings (i.e. bearings)
• Landfill Leachate
• Centralized Waste Treaters
• Contaminated Sites
• Fire Fighting Training Facilities
• Airports
• Any Other Known or Expected Sources of PFAS

PFAS sampling is expensive. MCWRS recommends that "annual" be replaced with "regular" sampling and that "Any Other Known or Expected Sources of PFAS" be deleted because the term is too vague to be effectively be carried out.

Response 203

See Responses 13, 21, 80 and 169.

Comment 204

2. 7Q10 Calculations

2.1. A number of facilities have indicated disagreements with the Draft Permit's (Attachment E) recalculated 7Q10 flows used to establish the Water Quality Based Effluent Limits (WQBELs). As this is a critical metric which determines dilution factors and directly impacts permit limits it is critical that this low flow be calculated appropriately and consistently. MCWRS recommends that previously approved and utilized 7Q10 flows be retained for the General Permit. The Attachment E 7Q10 figures, if different than those previously used, should be examined and reviewed with the permittee. If a new approach to 7Q10 calculation is justified, EPA and MassDEP should convene a working group to review and develop protocol for modifying 7Q10 flows where such modifications are necessary.

Response 204

The specific facilities that indicated disagreement with revised 7Q10 calculations have been responded to above. See Responses 101, 122 and 163.

All other revised 7Q10s summarized in Attachment E are carried forward. As noted in the Fact Sheet at 15, these 7Q10 analyses have been updates using the best available data from the most recent 30 climate years in order to account for recent hydrological changes in the watershed and changing climatic conditions. EPA considers this approach to be appropriate and consistent with recent individual permit. Additionally, EPA notes it has not been challenged in any comments received on this General Permit. Therefore, this comment does not result in any other changes to the Final General Permit.

Comment 205

3. Ambiguous Narrative Language

26.1. Part II.B Other Requirements, subparagraph 1, states, "The discharge shall not cause a violation of the water quality standards of the receiving water." As required by the Clean Water Act, the permit writer has the burden to identify and apply applicable regulations and incorporate all necessary and appropriate terms, conditions, and limitations into the permit. Federal law requires that permitting agencies include limitations necessary to meet applicable water quality standards (WQS), including numeric effluent limits for any pollutant that has reasonable potential to cause a WQS violation. As such, we request that this narrative language be deleted from the permit.

26.2. Similarly, subparagraphs II.B.2, 3, 4 and 5, contain ambiguous, boilerplate, narrative language that opens the permittees up to lawsuits or enforcement actions, due to misunderstandings in the statutory requirements. Therefore, we request that this narrative language also be deleted from the permit.

Response 205

See Responses 108 and 161.

Comment 206

4. Annual Nitrogen Reporting

4.1. Part III.G.2 requires permittees to submit an annual report documenting the annual nitrogen discharge load from the facility and tracking trends relative to the previous calendar year and the previous five calendar years. This requirement should be simplified by deleting the last two sentences of Part III.G.2 and replace with "Report on any trends or anomalies in the data along with potential explanation of the anomalies."

4.2. Nitrogen monitoring and reporting noted in Table 1 should not be required for facilities that discharge to waters which are not impaired by nitrogen.

Response 206

See Response 46 and 157.

Comment 207

5. Ambient Phosphorus Monitoring

5.1. The Draft General Permit imposes an ambient phosphorus monitoring program for facilities with a dilution factor greater than 1.1 and a final effluent concentration limit greater than 0.1 mg/L. The Draft General Permit calls for permittees to submit a sampling plan and QAPP for approval by EPA and MassDEP. These requirements are unnecessary and overly burdensome. A site-specific monitoring plan and QAPP is not necessary to collect these data when a facility is already collecting ambient data for the WET testing requirements, and these data are already used by EPA for the reasonable potential analysis calculations. The need for an EPA and MassDEP approved sampling plan and QAPP should be deleted from this permit. If the agencies believe that facility operators are incapable of collecting ambient phosphorus samples without an elaborate and expensive plan, then this task should be completed by EPA and MassDEP, which, frankly, have the responsibility of conducting surface water quality monitoring.

5.2. The Draft Permit's ambient phosphorus monitoring program requires monthly sampling from May through September with a 72-hour antecedent precipitation requirement. This requirement is difficult to implement in practice for a small WWTF that may have limited staff availability. The uncertain nature of running a weather-driven monitoring program makes it impossible to plan in advance the monitoring dates. MCWRS recommends that EPA modify the proposed monitoring program to require monthly monitoring on a pre-determined date. Since this program is anticipated to occur biannually for the length of the permit, it will collect adequate data to characterize the upstream phosphorus concentrations, even if a subset of the data happen to be collected on a wet weather day.

5.3. Monitoring and reporting of ambient phosphorus should not be required for facilities discharging to waters that are not phosphorus impaired.

Response 207

See Responses 47 and 52.

Comment 208

6. Aluminum Compliance Schedule

6.1. MassDEP has spent a significant amount of time and effort to get the watershed specific criteria for aluminum established and approved by EPA. That process has taken longer than expected and is yet incomplete though slowly progressing. MCWRS recommends that EPA delay issuance of a final GP until after that process is complete so as to avoid unnecessary confusion regarding current and future aluminum limits. The convoluted language in Part III.F.3 could then be replaced with clear limits based on the new MassDEP aluminum criteria. It appears that the last step in the process of developing new criteria is EPA approval. The agency thus has the ability to expedite that approval and allow itself to move beyond the confusing aluminum compliance scheduling currently in the draft permit.

Response 208

At the time of issuance of this General Permit, the revised 2021 Massachusetts WQS for aluminum have been approved by EPA.

Comment 209

7. SSO notification requirements

7.1. The draft GP designates time frames for reporting sanitary sewer overflows (SSOs) including notification of downstream water suppliers of any SSO events. There is a long-standing SSO reporting system that MassDEP has had in place. In addition, MassDEP recently passed regulations (314 CMR 16.00) for public notification of certain SSO events as well as a continuance of all SSO events as outlined in 314 CMR 12.00. To minimize confusion and overlap, MCWRS recommends that SSO notification requirements in the General Permit mirror those currently required by MassDEP.

Response 209

See Response 81.

Comment 210

8. Co-permittees

8.1. MCWRS agrees with comments provided by MWRA regarding regulation of co-permittees through this general permit and that EPA lacks the authority to do so. All references to co-permittees should be deleted from this permit.

Response 210

See Responses 40 through 44.

GG. Comments from Julia Blatt, Executive Director of Massachusetts River Alliance, on April 26, 2022. Co-signed by: Clean Water Advocacy Save Buzzards Bay, Charles River Conservancy, Charles River Watershed Association, Chicopee 4 Rivers Watershed Council, Connecticut River Conservancy, Conservation Law Foundation, Hoosic River Watershed Association, Housatonic Valley Association, Ipswich River Watershed Association, Merrimack River Watershed Council, Nashua River Watershed Association, Neponset River Watershed Association, North and South Rivers Watershed Association, OARS, Save the Bay / Narragansett Bay, Taunton River Watershed Alliance, and Waterkeeper Alliance

Comment 211

On behalf of Massachusetts Rivers Alliance, we write to express our concerns with the above-referenced draft 5-year General Permit covering specific Wastewater Treatment Facilities (WWTFs) in Massachusetts with medium-sized discharges (1-5 mgd).

In addition to reviewing EPA's draft General Permit, we and our member organizations reviewed the permit's Fact Sheet, the draft Authorization Letters, MassDEP's draft General Permit, and the relevant underlying current permits from EPA and MassDEP for the 44 medium-size WWTFs to be covered under this permit, all of which discharge to waterways in the Commonwealth.

Founded in 2007, The Massachusetts Rivers Alliance ("Mass Rivers") is a 501(c)3 nonprofit organization whose mission is to protect and restore the Commonwealth's rivers and streams, and to increase climate resilience for all communities. Mass Rivers currently has 80 member organizations, several of which operate in watersheds where one or more of the 44 facilities eligible for coverage under the Permit discharge treated sewage. Many of these affected groups have expressed serious concerns about EPA's decision to propose this Permit and are joining Mass Rivers in submitting this Public Comment Letter (hereinafter Mass Rivers and the co-signers to this Letter are referred to collectively as "Mass Rivers").

With an estimated 8,229 river miles, 1,200 named rivers, 588,486 acres of wetlands and 1,519 miles of coastline, water touches every resident of the Commonwealth and draws millions of visitors each year. The recent pandemic highlighted the importance of these resources for safe and enjoyable recreation. Healthy ecosystems are necessary for mitigating floods, maintaining water quality and quantity, recycling nutrients, and providing habitat for plants and animals. These systems are already under tremendous pressure to adapt to the impacts of climate change and survive the myriad human impacts threatening them. It is up to our federal and state agencies, such as EPA and MassDEP, to effectively implement the environmental regulations designed to protect them.

This year is the 50th anniversary of the Clean Water Act, arguably the most important environmental legislation the US has ever passed. Since this landmark law was passed in 1972, we as a nation have been trying to reduce and ultimately cease the dumping of contaminants into our waterways. EPA established the National Pollutant Discharge Elimination System (NPDES) to regulate those discharges that could not yet be eliminated, and track progress toward that ultimate goal. Half a century later, we have made tremendous improvement in local water quality, but we have still not achieved the basic goal of ensuring our rivers and streams are indeed clean. EPA has permitted over 48,000 industrial facilities under NPDES - allowing them to continue polluting throughout the country. In Massachusetts, MassDEP currently has 476 parallel state permits, allowing facilities to continue allowing pollutants to be dumped into our precious waterways.

Nutrient overload from wastewater discharge is a significant problem for rivers in Massachusetts. Excess nutrients cause toxic cyanobacteria (also known as blue green algae) outbreaks which impair habitat, inhibit recreation, and in some cases threaten public drinking water supplies. Climate change-induced impacts such as increased water temperatures, more frequent droughts and severe droughts, and sea level rise are exacerbating the cyanobacteria problem and also lead to harmful algal blooms and increased eutrophication in our waterways. The NPDES permitting process is the primary venue for regulated parties, the general public, and environmental advocates alike to inform how their local waterways are managed for the benefit of all, including limiting nutrient pollution. Local stakeholders are typically the most knowledgeable about the specific concerns and solutions within their watershed, and serve as an important resource for federal and state regulators developing effective permits. It is imperative that EPA and MassDEP follow a community-engaged and science-based approach to issuing WWTF permits, so as to progressively reduce and ultimately eliminate excess nutrients and other pollutants being discharged from these facilities.

Response 211

EPA acknowledges this comment.

Comment 212

I. Introduction and Request for Public Hearing

The Environmental Protection Agency, Region 1 ("EPA") is proposing the Medium Wastewater Treatment Facilities General Permit ("Permit") to replace the individual Clean Water Act ("CWA") discharge permits for 44 facilities treating domestic sewage discharging into Massachusetts waters. The proposed Permit would cover the 44 eligible facilities (and potentially more in the future) under a single CWA permit, apparently through the use of "authorization letters," separate documents that contain effluent limitations for the specific authorized facility. The eligible facilities are those that discharge between one and five million gallons per day of treated domestic sewage.[1] Thus, this proposed Permit would govern up to 220 million gallons per day of treated domestic sewage discharges into both freshwater and marine waters throughout the Commonwealth of Massachusetts.

1 See Permit, at 3.

The proposed Permit is not only contrary to the purpose and spirit of the CWA, but also potentially unlawful. The Permit creates procedural and substantive confusion, fails to advance protection for the state's waters, and does not create the efficiency that EPA seeks. Rather than spending time and resources moving forward with the proposed Permit, EPA should direct those resources toward updating and reissuing individual National Pollutant Elimination Discharge System ("NPDES") Permits for those facilities among the 44 eligible ones that are operating under expired permits,[2] some of which are over a decade past due.

2 Out of the 44 facilities eligible for coverage under the proposed Permit, it appears that 27, or about 61%, are operating under expired and administratively continued individual permits.

We recognize the main goal of the general permit approach is to reduce the significant permitting backlog, which has resulted in substantial delays in permit reissuance. We share this concern: of the 44 facilities included in this draft permit, 27 are operating under expired and /or administratively continued permits, some of which are nearly a decade past due.[3] Yet we have serious doubts as to whether the draft General Permit will indeed improve permitting and compliance over the long term.

3 See Attachment A to this Comment

Other than the short term "benefit" EPA will achieve by instantly (although superficially) eliminating its backlog of expired and administratively continued NPDES permits for the eligible facilities, it is hard to identify any other efficiencies generated by the Permit. To the contrary, EPA seems to be trading a short-term gain for long term pain (both for the agency and for affected communities)—in five years when the Permit is due for renewal, EPA will have to analyze and update effluent limitations for 44 facilities all at once, rather than on a staggered basis as is currently the case with individual permits. And communities living in watersheds with multiple eligible facilities will be burdened with having to evaluate and comment on those multiple facilities when the Permit is up for renewal all at the same time.[4] Neither EPA nor affected communities benefit from this outcome. In fact, Mass Rivers believes it will cause more inefficiency, not less, when that time arrives.

4 For example, there are 13 eligible facilities in the Connecticut River watershed. If the standard comment period for an individual facility's permit renewal is 30 days, affected Connecticut River watershed communities would have a total of 390 days to evaluate and comment on the 13 permit renewals, assuming no overlap of comment periods. Under the proposed Permit, that number shrinks to 30 days total when the Permit scheduled for renewal.

EPA has determined that the point sources covered by the proposed Permit consist of multiple facilities within a single category of dischargers that are more "appropriately controlled and efficiently regulated" under a general permit than under individual permits.[5] However, EPA never explains why the 44 eligible facilities are more "appropriately controlled" by the Permit or precisely how they will be more "efficiently regulated."[6]

5 FACT SHEET AND SUPPLEMENTAL INFORMATION, DRAFT NPDES GENERAL PERMIT NUMBER MAG59000, at 4 (2022) (hereinafter "Fact Sheet").

6 EPA briefly explains the switch to a general permit by stating that the dischargers meet the qualifications necessary under the regulations governing general permits. See Fact Sheet at 4. EPA also includes a conclusory statement that, "[o]nce issued, the [Permit] will enable eligible facilities to maintain compliance with the CWA, will extend new environmental regulatory controls to these dischargers, and will reduce EPA's permit issuance backlog of pending individual permit applications and expired permits." Id. at 4. As described further in this Comment, the former statement ignores EPA's own regulations, and the latter does not support the need for a major regulatory shift away from facility-specific individual NPDES permits to a general permit.

In addition to the timely issuance of permits, the proposed General Permit has such serious technical flaws that it fails to protect water quality in our receiving waters. The draft General Permit also fails to comply with multiple established TMDLs in 13 of the receiving watersheds,[7] which requires adaptive management. It is virtually impossible to implement effective adaptive management when such a long time lapse occurs between permit issuance. Finally, MassDEP simply lacks the regulatory authority to issue this kind of general permit.

7 See Attachment A

Mass Rivers strongly urges EPA to withdraw the draft General Permit, and instead continue issuing individual permits for the 44 covered WWTFs, which should incorporate the effluent limitations contained in EPA's Draft Authorization Table.[8]

8 https://www.epa.gov/npdes-permits/region-1-draft-medium-wastewater-treatment-facilities-general-permit-massachusetts

Individual permits are more simple than the proposed bifurcated General Permit and Notice of Authorization process - for both the public and regulated facilities to understand, comply with, and track progress. The complex General Permit document, even supported by an Authorization Letter (as described in the EPA website Draft Authorization Table) is unnecessarily confusing for all interested parties.

The concept of general permits was originally proposed as an exception to the rule of individual NPDES permit coverage.[9] EPA's move from covering small publicly owned treatment works through a general permit to now covering medium wastewater treatment facilities begs the question of what is next? EPA is sliding down a slippery slope that will result in the exception swallowing the rule, to the detriment of the waters of the Commonwealth.

9 See Nat. Res. Def. Council v. Costle, 568 F.2d 1369, 1381–82 (D.C. Cir. 1977).

Response 212

See General Response to Comments on Benefits and Appropriateness of General Permit Approach and Response 231.

Comment 213

Mass Rivers requests that EPA hold multiple public hearings, regardless of EPA's decision regarding the Permit, for three purposes:

- So that all affected communities with eligible facilities have a fair opportunity to pose directly to EPA employees the many questions this Permit raises;
- To receive answers to those questions in a public setting; and
- To voice their concerns directly to EPA.[10]

10 Mass Rivers makes this request pursuant to 40 C.F.R. § 124.12. See also Fact Sheet at 48. This Comment reflects the nature of the issues Mass Rivers intends to raise at a public hearing, as well as any additional issues Mass Rivers identifies after the submission of this Comment upon further review of the proposed Permit and its implications.

Such public hearings are in fact mandatory, due to the high degree of public interest in the Permit.[11] Given the potential significant regulatory shift the Permit represents, multiple public hearings are appropriate. This draft permit is of statewide interest. As such, public hearings should be held at times and locations convenient to community members, and geographically distributed so that all affected community members can participate with minimal travel. EPA also should hold public hearings because, as detailed further below, such hearings "might clarify one or more issues" raised by the proposed Permit.[12]

11 40 C.F.R. § 124.12(a)(1) (EPA "shall hold a public hearing whenever he or she finds, on the basis of requests, a significant degree of public interest in a draft permit") (emphasis added).

12 Id. § 124.12(a)(2).

Response 213

This comment seeks an opportunity to engage in a dialogue with EPA regarding the General Permit. The comment refers to this request as a "public hearing" but describes the request as an opportunity to ask questions and receive answers in a public setting. EPA clarifies that a "public hearing" would not fulfill this request. Rather, a public hearing is an opportunity where "any person may submit oral or written statements and data concerning the Draft Permit." *See* 40 CFR 124.12(c). In other words, a "public hearing" is simply another avenue whereby interested parties may submit comments to EPA during the public comment period. Given that the commenter is requesting this public hearing for purposes other than the submission of comments and has already submitted written comments directly to EPA during the comment period, EPA does not agree that it is necessary to conduct a public hearing.

To the extent this request seeks an opportunity to "clarify one or more issues" regarding the General Permit, EPA did answer clarifying questions posed during the public comment period by the commenter and by a variety of other interested parties. Given that EPA clarified all such questions during the comment period in a timely manner, EPA does not consider this as grounds for a public hearing.

Comment 214

<u>II. Background and Relevant Regulations</u>

Congress passed the Clean Water Act ("CWA") to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." [13] To accomplish this, the CWA makes it unlawful to discharge pollutants into waters of the United States unless a discharger complies with certain conditions.[14] The National Pollutant Discharge Elimination System ("NPDES") permit program is one such way to lawfully discharge pollutants.[15] The ultimate goal of the CWA and the NPDES program is to eventually eliminate all discharges of pollutants into navigable waters.[16] The NPDES program works to achieve this goal by requiring establishment and compliance with technology based and water-quality based effluent limitations ("TBELS" and "WQBELs"), antidegradation policies, toxic and pretreatment effluent limitations, sewage sludge standards and monitoring requirements as required by the CWA.[17] The maximum term of NPDES permits are five years, before permittees must apply for reissuance prior to expiration of the existing permit.[18] This limited duration requires that EPA "re-ensure compliance with the [CWA]…in regular intervals" and tighten discharge limits as needed under CWA requirements.[19] The reason for reviewing and tightening discharge limits is to work toward the CWA's goals of eliminating discharges and enhancing water quality. Individual NPDES permits "are issued to individual dischargers [sic] and are developed according to the specific nature of each facility and the receiving water into which each facility discharges."[20]

13 33 U.S.C. § 1251(a).
14 33 U.S.C. 1311(a).
15 See 40 C.F.R. §122.1.
16 See 33 U.S.C. § 1251(a)(1) ("[I]t is the national goal that the discharge of pollutants into navigable waters be eliminated by 1985.").
17 See, e.g., 40 C.F.R. §§ 122.4, 122.41, 122.44.
18 See 33 U.S.C. §§ 1342(a)(3), 1342(b)(1)(B).
19 See Upper Blackstone Water Pollution Abatement Dist. v. U.S. Envtl. Prot. Agency, 690 F.3d 9, 22 (1st Cir. 2012).
20 Fact Sheet at 3.

In addition to individual NPDES permits, EPA also approves NPDES permits through the general permitting mechanism found at 40 C.F.R. § 122.28. EPA defines "general permit" as "an NPDES 'permit' issued under § 122.28 authorizing a category of discharges under the CWA within a geographical area." [21] At its inception, EPA intended the general permit program "to provide administrative flexibility while dealing with numerous minor discharges subject to the same limitations."[22] Shortly after the promulgation of the CWA, EPA unsuccessfully attempted to exclude certain discharges from the NPDES permitting program due to concern over the administrative burden and difficulty of developing end-of-pipe limitations for certain storm runoff discharges.[23] While section 402 does not explicitly describe the scope of a NPDES permit, "the most significant requirement is that the permit be in compliance with [effluent] limitation sections of the Act[.]"[24] General permits are permissible under the CWA as long as they remain "not inconsistent" with the CWA's clear terms.[25] Thus, the CWA provides no specific statutory authority to use general permits to satisfy NPDES requirements, and general permits are subject to all the same substantive and procedural obligations applicable to individual NPDES permits, including TBELs, WQBELs, anti-degradation policies, and anti-backsliding regulations. Furthermore, courts do not defer to EPA's judgment that general permit terms are appropriate when they do not fully ensure compliance with provisions of the CWA or the NPDES permitting program.[26]

21 40 C.F.R. § 122.2.

22 National Pollution Discharge Elimination System: Revision of Regulations, 44 Fed. Reg. 32854, 32873 (June 7, 1979)(emphasis added).

23 Jeffrey M. Gaba, Generally Illegal: NPDES General Permits Under the Clean Water Act, 31 HARVARD ENV'T L. R. 409, 420-21 (2007); see also Costle, 568 F.2d at 1372-73.

24 Costle, 568 F.2d at 1381.

25 Id. at 1382.

26 See, e.g., Waterkeeper All. v. U.S. E.P.A., 399 F.3d 486, 499 (2d Cir. 2005) (holding that EPA's general permit for CAFO discharges was arbitrary and capricious and violated the CWA because, by failing to provide for permitting authority review of nutrient management plans, the rule did not ensure that each Large CAFO would comply with all applicable effluent limitations and standards); Env't Def. Ctr. v. U.S. E.P.A. 344 F.3d 832, 857 (9th Cir. 2003) (rejecting a rule implementing a general permit for small municipal separate storm sewer systems ("small MS4s") as contrary to the clear intent of Congress insofar as it did not provide for public hearing on the Notices of Intent, which contained substantive information on discharge reduction). The Ninth Circuit also found that the general permit violated the CWA's requirement that MS4 Phase II permits "require controls to reduce the discharge of pollutants to the maximum extent practicable." EPA contended that Congress delegated the task of designing the MS4 Phase II permit system to EPA and thus the general permit was a reasonable adaptation of the NPDES program to suit the unique needs of the Phase II program. The Court disagreed because the permit allowed compliance as long as operators implemented their stormwater management programs and provided no review by EPA to ensure that these programs did "in fact" reduce discharges to the maximum extent practicable. Id at 854-55.

Response 214

EPA acknowledges this comment and confirms that this General Permit does ensure compliance with the CWA. See General Response to Comments on Benefits and Appropriateness of General Permit Approach

Comment 215

<u>III. The Permit does not comply with EPA's regulation governing general permits</u>

As introduced above, 40 C.F.R § 122.28(a)(2)(ii) allows for general permits that regulate one or more categories or subcategories of "treatment works treating domestic sewage" in the same geographic area, if the sources within each category or subcategory all:

(A) Involve the *same or substantially similar* types of operations;

(B) Discharge the same types of wastes or engage in the same types of sludge use or disposal practices;

(C) Require the same effluent limitations, operating conditions, or standards for sewage sludge use or disposal;

(D) Require the same or similar monitoring, and;

(E) In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.[27]

27 40 C.F.R. § 122.28(a)(2)(ii) (emphasis added).

Thus, general permits may only regulate wastewater treatment facilities as a category of sources if every source meets all five criteria listed above. For the proposed Permit, EPA leans heavily on its determination under (E) that each facility is more appropriately controlled and efficiently regulated under a general permit,[28] but this cannot substitute for a failure to comply with the other regulatory requirements. While the sources in the Permit may satisfy factors (A) and (B), there are substantial questions as to requirements (C) and (D).

28 Fact Sheet at 4.

A. The Permit does not cover categories of sources with the same effluent limitation, as required by the regulation

EPA claims that the discharges from the eligible medium wastewater treatment facilities qualify for coverage under a general permit because "the wastewater discharged from these sources…requires the same or similar effluent limitations, monitoring requirements, and other conditions to be effectively controlled[.]"[29] This is a misstatement of EPA's own regulations that ignores the plain text meaning of the regulation. As set forth above, the regulation states a general permit is only applicable if all sources require the same effluent limitations.[30] EPA may have been attempting to use shorthand in the Fact Sheet, but words matter in interpreting regulations. The words "or similar" do not appear in connection with "effluent limitations" in EPA's regulations, although importantly, they do appear in other provisions involving general permits.

29 Id. (emphasis added).
30 40 C.F.R. Â§ 122.28(a)(2)(ii)(C).

"When construing an administrative regulation, the normal tenets of statutory construction are generally applied."[31] Thus, when a court is "faced with statutory language that is clear and unambiguous, [it] ordinarily must construe the statute precisely as it is written, giving its constituent words their plain meanings."[32] Although it is self-evident, the plain meaning of the word "same" means "identical," "not different," or "corresponding so closely as to be indistinguishable."[33]

31 In Re: Consumers Scrap Recycling, Inc, 11 E.A.D. 269 at 18 (Jan. 29, 2004).
32 Cahoon v. Shelton, 647 F.3d 18, 22 (1st Cir. 2011).
33 Merriam-Webster.com.

While the regulations allow for general permits for wastewater treatment facilities that involve the "same or substantially similar" type of operations and monitoring, the language clearly distinguishes the need for the sources within each category to require the same effluent limitations, operating conditions, or standards.[34] Simply put, EPA's characterization in the Fact Sheet of its own regulations—by inserting the words "or similar" in front of effluent limitations—is impermissible under basic tenets of regulatory construction. Put another way, if the word "same" meant "the same or similar" then the language in subsections (A) and (D) becomes superfluous.[35] Under both the canon of construction against surplusage and the canon of construction requiring words be given their plain meaning, EPA's characterization of its own regulation in the Permit's Fact Sheet must be rejected.

34 40 C.F.R. § 122.28(a)(2)(ii)(C); see also National Pollutant Discharge Elimination System; Revision of Regulations 44 Fed. Reg. 32854, 32873 (June 7, 1979) ("The [general permit] program was intended to provide administrative flexibility in dealing with numerous minor discharges subject to the same limitations.") (emphasis added); Amendments to Streamline the National Pollutant Discharge Elimination System Program Regulations: Round Two, 61 Fed. Reg. 65,268, 65,272 (Dec. 11, 1996) ("Under the general permit program, the permitting authority may issue a permit to cover a class of similar dischargers or treatment works treating domestic sewage in a defined geographic area with the same effluent limitations.") (emphasis added).

35 See Marx v. General Revenue Corp., 568 U.S. 371, 386 (2015) ("[T]he canon against surplusage is strongest when an interpretation would render superfluous another part of the statutory scheme.").

Once the regulatory language is given its plain meaning, it is clear that the sources EPA proposes to cover under the Permit do not have the same effluent limitations and operating conditions. Instead of including the same effluent limits for all the eligible facilities, the Permit purports to

carry forward different, existing effluent limits unique to each individual facility. In the case of BOD5 for Erving Center WWTP 2, for example, the Permit carries forward the "unique BOD5 and TSS limits…from the 2021 individual permit based upon the unique industrial component of this facility."[36] These and other individualized effluent limitations mean that the Permit covers facilities that require different effluent limitations, directly contrary to general permit regulations. Effluent limitations are perhaps the most integral component to the functioning of NPDES permits. The regulations' plain language cannot be ignored in an attempt to gain purported administrative efficiency. Because EPA has not clearly delineated separate subcategories subject to the same effluent limitations the proposed Permit does not satisfy the agency's general permit requirements.[37]

36 Permit at 9.
37 See Amendments to Streamline the National Pollutant Discharge Elimination System Program Regulations: Round Two, 65 Fed. Reg. 30886, 30890 (May 15, 2000) ("Within each identified category or subcategory, limitations would have to be identical for all covered dischargers or treatment works treating domestic sewage.") (emphasis added). Likewise, EPA does not explain how the proposed Permit complies, if it does, with the mandate of 40 C.F.R. 122.28(a)(3), which states: "Where sources within a specific category or subcategory of dischargers are subject to water quality-based limits imposed pursuant to § 122.44, the sources in that specific category or subcategory shall be subject to the same water quality-based effluent limitations."

In an analogous context, EPA has recognized the limited use of general permits for facilities with different limitations, stating that "where sludge regulations require site specific conditions that vary for each permittee, general permits would not be appropriate and individual permits would be required."[38] EPA does not explain how site-specific conditions for effluent discharges from wastewater treatment facilities would be appropriate for a general permit when those for sludge are not. Part of EPA's process for establishing flexibility through more streamlined, efficient general permits included determinations of what should and should not be streamlined to maintain the integrity of the NPDES permits. While some elements were afforded more flexibility from the beginning, effluent limitations and WQBELs were not.

38 National Pollution Discharge Elimination System Sewage Sludge Permit Regulations; State Sludge Management Program Requirements, 54 Fed. Reg. 18716, 18740 (May 2, 1989).

Response 215

See General Response to Comments on Benefits and Appropriateness of General Permit Approach.

Comment 216

B. <u>The Permit Ignores Longstanding Monitoring Requirements Among Eligible Facilities</u>.

For decades, the individual permits for 44 eligible facilities have imposed varied monitoring requirements depending on the characteristics of the discharges, the specific facility's operations, and the status of the receiving waters, among other variables. EPA in the proposed Permit ignores those historical differences, apparently in order to fit within EPA's general permit regulations, and imposes a "one size fits all" monitoring regime for all of the eligible facilities. This unexplained change, which in almost all cases often results in significant decreases in monitoring frequencies (further explained below), is arbitrary and capricious.[39] First, EPA cannot reverse engineer monitoring frequencies to fit within its regulations. It is clear that the 44 eligible facilities do not require "the same or similar" monitoring as is required for general permit coverage.[40] While EPA may have discretion to change those monitoring frequencies, it must explain its change and that explanation must be rational. Put another way, if EPA is going to impose its "one-size-fits-all" monitoring regime on the 44 eligible facilities, it must explain for

each facility why it is changing them, especially for those where the frequency is decreasing, and why the new significantly reduced monitoring frequencies will be sufficient to yield representative date and maintain and protect water quality standards in Massachusetts. Presumably, EPA had a rational reason for determining the monitoring frequencies it has been imposing on these facilities for decades, and now it must provide the same reasoning for changing them. It has not done so in the proposed Permit.

39 See Attachment A to this Comment, detailing the reductions in monitoring frequencies at the various eligible facilities.
40 40 C.F.R. § 122.28(a)(2)(ii)(D).

Response 216

See Response 275.

Comment 217

V. The Permit will not increase efficiency for EPA and has a greater potential to increase the backlog of expired permits and outdated TMDLs.

As noted above, much of the efficiency of general permits derives from writing permits on a watershed or geographic basis, to facilities with the same water quality requirements, that reduces the administrative burden on agencies by decreasing the number of permits issued. This approach to permitting subsumes distinct categories that truly share the same effluent limitations so inclusion in one permit does not create confusion or additional processes. This efficiency is lost, however, when the general permit is heavily reliant, as the proposed Permit is, on the provisions of past individual permits for the facilities it covers. This point underscores the importance of the general permit implementing regulations, which create efficiency by maintaining that eligible facilities must have the same effluent limitations.

General permits must "clearly identify the applicable conditions for each category or subcategory of dischargers or treatment works treating domestic sewage covered by the permit."[41] Yet the proposed draft permit itself does not even contain some of the effluent limits that the covered facilities are subject to. Instead, EPA posted 44 individual "Draft Authorization Letters" on the Permit's webpage, each of which contains the relevant limitations for each facility.[42] EPA's use of Authorization Letters to establish eligible facilities' individual effluent limitations creates a host of questions that raise efficiency concerns about this process. These include but are not limited to:

How long will EPA wait for a specific facility to submit a Notice of Intent to be covered under the Permit before the agency unilaterally notifies that facility that it is covered, and its individual permit is terminated?

Will the public have any opportunity to participate in that process?

Are the Authorization Letters separate final agency actions that can be challenged independently of the proposed Permit?

Are the effluent limitations in the Authorization Letters incorporated into the Permit, but only for the authorized facility?

41 40 C.F.R. § 122.28(a)(4)(i).
42 Region 1 Draft Medium Wastewater Treatment Facilities General Permit for Massachusetts, U.S. E.P.A., https://www.epa.gov/npdes-permits/region-1-draft-medium-wastewater-treatment-facilities-general-permit-massachusetts (last visited April 19, 2022).

Response 217

See General Response to Comments on Benefits and Appropriateness of General Permit Approach.

With regard to reliance on past individual permits, EPA confirms that all NPDES permits for existing facilities must rely to some extent on the conditions in a facility's current NPDES permit.

With regard to the General Permit and the Draft Authorizations, EPA asserts that all provisions in the Draft Authorizations are based on requirements set forth in the General Permit. For example, footnote 13 of Table 1 in Part II.A requires that all existing limits in a facility's current permit would be carried forward under the General Permit unless the General Permit requires a more stringent limit. Many of the limits in the Draft Authorizations are based on this provision in the General Permit. To more clearly identify all applicable conditions for each discharger within the General Permit, EPA has created a new attachment (i.e., Attachment I – Facility-Specific Permit Terms) to the Final General Permit which is discussed in more detail in Response 227.

With regard to Notices of Intent (NOIs), Part IV.A of the General Permit requires that a NOI must be submitted within 30 days of the effective date of the Final General Permit. EPA expects to authorize eligible facilities shortly after this initial time period. The submission of NOIs by the eligible WWTFs and the issuance of final authorizations by EPA is not a public process nor a final agency action. Once these authorizations become effective, EPA will post them on the Region's website for public access.

Finally, as mentioned above, the authorizations have been "incorporated" into the General Permit as Attachment I (See Response 227) and EPA notes that the basis for all requirements are included in the General Permit.

Comment 218

It is also unclear how the proposed Permit helps EPA address the backlog of expired permits in Region I. EPA acknowledges the backlog of expired individual permits that will be eligible for coverage under the Permit.[43] While in the short-term that backlog will artificially disappear, five years from now EPA will find itself simultaneously reevaluating effluent limitations for 44 facilities, rather than on the staggered, individual basis currently in place (which EPA has already demonstrated its inability to keep up with). EPA does not acknowledge this requirement, nor does the agency explain how, given that it is already experiencing a backlog of 27 expired permits under the staggered reevaluation system, it will accomplish this. Without providing an explanation for how it intends to accomplish its existing regulatory and administrative responsibilities, EPA undermines its conclusion that medium wastewater treatment facilities will be more efficiently regulated under a general permit.

43 Fact Sheet at 4.

Response 218

See General Response to Comments on Benefits and Appropriateness of General Permit Approach.

Comment 219

VI. The General Permit hinders public participation in the permitting process.

By aggregating the renewal of 44 facilities' permits together, the Permit creates a significant burden for interested parties to review and comment on the terms of the permit as it relates to individual facilities. In its primary statement of the CWA's approach and philosophy, Congress "identified public participation rights as a critical means of advancing the goals of the Clean Water Act."[44] "EPA has acknowledged that technical issues related to the issuance of NPDES permits should be decided in the most open, accessible forum possible."[45] The regulations governing general permits are even more explicit in the clarity required to allow for informed public participation: "The general permit must clearly identify the applicable conditions for each category or subcategory of dischargers or treatment works treating domestic sewage covered by the permit."[46] As explained below, the Permit itself does not clearly identify applicable conditions, and concerned citizens must cross-reference additional documents to try to understand applicable limitations. Given the volume of sewage discharge covered under the proposed Permit, and the potential environmental and public health risks those discharges pose, EPA should be making public participation easier, not harder as this Permit will do.

44 Env'tl Defense Center v. U.S. Envt'l Prot. Agency, 344 F.3d 832, 856 (9th Cir. 2003) (citing 33 U.S.C. § 1251(e) and Costle v. Pacific Legal Found., 445 U.S. 198, 216 (1980)).
45 Id. at 856-57 (quoting 44 Fed. Reg. 32,854, 32,885 (June 7, 1979)) (internal quotations omitted).
46 40 C.F.R. 122.28(a)(4)(i).

As used here, the general permit model creates confusion for the public that runs counter to the CWA's goals of protecting public participation rights and providing clarity regarding applicable permit conditions, especially when compared to the current individual permits. It is difficult to parse the actual terms of the Permit because it implicates provisions from past permits by reference, often not including the actual text of the requirement in the document itself.[47] The use of Authorization Letters containing substantive provisions of the Permit adds to this confusion. It is troubling that EPA only posted the Draft Authorization Letters on their website more than mid-way through the comment period and only after Mass Rivers requested copies of all of them to distribute to its member organizations.[48] Why weren't they posted along with the proposed Permit so the public could have the full comment period to review them? EPA claims that the letters were "available for review at any time upon request" but how was the public even supposed to know the letters existed, not to mention the corresponding Reasonable Potential Analysis and Limits Calculations? This lack of transparency raises concerns about the availability of information if EPA moves forward with the Permit.

47 See, e.g., Permit at 8–9 ("Uxbridge Sewer Commission shall notify EPA the date it expects to exceed or does exceed its annual rolling average effluent flow limit of 1.25 MGD and the limits referenced in Part 4.1 of the Fact Sheet (from Part I.A.1.b of their 2013 individual permit) will become effective after that time under this General Permit on the date indicated on written notice from EPA."); Permit at 9 ("For Erving Center WWTP 2, the unique BOD5 and TSS limits are carried forward from the 2021 individual permit based upon the unique industrial component of this facility."), ("The CBOD5 limitations apply in lieu of BOD5 limitations if already included in a facility's existing permit."); Permit at 28 ("If the Permittee has already conducted [nitrogen discharge optimization] evaluation under their existing permit, [the general Permit's] requirement does not apply . . .").

48 This was in addition to EPA failing to notify many environmental groups of the issuance of the draft Permit for comment, despite having participated in prior permitting procedures for the individual permits and having explicitly requested to be included as an interested party on the notification list of future permits.

The proposed Permit further hinders public participation by omitting individual Fact Sheets for the eligible facilities. Environmental organizations like Mass Rivers' members depend on these individual fact sheets to track changes made to individual facilities in their region. Fact sheets also provide information about future plans at the facility and summarize Discharge Monitoring Reports. Providing only one fact sheet for the 44 qualifying facilities prevents regional groups from fully, expeditiously and accurately understanding analyses for their individual facilities.

The use of a general permit also results in a comment period of the length usually provided for one facility applying to dozens of facilities. For an organization like Mass Rivers, which has interests and member organizations in every watershed of the state, this imposes a significant resource strain. Conducting simultaneous permit reviews for multiple facilities within the same region drastically increases the burden on affected communities, individual citizens, environmental organizations, and municipalities to evaluate multiple facilities concurrently. Some regions will have as many as 13 facilities to evaluate and comment on simultaneously. The increased confusion and barriers to public evaluation and participation will reduce the likelihood of EPA receiving informed comments from the public, and thus undermine the CWA's goal of robust public participation in permitting actions.

49 Revisions to the Permit Appeals Process To Restore the Organization and Function of the Environmental Appeals Board, 86 Fed. Reg. 31,172, 31,174 (June 11, 2021).
50 40 C.F.R. § 124.19.
51 40 C.F.R. § 124.19(o). Section 124.19(o) only applies to EPA-issued permits. The concurrent DEP permit has its own appeals process, and thus there is also a question of what happens if the permit is appealed to DEP and stayed? Will this stay the permit for all 44 facilities? See 301 C.M.R. 1.00 for the basic DEP appeals process. These appeals take additional time and resources, as they may require mediation.
52 86 Fed. Reg. at 31,174.
53 Id. at 31,175
54 Id. at 31,174.

Response 219

EPA agrees that public participation is an integral aspect of NPDES permitting and implementation of the CWA. EPA recognizes that General Permits are inherently more complex than an individual permit given that they are designed to cover multiple facilities. To account for this complexity, EPA attempted to facilitate public participation in a number of ways. First, EPA incorporated all provisions into the General Permit, specifying in certain cases where a provision applies to only a subcategory of dischargers (*e.g.*, pretreatment requirements) or is based on a facility's current individual permit (*e.g.*, the examples listed in footnote 47 of the comment). Second, rather than merely providing the methodology for establishing effluent limits (as is standard practice in many other general permits), EPA identified the entire universe of eligible dischargers and calculated all necessary effluent limits in advance of the public comment period (summarized in Attachment E). Third, EPA posted all information necessary to understand the General Permit on our website from the beginning of the comment period (*i.e.*, General Permit, Attachment E, and current individual permits). Fourth, EPA developed facility-specific "Draft Authorizations" that provide an even simpler way to understand exactly how each provision and limitation would apply to each facility. These "Draft Authorizations" as well as "Discharge Monitoring Report Data" (summarizing available data for each discharger) and "Reasonable Potential Analysis and Limits Calculations" (presenting calculations for deriving limits for each discharger) were available in the administrative

record throughout the public comment period and once EPA received requests for some of these documents, they were all promptly posted on our website to facilitate public access.

As with all NPDES permits, the documents posted on our website for public access do not constitute the entire administrative record used in the development of a permit. Rather, 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) To make it clear that additional information may be requested, Part 8 of the Fact Sheet notes that "any documents included in the Administrative Record on which this Draft General Permit is based may be accessed by contacting [EPA]." Further, the Notice of Availability posted in the Federal Register stated that "any electronically available documents that are part of the administrative record can be requested from the EPA contact above."

Regarding footnote 48 of the comment, EPA does maintain "area lists" that we use to notify interested parties of public notices within certain geographic areas, consistent with 40 CFR § 124.10(c)(1)(ix)(B). For all permits that we issue in Massachusetts (including this Medium WWTF General Permit), we have an "area list" that includes interested parties throughout the state of Massachusetts. We have been using this "area list" for many years and continually update it based on individual requests which often occur through past permit proceedings. For example, during the comment period for this General Permit, we received such a request from this commenter and updated our list to include many interested parties from their member organizations.

The comment suggests that "individual Fact Sheets" for eligible facilities are necessary to (1) track changes, (2) provide information about future plans and (3) summarize discharge monitoring reports (DMRs). Regarding tracking changes, EPA notes that Attachment E of the General Permit provides a summary of changes to permit limits for all 44 WWTFs. Regarding future plans, EPA did include some such details in the General Permit Fact Sheet, such as plans to evaluate future ambient phosphorus monitoring data, implementation of compliance schedules, etc. While it is not clear what specific type of "future plans" are referred to in the comment, EPA also notes that the regulatory definition of a fact sheet above does not require "future plans" to be included. Regarding DMRs, EPA did prepare DMR summaries similar to what would be included in an individual permit fact sheet and made them available to the public during the comment period.

Regarding the comment period requiring review of multiple WWTFs concurrently, see General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

Comment 220

VII. Bypassing the Environmental Appeals Board is inefficient and burdensome.

According to EPA, the EAB appeals process not only "provides a meaningful opportunity for affected communities to have their concerns addressed," but also "expedites the process of

obtaining a final, valid permit by facilitating a process that is faster and more certain for the applicant."[49] Appeals for individual NPDES final permit decisions usually are filed with the Environmental Appeals Board ("EAB").[50] General permits, however, are not subject to this appeals process; they can only be challenged by filing an action in court.[51] Shifting to an appeals process in federal court for permit conditions affecting 43 separate facilities impacts all parties involved by forfeiting the specialized knowledge, efficiency and body of precedent created through years of EAB appeals. Much of this efficiency occurs because "permit appeals to the EAB are resolved within a reasonable timeframe," and "without the need for federal court litigation, which generally takes considerably longer."[52] Additionally, the EAB process allows issues to be seen in front of judges with "deep experience in EAB jurisprudence" that "provide important stability for the Board [and] the Agency's administrative jurisprudence."[53]
The financial costs and delays of precluding EAB appeals will create unnecessary burdens for both EPA and other stakeholders, including community members, municipalities and non-profit organizations, seeking to protect their watersheds and ensure the permit complies with the law. "Over the years the EAB has continually refined and altered its process to reduce the amount of time it takes to effectively resolve an appeal and to make it easier for people to use the appeals process[.]"[54] This shift into federal courts is a shift away from a process familiar to public interest watershed protection groups in Massachusetts and a stable set of jurisprudence for the relevant permits. Thus, the significant amount of precedent and experience with the appeals process developed between EAB, permitting authorities and environmental groups in this region will be lost if EPA adopts this Permit.

49 Revisions to the Permit Appeals Process To Restore the Organization and Function of the Environmental Appeals Board, 86 Fed. Reg. 31,172, 31,174 (June 11, 2021).
50 40 C.F.R. § 124.19.
51 40 C.F.R. § 124.19(o). Section 124.19(o) only applies to EPA-issued permits. The concurrent DEP permit has its own appeals process, and thus there is also a question of what happens if the permit is appealed to DEP and stayed? Will this stay the permit for all 44 facilities? See 301 C.M.R. 1.00 for the basic DEP appeals process. These appeals take additional time and resources, as they may require mediation.
52 86 Fed. Reg. at 31,174.
53 Id. at 31,175
54 Id. at 31,174.

Response 220

As mentioned on page 48 of the Fact Sheet, general permits may not be appealed to the Environmental Appeals Board. Rather, EPA regulations at 40 CFR § 124.19(o) provide that general permits may be appealed to the federal courts:

(o) General NPDES permits.

(1) Persons affected by an NPDES general permit may not file a petition under this section or otherwise challenge the conditions of a general permit in further Agency proceedings. Instead, they may do either of the following:

(i) Challenge the general permit by filing an action in court; or

(ii) Apply for an individual NPDES permit under § 122.21 as authorized in § 122.28 of this chapter and may then petition the Environmental Appeals Board to review the individual permit as provided by this section.

(2) As provided in § 122.28(b)(3) of this chapter, any interested person may also petition the Director to require an individual NPDES permit for any discharger eligible for authorization to discharge under an NPDES general permit.

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

Comment 221

VIII. The Permit relaxes requirements, violating anti-backsliding regulations.

Congress's primary goal in enacting the CWA was the complete elimination of pollutant discharges.[55] To make reasonable progress toward this ambitious goal, the CWA instructs EPA to establish TBELs that become progressively more stringent.[56] EPA implemented anti-backsliding regulations to ensure permittees meet "the most stringent limits required by the statute," thereby safeguarding continued progress towards the total elimination of pollutant discharges into the nation's waters.[57]

55 Nat. Res. Def. Council, Inc, v. U.S. E.P.A., 859 F.2d 156, 198 (D.C. Cir. 1988).
56 Id. at 198–99.
57 Id. at 199.

When reissuing permits, the final effluent limitations must include an assessment of whether the revised criteria are consistent with the CWA requirements and NPDES' anti-backsliding regulations.[58] EPA Permit Writers' Manual specifies that a permit writer "should clearly explain in the fact sheet for the permit how the final limitations in the permit were determined and how those limitations meet both technology and water quality standards (including antidegradation) and, where appropriate, how an anti-backsliding analysis was applied to the final effluent limitations."[59]

58 EPA Permit Writer's Manual 2010, at 7-1.
59 Id. at 7-1.

The Fact Sheet for the proposed Permit does not achieve this level of explanation. Instead of explaining how the limitations meet applicable standards, it uses general, catchall language that depends on each facility's current individual permit without acknowledging that 27 of these permits are expired.[60] This is additionally concerning considering the size and individual and cumulative environmental impact of these facilities. For example, when answering stakeholder questions regarding excluded facilities, EPA explained the exclusion of Somerset because the analysis to support a potential nitrogen limit and facility upgrade was too resource intensive to be efficiently included in the Permit. When taken in the context of a Permit that rolls over several existing limitations (some of which are contained in permits that have been expired for years), this explanation calls into question whether a similar exclusion could be the case for additional facilities. To the extent that the public may want to understand or comment on these issues, the Fact Sheet provides little guidance. And, considering the size and scale of the Permit, it is even more important to ensure that permit conditions are effective at maintaining and improving the quality of Massachusetts' waters.

60 See Fact Sheet at 12–13 ("All required limitations in the draft General Permit are at least as stringent as limitations included in each facility's current individual permit unless specific conditions exist to justify one of the exceptions listed in accordance with CWA §§ 402(o) and 303(d)(4)… Therefore, the draft General Permit complies with the anti-backsliding requirements of the CWA.").

This Permit also includes significantly relaxed monitoring requirements that violate anti-backsliding regulations. The CWA requires NPDES permittees "to monitor its discharges into the navigable waters of the United States in a manner sufficient to determine whether it is in compliance with the relevant NPDES permit."[61] Congress adopted the self-monitoring mechanisms in the NPDES program to promote straightforward enforcement of the CWA, and monitoring requirements are a crucial component of ensuring compliance with TBELs and WQBELs.[62] Anti-backsliding regulations restrict the relaxation of both "standards" and "conditions" in existing permits, and EPA instructs permit writers that backsliding regulations address "all types of backsliding…including from conditions such as monitoring requirements that are not effluent limitations."[63]

61 Nat. Res. Def. Council v. County of Los Angeles, 725 F.3d 1194, 1207 (9th Cir. 2013) (citing 33 U.S.C. § 1342(a) (2); 40 C.F.R. § 122.44(i)(1)).
62 See Nat. Res. Def. Council v. U.S. E.P.A, 808 F.3d 556, 581 (2d Cir. 2015) (quoting Nat. Res. Def. Council v. Cty of L.A., 725 F.3d 1194, 1208 (9th Cir. 2013). See also Food & Water Watch v. U.S. E.P.A., 20 F.4th 506, 515 (9th Cir. 2021) (explaining how, while EPA has discretion under the regulatory framework to craft the monitoring requirements for each NPDES permit, this discretion is "not unlimited" and monitoring must be "sufficient to yield [representative] data.").
63 Permit Writers' Manual, Section 7.2.2, at 7-4 (emphasis added). See also 40 C.F.R. § 122.44(l)(1).

However, in this Permit, EPA significantly reduces monitoring requirements for many facilities.[64] For example, EPA has reduced nitrogen monitoring frequency by 77% at the Scituate facility. The Permit also decreases nitrogen monitoring by 92% for the Fairhaven facility, and 77% for the Lenox facility, and 50% for the Dartmouth facility among others. The Amesbury facility's chlorine monitoring is reduced by 76%. The Permit reduces the BOD_5 monitoring by 92% in Greenfield and 50% in Bridgewater. At the Lenox facility, aluminum monitoring requirements were eliminated. These types of reductions are seen across the majority of facilities for at least one effluent characteristic. Additionally, there are nine facilities at which orthophosphorus or orthophosphate monitoring requirement was completely eliminated, 15 at which the ammonia nitrogen monitoring requirement was eliminated for at least part of the year, and two for which the dissolved oxygen monitoring is eliminated.

64 See generally Attachment A.

Without robust monitoring requirements, it is difficult to see how individuals or EPA will be able to establish that facilities are indeed most appropriately permitted under this Permit or if they are even complying with effluent limitations. Specifically, once a general permit has been issued, the basis for a permitting agency to require an individual permit instead of coverage under a general permit includes that the "discharge(s) is a significant contributor of pollutants." 40 C.F.R. § 122.28(b)(3)(G). As previously discussed, monitoring requirements are integral to EPA or the public being able to make that determination.

(EPA note: The tables presented in Attachment A of this comment letter were reviewed by EPA but are not reproduced in this document. They are available upon request.)

Response 221

The comment suggests that the General Permit Fact Sheet did not adequately explain how permit limits were derived, especially limits that were carried forward from the existing

individual permits. EPA disagrees and asserts that the Fact Sheet provided the necessary rationale for the effluent limits, presenting where appropriate the water quality criteria and methodologies for how each pollutant is evaluated. As 40 CFR § 124.8(a) states, "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) It is unclear why the commenter objects to "catchall language" related to anti-backsliding that applies to a variety of limits that are in the existing individual permits. It is also unclear why the commenter highlights that 27 of these individual permits are expired. In any case, EPA conducted a site-specific analysis for each pollutant discussed in the Fact Sheet (*e.g.*, Fact Sheet Appendix A) for each of these WWTFs and either: (1) established new or more stringent limits (summarized in General permit Attachment E) if necessary to meet WQS or (2) carried forward the existing limit if it was determined that a more stringent limit was not necessary to continue to be protective of WQS. The "catchall language" described in the comment is the rationale for the latter determination.

If the commenter is implying that the "catchall language" regarding anti-backsliding was used to justify backsliding of permit limits without any further justification, EPA clarifies that this is not the case. Rather, there was no further discussion in the Fact Sheet regarding backsliding of any specific permit limits because no limits for any of the WWTFs were becoming less stringent (*i.e.*, backsliding) in the Draft General Permit compared to the limits in the respective individual permits.

Regarding the commenter's reference to Somerset, EPA notes that the carrying forward of permit limits based on anti-backsliding regulations is quite distinct from the justification required to establish a new limit for total nitrogen at the Somerset WWTF. Therefore, EPA maintains that is it appropriate to exclude Somerset from this issuance of the General Permit while not excluding the other eligible facilities. See Response 231.

The comment also objects to reductions in monitoring frequency on the grounds of anti-backsliding regulation 40 CFR 122.44(l)(1). For EPA's rationale regarding monitoring frequencies, including with respect to anti-backsliding regulations, see Response 275.

Comment 222

IX. The Permit Raises Questions Regarding Current and Future TMDL Compliance.

The use of a general permit for these facilities makes it more difficult to ensure that WQS are not violated. Most significantly, this proposed Permit separates facilities that have already been permitted with TMDL compliance in mind, and creates significant questions about how facilities will comply in the longer term with current or new TMDLs. The weakened monitoring requirements in the Permit also make it more difficult to comply with TMDLs because it significantly reduces the amount of data that could be used to determine appropriate wasteload allocations. When and if a new TMDL is promulgated, how will the Permit be revised to reflect it? This also raises questions of how, in light of potential future changes to TMDLs, EPA will ensure compliance when certain facilities in a watershed are being renewed through the general permit and others are not.

Response 222

As mentioned in General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach, EPA asserts that TMDLs may be implemented through this General Permit perhaps even more effectively that through individual permits.

Regarding monitoring frequencies, See Response 275.

Comment 223

X. Conclusion: EPA should not issue the General Permit.

The proposed Permit is a step backwards for water quality protection in Massachusetts. Other than EPA's delay in renewing individual permits for the eligible facilities, those permits have functioned well for decades to control pollutant discharges, require necessary plant upgrades to meet water quality standards, allow meaningful public participation, and implement TMDLs. EPA's own regulations send a clear signal that general permits were not designed to be used for dischargers of this size, with such varied effluent limitations and receiving waters. The use of a general permit here is bad policy, and EPA fails to explain what substantial benefits the Permit will provide.

We *strongly urge EPA to reconsider this ill-advised major shift in how medium-sized wastewater treatment plants are regulated in Massachusetts, and focus its resources instead on the important work of updating expired permits.* Not only is the Permit unsupported by the plain text of the controlling regulations, but EPA also fails to demonstrate why the 44 eligible facilities would be more appropriately controlled and efficiently regulated by a general permit. To the contrary, efficiencies for both EPA and the public are lost through the proposed Permit, especially in five years when all 44 facilities will simultaneously be scheduled for renewal. Indeed, if EPA's claims of what it has done to support the issuance of the proposed Permit are to be believed, then most, if not all, of the analysis to support renewals of expired permits should already be complete.

We sincerely appreciate your attention to this important matter and are available to further discuss our concerns and recommendations at your request.

Response 223

See Responses 212 through 222.

HH. Comments from Alison Field-Juma, Executive Director, OARS, on April 21, 2022:

Comment 224

Thank you for the opportunity to submit the following comments on the above-referenced draft 5-year General Permit covering Medium Wastewater Treatment Facilities (WWTFs) in Massachusetts. This permit, which applies to 44 medium-size WWTFs, would apply to three municipal facilities discharging to the Assabet River (Marlborough Westerly, Hudson and Maynard) and one discharging to the Concord River (Town of Concord). The Marlborough Westerly facility was excluded in this first draft general permit due to being under appeal, now resolved.

We have reviewed the draft General Permit, the permit's Fact Sheet, the draft Authorization Letters, and the underlying permits for the Assabet River facilities from MassDEP and the EPA—four different highly detailed documents for each of three different facilities from each agency—which will be the focus of our comments. We share the concerns raised by Mass Rivers Alliance in its comments and strongly support the comments they are submitting. We will use the opportunity of this letter to provide detailed assessment of the issues in one of our three watersheds. We are grateful to the EPA and MassDEP staff who answered our questions as best they could, given the rules of the comment period, as we tried to understand the purpose and process entailed in this new approach to permitting.

Below we provide some background on our organization and the Assabet River and the downstream Concord River. We then provide a detailed discussion of the draft permit's provisions, and those of the draft Authorization Letters provided to the permittees, whose contents we were not aware of until well into the comment period.

OARS is a non-profit watershed organization established in 1986 to protect, preserve and enhance the natural and recreational features of the Assabet River, its tributaries and watershed. In 2011 the Sudbury and Concord Rivers were added to our mission.

OARS has some 900 members and has operated a successful quality-controlled, water quality monitoring program with an EPA and MassDEP-approved QAPP since 2000, a biomass monitoring program, a large-scale volunteer annual river clean-up, and a variety of educational workshops, canoe trips and other activities designed to foster enjoyment and good stewardship of the rivers. OARS provides detailed annual Water Quality Reports to the local municipalities, the public and regulators (see: www.oars3rivers.org/river/waterquality). OARS' Water Quality Monitoring Program Final Report: 2018-19 Field Season is available at this site, and data for 2020 and 2021have been provided to EPA Region 1 and MassDEP through EPA's data portal. OARS provides data used by MassDEP in developing their Integrated List of Waters under Sections 303(d), 314 and 305(b) of the Clean Water Act, by Region 1, by municipalities and by scientists and the public. It is the Clean Water Act that has made possible all the progress seen thus far. Within that framework, the municipalities, non-profits, citizens and state and federal government have all invested a tremendous amount of effort and money to get us to this point today, and all these stakeholders need to be able to continue to fully participate as provide under the Act. The Assabet and Concord Rivers are part of the federally-designated Sudbury-Assabet-Concord Wild and Scenic River.

We understand that the main goal of this general permit approach is to reduce the backlog of permitting that has resulted in substantial delays in permit reissuance. We share this concern: for the facilities on the Assabet River, the five-year permits have just now been renewed after 17 years. As noted below, the TMDL facilities are under a TMDL for phosphorus that requires adaptive management—that cannot be effectively done if so many years elapse between reissuance. We are concerned, however, that this proposed general permit has such serious flaws that it fails to comply with the TMDL and fails to protect the water quality of the Assabet and Concord Rivers. Additionally, EPA simply does not have the regulatory authority to issue this kind of general permit.

Response 224

See General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

Regarding TMDLs and adaptive management, see Response 233.

Comment 225

The Assabet and Concord Rivers

The Assabet River, once dubbed "the Cesspool of Massachusetts," is now enjoyed by boaters, anglers, hikers and birdwatchers, and hosts many town conservation areas and the Assabet River National Wildlife Refuge on its banks. Yet major sections of the Assabet still suffer each summer and early fall from excessive nuisance aquatic plant growth that degrades recreation, aesthetics and wildlife habitat.

The Assabet River originates in Westborough and flows north through Marlborough, Northborough, Hudson, Stow, Maynard and Acton to its confluence with the Sudbury River in Concord. The Assabet contributes about half the flow of the Concord River, which then continues northward for 15.5 miles before emptying into the Merrimack River in Lowell. The Merrimack River discharges to the Atlantic Ocean in Newburyport, Mass. The Assabet River is classified as Class B – Warm Water, and the Concord River is classified as Class B – Warm Water, Treated Water Supply. The Concord River is the sole public drinking water source of the Town of Billerica.

The Concord River has had a notable history of recreational use, particularly fishing, swimming and boating, stretching back several centuries. Despite water quality impairments, Recreation, Scenery and Ecology were recognized as Outstandingly Remarkable Values of sections of the Assabet, Sudbury and Concord Rivers by Congress when these sections, collectively, were designated a Wild and Scenic River in 1999. RiverFest, an annual celebration of the three rivers, holds some 40 river-based events each year, from canoe trips to fishing classes. As the rivers' popularity as a recreational resource has grown, area residents have become increasingly active in river stewardship.

The Massachusetts Year 2018-20 Integrated List of Waters lists the Assabet and Concord Rivers under Category 5 (Waters Requiring a TMDL). Segments of the Assabet remain impaired for "Nutrient/Eutrophication Biological Indicators," "Algae," and "Dissolved Oxygen" (a result of eutrophication and essential for aquatic life). Due to TMDL-induced reductions in Total Phosphorus discharges from Assabet and Concord River point sources thus far, the Concord River was delisted in 2016 as impaired for Total Phosphorus—a major achievement. However, the Assabet River does not meet its designated "Class B – Warm Water" water quality standard. In 2004 MassDEP published the Total Maximum Daily Load (TMDL) study for phosphorus for the Assabet River.[1] In 2005, EPA and MassDEP adopted a 2-step "adaptive management" approach to meeting the terms of the TMDL in which the two agencies were to jointly issue NPDES discharge permits to all four municipal wastewater treatment plants (WWTPs) discharging to the Assabet River with phosphorus limits designed to be the first step toward meeting water quality standards. The second step was to be the next 5-year permit, to be issued in 2010, which was to complete the process and contain discharge limits that would

enable the Assabet River to meet its water quality standard. In this period a study of phosphorus contributions by sediment behind the dams by the ACOE was completed, OARS continued monitoring water quality, and OARS and DEP monitored plant biomass and duckweed, respectively.

Although the second round of permits was not completed until 17 after the first-round permits were issued (a delay of concern to OARS and the agencies), the reissued permits used the data from the dam study and OARS' monitoring to understand better how the river responded to phosphorus discharges from the facilities under with the first-round NPDES permits. The second round of permits (2019-22) were based on an analysis of all four facilities discharging to the river, how each influenced the receiving waters of all downstream facilities, and how a reduced 7Q10 affected the dilution factor all the way down the river, starting with a dilution factor of zero at the Westborough facility at the headwaters. As a result the four final second-round permits included more stringent winter Total Phosphorus discharge limitations than the 2005 permits and added important monitoring provisions regarding DEHP and PFAS.[2] The DEHP monitoring was added only to the Town of Hudson permit and, on the Concord River to the Town of Concord's permit, due to the specific characteristics of their influent streams, illustrating the presence of significant differences between the four medium-sized facilities covered in this permit in the SuAsCo watershed.

This is the essence of "adaptive management" – making periodic, highly specific changes to NPDES permits based on the conditions of this particular river and its permittees. But no one involved is claiming that this reduction in the winter TP limit will solve the Assabet River's eutrophication problem. According to the TMDL (p. 26), "a substantial reduction in total biomass of at least 50% from July 1999 values is considered a minimum target for achieving designated uses." This has not yet been achieved; so the adaptive management approach required by the TMDL is still in force.

[1] Assabet River Total Maximum Daily Load for Phosphorus, Report No: MA82B-01-2004-01, 2004. See: https://www.mass.gov/doc/final-nutrient-tmdl-report-for-the-assabet-river/download

[2] The 2005 Phase 1 NPDES permit limits for phosphorus were 0.1 mg/L Total Phosphorus in the growing season and 1.0 mg/L TP in the winter. The Phase 2 (2019-22) permits contain more stringent winter limits of 0.2 mg/L average monthly TP.

Response 225

EPA acknowledges this comment and the background information provided specific to these eligible dischargers (*i.e.*, Hudson, Maynard and Concord).

Regarding adaptive management, EPA asserts that the "essence" of adaptive management defined in the comment is implemented routinely in both individual and general NPDES permits. In the case of this General Permit, EPA is able to make more frequent (each permit reissuance), highly specific changes to this General Permit based on a site-specific analysis of the condition of each receiving water and the characterization of each discharge, thus allowing for a more tailored implementation of an adaptive management approach than compared to less frequent issuance of an individual permit.

Comment 226

Regulatory Coverage Requirements. This draft General Permit, which contains a variety of discharge limits that are tailored differently for many of the medium-size WWTFs in Massachusetts it seeks to cover, and which rigidly imposes the same monitoring requirements on all included facilities despite the fact that many require significantly dissimilar monitoring requirements, cannot be issued because it fails to meet all the regulatory "coverage" requirements in in 40 CFR 122.28(a)(2) for a permissible general permit. In other words, this Draft Permit cannot be issued because doing so would exceed EPA's regulatory authority. That portion of the EPA's General Permits regulation states as follows:

> **(2) Sources.** The general permit may be written to regulate one or more categories or subcategories of discharges or sludge use or disposal practices or facilities, within the area described in paragraph (a)(1) of this section, where the sources within a covered subcategory of discharges are either:
>
> **(i)** Storm water point sources; or
>
> **(ii)** One or more categories or subcategories of point sources other than storm water point sources, or one or more categories or subcategories of "treatment works treating domestic sewage", if the sources or "treatment works treating domestic sewage" within each category or subcategory **all**:
>
> **(A)** Involve the same or substantially similar types of operations;
>
> **(B)** Discharge the same types of wastes or engage in the same types of sludge use or disposal practices;
>
> **(C)** Require the same effluent limitations, operating conditions, or standards for sewage sludge use or disposal;
>
> **(D)** Require the same or similar monitoring; and
>
> **(E)** In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits. (Emphasis added)

The Fact Sheet summary of this regulation (at p. 3 of the Fact Sheet) leaves out the critically important word "all."

When read properly with the word "all" given the effect it requires, the plain meaning of this regulation is that EPA can craft a category of WWTFs for a general permit only if all of the WWTFs included meet all five of these requirements (A, B, C, D, and E).

This means, inter alia, that all of the WWTFs covered by a general permit must "require the same effluent limitations." (Emphasis added.) Those that require "similar" effluent limitations cannot be included. Here, "similar" is not good enough. It is clear that the word "same" here cannot be reasonably interpreted to mean "same or similar," because the very next subsection – subsection D – of this regulations uses words "same or similar." This demonstrates that in drafting this regulation EPA intended that there be a difference between the word "same" and the words "same or similar."

This regulatory language quoted above also means, inter alia, that, all of the WWTFs covered by a general permit must "require the same or similar monitoring." Those that require significantly dissimilar monitoring requirements cannot be included.

These two requirements present a huge problem for this draft General Permit for two reasons. First, many of the WWTFs this draft seeks to cover require different, specially tailored effluent limits that are not the "same." The draft even highlights this by including many of these differing limits right in Appendix E of the permit (and in various draft Authorizations) as if this were permissible. It isn't. Second, at least some of the WWTFs included in the draft require significantly dissimilar monitoring requirements that those mandated for all facilities in the draft General Permit.

For examples of these violations of the above-quoted regulation, let's examine the two WWTFs included in the draft General Permit that discharge to the Assabet River – the ones in Hudson and Maynard.

The first thing to know about these two facilities is that they – along with the Marlborough Westerly[3] and Westborough WWTFs – are subject to the Assabet River TMDL for Total Phosphorus ("TP") that was approved by EPA Region 1 in 2004. To this day that TMDL and the adaptive management approach it triggered are still shaping the individual federal and state discharge permits periodically issued to these facilities, thanks to the longstanding cooperation and coordination of federal and state regulators, permittees, and stakeholders. As EPA well knows, this Class B river still does not meet its Water Quality Standards (e.g., it is not swimmable and continues to exhibit excessive biomass). But following the TMDL's adaptive management approach, up until now all parties involved have been working together in good faith to guide the development of successive NPDES permits that are designed to drive the river closer towards the goal of achieving its Water Quality Standards. Now, however, this draft General Permit would upend that cooperative process by unilaterally – without first consulting the other TMDL stakeholders – moving the Hudson and Maynard WWTFs into this General Permit.

However, EPA's own General Permit regulation, quoted above, prevents the termination of a nearly 20-year collaborative river remediation process that began with the cooperative development of the Assabet's TMDL.

First, as with many of the facilities that EPA seeks to include in this General Permit, the Hudson and Maynard facilities currently have – and according to EPA Region 1 "require" – different discharge limits for Total Phosphorus ("TP"). The Hudson NPDES permit was last renewed on 3/1/19, and the Maynard NPDES permit was last renewed on 7/2/19. The Fact Sheets for both of these permits go into some detail to explain why, for both facilities, EPA had concluded that it was necessary to maintain the growing season (April 1 – Oct. 31) TP discharge limit at 0.1 mg/L and to reduce the TP discharge limits for the winter months (Nov. 1 – March 31) from 1.0 mg/L to 0.2 mg/L. According to the Fact Sheet at 23, the water quality sampling that Region 1 conducted during low flow conditions before issuing these 2019 permits revealed that "the Assabet River is still severely impaired including, elevated concentrations of phosphorus with the highest concentrations occurring near the bottom, large quantities of plant biomass, and frequent occurrences of supersaturated dissolved oxygen levels with associated pH criteria violations." Furthermore, as EPA also stated in the Fact Sheet, "The MassDEP also surveyed the river during the summer of 2012 to determine the extent of Duckweed growth in the impoundments. The survey confirmed levels of Duckweed in the Assabet River impoundments remain excessive. Consequently, the receiving water continues to exceed water quality standards."

In explaining why the TP effluent limit for the winter months was being reduced from 1.0 to 0.2 mg/L, the Fact Sheet at states: "An average monthly total phosphorus limit of 0.2 mg/L for November through March is included in the Draft Permit. This is consistent with the technology based Highest and Best Practical Treatment requirement in the MA SWQS at 314 CMR 4.05(c)15." In other words, given the circumstances, this particular winter limit on the TP concentration of wintertime discharges was deemed to be "required" at the Hudson and Maynard facilities.

There is no doubt that these winter discharge limits required for TP at the Hudson and Maynard facilities are not the "same" as the winter TP discharge limits for many of the facilities in the draft General Permit. This is easily confirmed by examining the draft permit's Appendix E and also by comparing the TP discharge limits contained in the draft Authorizations for each facility the permit seeks to cover.

Therefore, pursuant to EPA's own regulation at 40 CFR 122.28(a)(2)(i), these two WWTFs cannot be included in the General Permit, because the necessary requirement in subsection (2)(i)(C) is not met.

A similar analysis leads to the same conclusion with respect to the TP monitoring requirements currently required in the 2019 NPDES permits for Hudson and Maynard facilities. The EPA regulation at 40 CFR 122.28(a)(2)(i)(D) requires that all the facilities included in a General Permit must "require the same or similar monitoring." With respect to at least the Hudson and Maynard facilities, that is far from the case.

For TP, the draft General Permit proposes to set a rigid monitoring frequency of 2 times per month for all facilities included in the permit. However, when EPA issued NPDES permits to the Hudson and Maynard facilities in 2019 it required TP to be monitored 3 times per week during the growing season (April 1 – Oct. 31). That translates to 13 times per month.
There is no rational way that a monitoring frequency of 2 times per month can be considered to be "similar" to 13 times per month. The monitoring requirements are set to the specific limitations, and to delink these two key features of the permits is problematic. This fine-grained monitoring data is a key element of the "adaptive management' process required by the TMDL. Absent any scientific justification for delinking limitations and monitoring, doing so would be arbitrary and capricious.

That monitoring frequency of 13 times per month during the growing season was based on a solid rationale. As the Fact Sheets at p. 28 for the 2019 Maynard and Hudson NPDES permits state:

> The monitoring requirements included in this permit have been established to yield data representative of the discharges under the authority of §§ 308(a) and 402(a)(2) of the CWA, and consistent with 40 C.F.R. §§ 122.41(j), 122.43(a), 122.44(i) and 122.48. The monitoring requirements included in this permit specify routine sampling and analysis, which will provide ongoing, representative information on the levels of regulated constituents in the wastewater discharge streams. The monitoring program is needed to assess effluent characteristics, evaluate permit compliance, and determine if additional permit conditions are necessary to ensure compliance with technology-based and water quality-based requirements, including WQSs. 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 § 304(a)(1) of the CWA, 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 C.F.R. § 122. Therefore, the monitoring requirements in this permit are included for specific regulatory use in carrying out the CWA.

The initial NPDES permits for the four Assabet River WWTFs issued after the TMDL was finalized in 2004 all contained a monitoring requirement for TP in the growing season of 3 times per week. That frequency has been maintained in the subsequently issued permits for all four WWTPs discharging to the Assabet, and it has proven useful to regulators and OARS alike.

There is one important additional effluent limitation and one monitoring requirement that are present in the current Hudson NPDES EPA and MassDEP permits that are not at all the "same or similar" to the any of effluent limitations or monitoring requirements in the draft General Permit. These are for bis (2-ethylhexyl) phthalate (sometimes referred to as DEHP).[4] This is a compound commonly used as a plasticizer in the production of PVC. It is toxic for human consumption, through direct consumption of water or due to its ability to bioaccumulate in aquatic organisms, which are then consumed by humans. It is also an endocrine disruptor and a carcinogen. In addition to the human health effects, the DEHP detected in the Hudson effluent is particularly relevant due to the US Fish & Wildlife Service study[5] that documented a 33% prevalence of intersex male largemouth bass in samples from the Assabet River in Stow and Maynard, downstream of the Hudson WWTP. Prior to issuing the 2019 permit, EPA and the state identified DEHP in discharges from the Hudson facility. The Fact Sheet for the 2019 permit sets forth the calculation by which EPA determined that "there is reasonable potential for the discharge to cause an exceedance of the Massachusetts bis (2-ethylhexyl) phthalate criteria in the Assabet River." Fact Sheet at p. 12. The Fact Sheet then describes what effluent limitation and monitoring requirements EPA was requiring in the permit to address this problem:

> As a result, EPA has established a water quality-based effluent limit for bis (2-ethylhexyl) phthalate in the draft permit. In this case, EPA had opted to include this **water quality-based effluent limit in the form of narrative limitations** rather that a numeric limitation. The primary reason for EPA's use of its discretion to use narrative limitations in this case is the likelihood that a limited number of industrial sources represent the majority of the source of the facility's effluent bis (2-ethylhexyl) phthalate. Further, it is likely that this source or sources can be identified and that measures can be taken to remove bis (2-ethylhexyl) phthalate from the influent wastewater. This can be best accomplished through the development and implementation of a plan to maximize the removal of bis (2-ethylhexyl) phthalate (as described in part I.H.2 of the Draft Permit), and the development of an industrial pre-treatment program. **In addition, the Draft Permit requires monthly effluent monitoring of bis (2-ethylhexyl) phthalate to monitor the effectiveness of these measures in reducing bis (2-ethylhexyl) phthalate in the facility's discharge.** (Emphasis added.)

The specific requirements included in the 2019 Hudson permit are found as Special Condition H.2 of the permit.

> Within one year of the effective date of the permit, the permittee shall complete an evaluation of alternative methods of operating the existing wastewater treatment plant to maximize the removal of bis (2-ethylhexyl) phthalate, and submit a report to EPA and MassDEP documenting this evaluation and presenting a description of recommended operational changes. The methods to be evaluated include, but are not limited to, identifying and mitigating sources of bis (2-ethylhexyl) phthalate, developing technically-based maximum allowable headworks loadings, maximum allowable industrial loadings and local limits for bis (2-ethylhexyl) phthalate, operational changes designed to optimize bis (2-ethylhexyl) phthalate treatment, septage receiving policies and procedures, and side stream management. The permittee shall implement the recommended operational changes in order to eliminate its bis (2-ethylhexyl) phthalate discharge from the wastewater treatment plant. Following the submittal of the first report, the permittee shall submit an annual report to EPA and MassDEP, by February 1 each year, that summarizes activities related to optimizing bis (2-ethylhexyl) phthalate removal efficiencies, **documents the annual bis (2-ethylhexyl) phthalate discharge concentrations from the wastewater treatment facility, and tracks trends relative to the previous year.** (Emphasis added.)

It is evident from this permit language that operators of the Hudson WWTF were being required to monitor for bis (2-ethylhexyl) phthalate even after they had taken steps to address the problem at its industrial source. To ensure that the problem had been fully mitigated, and was not reoccurring, the operators would need to continue monitoring for bis (2-ethylhexyl) phthalate throughout the years this permit was in effect.

The reason for describing all of these details here is this: Nothing whatsoever appears in the draft General Permit or Hudson's draft Authorization Letter about bis (2-ethylhexyl) phthalate.[6]

This is an important example of an EPA-required effluent limit that is not the "same" as any of the effluent limitations that EPA has included in the draft General Permit. And it is an important example of a monitoring requirement that is not the "same or similar" to any of the monitoring requirements in the draft General Permit.

Conclusions:

- Because the Hudson and Maynard WWTFs require some important effluent limitations that are not the "same" as those set forth in the draft General Permit, pursuant to 40 CRF 122.28(a)(2)(i)(C) these WWTFs cannot be included in this General Permit.
- Separately, because the Hudson and Maynard WWTFs require some important monitoring requirements that are not the "same or similar" as those set forth in the draft General Permit, pursuant to 40 CRF 122.28(a)(2)(i)(D) these WWTFs cannot be included in this General Permit.

[3] We understand that EPA intends to include the Marlborough Westerly facility in the General Permit when this General Permit is first renewed.
[4] The underlying NPDES permit for the Town of Concord also contains DEHP monitoring requirements.
[5] Iwanowicz, L.R., et al., 2015, "Evidence of estrogenic endocrine disruption in smallmouth and largemouth bass inhabiting Northeast U.S. National Wildlife Refuge waters: a reconnaissance study." US Fish and Wildlife Service, On-Refuge Investigation 51410-1261-5N44; Final Report Publication No. CBFO-C13-04.
[6] The same situation applies to the Town of Concord underlying permit and draft Authorization Letter.

Response 226

Regarding the applicability of 40 CFR § 122.28, see General Response to Comments on Benefits and Appropriateness of General Permit Approach and Response 275.

Regarding phosphorus monitoring, the comment quotes language from the individual permit fact sheets for Maynard and Hudson that justifies the monitoring based on the need "to assess effluent characteristics, evaluate permit compliance, and determine if additional permit conditions are necessary to ensure compliance with technology-based and water quality-based requirements, including WQSs." Notably, this justification confirms that the monitoring required in the individual permits is sufficient for these purposes but does not indicate that any less frequent monitoring would not be sufficient. Rather, EPA notes that this same justification also applies to the monitoring frequency in the General Permit. However, based on this comment EPA reevaluated the phosphorus monitoring frequency of 2/month proposed in the Draft General Permit and determined that it would be more appropriate to match the phosphorus monitoring frequency in the warm weather months (*i.e.*, April through October) with the nitrogen monitoring frequency of 1/week. This change is based on the fact that both phosphorus and nitrogen are nutrients with a similar "nature and effect of the discharge" as mentioned in 40 CFR § 122.44(i)(2) and will result in more uniform datasets for both nutrients during the growing season. See Response 275 for more detail on monitoring frequencies.

Further, EPA considers that the adaptive management aspect of the TMDL is more focused on monitoring of the receiving water. The *2004 Assabet River TMDL for Total Phosphorus* at 43 says the following:

> "In order to assess the progress in and success of obtaining the TMDL's water quality goals, a systematic monitoring plan needs to be established. Data necessary to determine whether water quality goals have been met through the implementation of one or a combination of control mechanisms provided for in the TMDL need to be collected and evaluated."

This clearly points to the need for ambient monitoring to track progress in the receiving water. Notably, this type of monitoring is not required in either the individual permits or this General Permit but is collected outside the scope of NPDES permits. Therefore, so long as the effluent monitoring frequency is sufficient to characterize the discharge and track permit compliance then it is consistent with the TMDL.

Regarding TMDL implementation, also see Response 233.

Regarding bis (2-ethylhexyl) phthalate, EPA agrees that the 2019 Hudson permit included a special condition to optimize removal described in the Fact Sheet as a "narrative limitation" and required monitoring to confirm compliance. Therefore, EPA agrees that this narrative limit (including both the monitoring requirement and special condition) should be continued in Hudson's authorization under the General Permit based on footnote 13 of Table 1, which applies to "any existing limit in a facility's current NPDES permit." This does not result in any change to the General Permit but only corrects an error to Hudson's draft authorization.

For Concord, on the other hand, DEHP is not included in the 2019 individual permit as a narrative limit and there is no special condition. Rather, the Fact Sheet indicates this monitoring would be used in the future to determine if a limit is necessary. EPA evaluated the available data and determined that the discharge does not have the reasonable potential to cause or contribute to an excursion of the applicable water quality standard. Therefore, this monitoring requirement is no longer necessary. However, the Final General Permit does require DEHP monitoring (as part of the pollutant scans) in the 5th year of the permit term which will be used in the next permit reissuance to ensure the discharge continues to meet WQS. See Response 272.

Comment 227

Clear identification of applicable conditions. Because of these many tailored effluent limitations and the confusing way they are presented in the draft General Permit and its Appendix E, this draft General Permit also fails to meet the regulatory requirement at 40 CFR 122.28(a)(4)(i) that a general permit "must clearly identify the applicable conditions for each category or subcategory of dischargers or treatment works treating domestic sewage covered by the permit." Note the collective focus here on the category or subcategories in the permit, not the individual facilities covered by a general permit. As we understand it, the individual facility Authorizations (done with individualized Authorization Letters exclusively sent to each Permittee) are not officially part of the permit. Because conditions and, as shown above, entire limitations may be changed without listing in Appendix E of the Permit, stakeholders and permittees must analyze and compare five long and complex documents for each permit: the underlying permit, the pre-existing and the draft Authorization Letter, and the pre-existing and draft General Permit. There is no clear single document or Appendix that lists the limitations and monitoring requirements for each plant, nor more importantly, any changes that may have been made since the last permit.

Response 227

See Response 219 and General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

In response to this and other comments regarding difficulties in understanding the interplay of the Authorization Letters and the General Permit, EPA has created a new attachment, Attachment I – Facility-Specific Permit Terms, which contains all of the Facility-Specific Permit Terms contained in the Draft Authorizations. These terms will also appear in the Authorizations provided to facilities should they come under coverage of the General Permit. By placing these terms in an Attachment to the General Permit, EPA clarifies that these terms are provisions of the General Permit itself (as has been EPA's intent and understanding in issuing the Draft General Permit). Additionally, EPA considers this change will enable a more streamlined review and understanding of the General Permit. EPA notes that these facility-specific permit terms were made available for public review on EPA's website in the form of the Draft Authorizations, and the terms have not changed except where otherwise noted in this Response to Comments.

EPA disagrees that conditions or limitations may be changed apart from the General Permit and asserts that all conditions or limitations are based on provisions in the General Permit. Further, EPA disagrees that you must analyze and compare five long and complex documents to understand the conditions applicable to a facility. Rather, the

specific conditions and limitations applicable to a specific facility may be determined in two ways: (1) using the General Permit and the current individual permit (*i.e.*, 2 documents), or more simply (2) using the Draft Authorization document alone, now compiled as "Attachment I – Facility-Specific Permit Terms" (*i.e.*, 1 document that combines the requirements of the General Permit and details from the current individual permit for simplicity). Therefore, any changes from the previous individual permit may be determined by comparing the "Attachment I – Facility-Specific Permit Terms" document (available for review during the public comment period as the Draft Authorizations) with the previous individual permit (*i.e.*, 2 documents). Going forward, changes from one issuance of the General Permit to the next will be easily determined by comparing this "Attachment I – Facility-Specific Permit Terms" document associated with the 2022 General Permit with the proposed "Attachment I – Facility-Specific Permit Terms" document associated with the next General Permit reissuance (*i.e.*, 2 documents). In both cases, all changes may be determined by comparing only 2 documents. EPA highlights that this type of comparison is no different than comparing a previous and proposed individual permit subject to an individual permit reissuance.

The comment concludes by noting that there is not a "single document" summarizing all limitations and monitoring requirements for each plant, nor more importantly, any changes that may have been made since the last permit. EPA notes that this latter, "more important" document summarizing all changes to permit limits was developed and included with the Draft General Permit (*i.e.*, Attachment E of the Draft General Permit). Additionally, EPA believes the creation of "Attachment I – Facility-Specific Permit Terms" further addresses this concern.

Finally, given that the current individual permits for these facilities were issued over a period of 14 years (dating back to 2008), they included a variety of outdated permit conditions. Summarizing all permit changes related to these outdated conditions would likewise have been unwieldy and not as helpful as providing the Draft Authorizations, now captured in the "Attachment I – Facility-Specific Permit Terms" document.

Going forward, each facility will already be covered by this General Permit so it will be much simpler to summarize any changes to permit limits and/or other permit conditions in the next reissuance of the General Permit. All changes to permit limits will be summarized in a single document similar to Attachment E of this General Permit. All changes to other permit conditions will also be described in the Fact Sheet supporting the next reissuance of the General Permit.

Comment 228

<u>Unreasonable hurdles to public participation.</u> We have identified several major consequences that limit public participation.

a. The situation described in 2, above, presents a major hurdle to stakeholders seeking to understand and make input into the permitting process. For OARS, with three 1-5 mgd facilities on the Assabet River and one on the Concord River, that totals four sets of five documents with some coming from two agencies. In addition, the limitations in the

permit for the Westborough WWTF may have changed in the interim and will need to be factored in.
b. Worse, this must all be done within the General Permit's unitary comment period, virtually ensuring that comments on each of the individual facilities of interest to a stakeholder cannot be prepared with the same level of study and analysis as would happen if the draft permit issuance for these facilities were spread out over the course of several months or years.
c. Essential documents, including the draft Authorization Letter, were not included in the draft permit posted on the website to which the notification was linked. Only upon inquiry were we told of their existence and they were made available from the "administrative record" upon special request. Only the most engaged and informed stakeholders could have followed the process or even known that facilities in their watershed were affected, and would not have had the information they needed to participate meaningfully.
d. Individual NPDES discharge permits contain Fact Sheets that detail the calculations and rationale for the effluent discharge limitations and other conditions contained in the permit. OARS uses these Fact Sheet details to understand and comment on the draft permits. The analysis provided in the new permitting system does not provide this level of individualized detail, thus making it nearly impossible for OARS and similar organizations to craft meaningful comments on individual WWTFs.
e. The elimination of the stakeholders' right to seek review of EPA's permitting decisions via appeal to the Environmental Appeals Board is a major negative consequence of the general permit approach from the perspective of public participation. EAB review – which typically triggers useful and productive negotiations – has resulted in better outcomes a number of times for the Assabet River WWTF permits. Forcing any dispute into the federal court system can only result in major delays in resolution, loss of the opportunity to negotiate an agreement, and higher (and perhaps unattainable) costs of legal counsel to be borne by stakeholders.

Conclusions: This general permit approach transforms what was a relatively straightforward analysis into a highly complex, time-consuming, and expensive process that creates a significant hurdle to public participation in commenting on draft permits and appealing agency decisions.

Response 228

Regarding concurrent reviews, see General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach and Response 227. As with all NPDES permits, prior changes to other permits within the watershed (*e.g.*, Westborough) may be considered in the development of subsequent permits.

Regarding the administrative record and individual fact sheets, see General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach and Response 219.

Regarding the Environmental Appeals Board, see Response 220.

Comment 229

<u>Backsliding and adaptive management.</u> Relaxing the Hudson and Maynard Facilities TP monitoring to only 2 times per month instead of 3 times per week (13 times per month), as this

General Permit would do, is arbitrary and capricious, would violate the TMDL and its monitoring plan, constitutes backsliding in violation of EPA's regulations, and would unnecessarily jeopardize continued progress in the ongoing adaptive management, 20-year effort to mitigate nutrient pollution in the Assabet River. Here are further changes listed by facility that the draft General Permit makes with no rationale given for the reduction in monitoring:

- BOD and TSS monitoring frequency is being reduced from 2/week to 1/week for all facilities.
- pH monitoring frequency is being reduced from multiple times per day to 5/week for Hudson and Maynard.
- Residual Chlorine monitoring frequency is being reduced from 2/day to 5/week for Hudson and Maynard.
- E. coli monitoring frequency is being reduced from 2-3/week to 1/week for all facilities.
- Total Phosphorus winter monitoring frequency is being reduced from 1/week to 2/month.
- Ammonia Nitrogen summer monitoring frequency is being reduced from 2/week to 2/month for Hudson and Maynard. And from 1/week to 2/month in the winter.
- Ammonia Nitrogen is not listed for Concord but monitoring is required in the underlying permit.
- Bis (2-ethylhexyl) phthalate (DEHP) is not listed for Hudson and Concord, but is in their underlying permits.

Further, calculations are made more difficult by different measures of flow being reported and how load is calculated by different plants. Permit page 8, number 4, should be clarified that load should be calculated using monthly average flow not annual rolling average.

Response 229

See Responses 226 and 275.

Regarding the final sentence of this comment, EPA agrees that load should not be calculated using annual rolling average flow. However, such calculations are clarified in other sections of the General Permit (*e.g.*, footnote 11 on page 10) so a change to footnote 4 is not necessary.

Comment 230

<u>Does not achieve the goal of streamlining permitting to reduce backlog</u>. OARS fully supports the need to reduce the permitting backlog at Region 1—the Assabet permits were overdue by 10-12 years. However, the general permit approach is unlikely to solve this problem and may actually exacerbate it. Any appeals are likely to take longer due to being routed into the federal court system with its years-long process when appeals are considered. Also, with 44 permittees covered by a single permit, an appeal by one could reasonably prompt an appeal or petitions to intervene by others in order to have a seat at the litigation table on a permit change that could affect them. Clearly more funding and permit writers are needed by this important section of Region 1 to reduce this backlog.

Response 230

See Responses 220 and General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

Comment 231

Regional Administrator's opinion. We cannot find anywhere in the record that the Regional Administrator, David Cash, has expressed the "opinion" required in 40 CFR 122.28(a)(2)(i)(E) that all the WWTFs included in this General Permit "are more appropriately controlled under this General Permit than under individual permits." We believe that such an opinion, if it exists, would be arbitrary and capricious for at least the Hudson and Maynard facilities. This is because for 20 years EPA, MassDEP, and the stakeholder community have unanimously agreed that these facilities, along with two other WWTFs in Marlborough and Westborough that discharge to the Assabet River, are "more appropriately controlled" pursuant to a TMDL for TP and tailored individual NPDES permits that collectively follow an adaptive management approach that engages the cooperation and input of all stakeholders for these four facilities. While this General Permit has a signature line for the Director of Region 1's Water Division, he is not the relevant "Director" for purposes of 40 CFR 122.28(a)(2)(i)(E). In the Definitions section for all of Part 122 of EPA's NPDES regulations (at 40 CFR 122.2), the definition for "Director" includes the following sentence: "When there is no "approved State program," and there is an EPA administered program, "Director" means the Regional Administrator." Has this matter been presented to the Regional Director? Was he made aware of the TMDL for the Assabet River and that this General Permit would split off two of the four WWTFs covered by the TMDL for a less tailored type of permitting? If he has in fact rendered the required opinion, please provide that opinion along with all of the documentation that was submitted to and received from Mr. Cash (or his predecessor) relevant to this opinion for the Hudson and Maynard WWTFs. We contend that the relevant Regional Administrator – the one who must provide this regulatory opinion – is the one in place at the time a general permit is made final and issued.

Response 231

EPA acknowledges that 40 CFR 122.28(a)(2)(ii)(E) indicates "In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits." In this case, EPA asserts that such an opinion should be made upon issuance of the General Permit after all relevant information and public comments have been reviewed. Additionally, the authority to make this determination has been delegated to the Director of the Water Division, Ken Moraff. Upon review of this information, Mr. Moraff has determined that the eligible facilities listed in Attachment E of the Final General Permit satisfy this condition. See General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach. The basis for this determination is the administrative record for this permit.

Further, as referenced on page 4 of the Fact Sheet, EPA evaluated a broad list of WWTFs that met the eligibility requirements in Part I.C of the General Permit to determine which are "more appropriately controlled and efficiently regulated under a general permit than under individual permits." Through these analyses, EPA identified several WWTFs that were found to be more appropriately controlled through individual permits. For example, the following 4 facilities were determined to be more appropriately covered by an individual permit at this time:

- For Marlborough Westerly, the individual permit was in an active appeal that had the potential to complicate transferring coverage to the General Permit.

- For Somerset, the complex analysis required to support a potential nitrogen limit and the resulting major facility upgrade were determined to be too resource intensive to be efficiently included in the General Permit at this time.
- For Salisbury, the facility is in the process of upgrading its outfall diffuser which will result in changes to permit conditions that are unknown at this time.
- For North Attleborough, a TMDL for phosphorus presents challenges that require extensive coordination with Rhode Island Department of Environmental Management and is too resource intensive to be efficiently included in the General Permit at this time.

The remaining 44 WWTFs (listed in Attachment E of the Draft General Permit) were considered to be more appropriately controlled and efficiently regulated under this General Permit given that they meet the eligibility requirements and did not present any additional challenges or concerns.

Comment 232

Water Quality Certification. MassDEP's draft 401 water quality certification for this General Permit fails to meet Section 401's requirements, with respect to at least the WWTFs in Hudson and Maynard. Therefore, before this draft 401 certification is made final, it must be amended by deleting the Hudson and Maynard WWTFs from its coverage. The scope of a certifying authority's CWA Section 401 certification review and action is limited to assuring that the discharge from a point source into a water of the United States resulting from a federally licensed or permitted activity will comply with "water quality requirements," as defined in the rule. Any such certification that MassDEP makes with respect to any of the four WWTFs on the Assabet River is arbitrary and capricious, and not grounded in data or other evidence, because these facilities are all the subject of a TMDL for TP; the Assabet River continues to exhibit eutrophic conditions and fails to meet its Class B water quality standards due to nutrients (e.g., not swimmable with excessive biomass); and the most recent federal NPDES and state surface water discharge permits for these facilities were designed pursuant to the TMDL's adaptive management approach. It is understood that at some point in the future the agencies will again assess whether the latest incrementally more restrictive discharge limits for TP have resulted in the river achieving Water Quality Standards or whether more restrictive limits or other actions are needed in the next round of permits to these four facilities. There is as yet no evidence or assurance that the effluent limitations in the current Assabet River NPDES permits will produce a river that meets its Water Quality Standards. We all hope it will, but this cannot be assured. EPA's understanding of this uncertainty is confirmed by this statement it made in the Fact Sheets at p. 23 for the 2019 Hudson and Maynard permits:

> EPA recognizes the inherent uncertainty of projecting receiving water impacts given the complexity of receiving water conditions, particularly the extent to which, and pace at which, sediment phosphorus reductions will occur given the previous imposition of growing season limits and new non-growing season limits. EPA has concluded that is reasonable, in light of this uncertainty, to continue to evaluate how the receiving water continues to respond to these new controls over the course of a permitting cycle.

MassDEP, EPA Region 1, and all stakeholders in the Assabet watershed understand that implementing this TMDL is an iterative process with several phases of permitting that has yet to

reach its goal – achieving the Assabet River's Class B water quality standards. There is nothing new in the General Permit that provides any indication whatsoever that discharges from the WWTFs in Hudson and Maynard will be any different than they are now under their 2019 individual permits. The General Permit does not mandate any more restrictive discharge limits for TP at these two facilities. In fact, it makes it harder going forward to do adaptive management assessments of progress in addressing the eutrophic condition of the river, because this General Permit would reduce the monitoring for TP at these facilities from 13 times per month to 2 times per month. For all these reasons, MassDEP's draft 401 certification for this General Permit is not believable, tenable, or legal with respect to at least the Hudson and Maynard WWTFs.

Therefore, EPA must reject this 401 certification, because it knows that it is not credible with respect to the Hudson and Maynard facilities. And DEP must withdraw this 401 certification for the same reason. If EPA wants to proceed with this General Permit process, it must delete the Hudson and Maynard facilities from the General Permit and ask MassDEP to delete the Hudson and Maynard facilities from a replacement 401 Certification. If this is not done, OARS will have to seriously consider appealing this issue to DEP's OADR and seek a stay of the effective date of this 401 certification. It may also appeal this issue to federal court.

Response 232

MassDEP reviewed all aspects of the Fact Sheet and the Draft Permit prior to drafting its 401 Water Quality Certificate and found that the discharges to be covered under this General Permit complied with water quality requirements as defined in the Clean Water Act. Permit limitations were determined based on the most recent data and stream characteristics and took into account antibacksliding requirements. Compliance with Massachusetts SWQS included compliance with any and all TMDLs affecting eligible facilities under this General Permit. Monitoring frequency requirements in permits and authorizations under General Permits indicate the minimum number of sampling events required: additional sampling is optional, provided that those results are part of the data forming the basis of reporting. Nothing prevents the Assabet River dischargers from additional sampling which could further facilitate the adaptive management assessments of the water body consistent with the TMDL. MassDEP's certification of this General Permit is legal and compliant with all applicable regulations.

See also Responses 226, 233 and 275.

Comment 233

Exclude Assabet River facilities coverage. Pursuant to EPA's General Permit regulation at 40 CFR 122.28(4)(ii), which allows it to "exclude specified sources or areas from coverage," OARS respectfully requests that the Assabet River WWTFs eligible to be included in this draft Massachusetts General Permit be excluded from its coverage. In our view, these facilities – Hudson and Maynard, and Marlborough Westerly in the future – are clearly more appropriately regulated under the Assabet River TMDL for Total Phosphorus,[7] individually tailored permits, and the adaptive management approach that all parties have been following since the TMDL was created in 2004.

The TMDL clearly called for individual but coordinated permits for the four WWTPs discharging to the Assabet River using an adaptive management approach. It also states: "This

TMDL can be achieved through the continued cooperation, effort, and oversight of federal, state and municipal agencies along with the watershed stakeholders." TMDL at 9. That cooperation and collaboration has been a very welcome approach that has benefitted the Assabet River since work began on preparation of the TMDL 20 years ago. We note that this approach has met with considerable success; the work is not completed but the approach is proven. Now, however, OARS considers the unilateral placing of two (and ultimately three) of the Assabet River's four WWTFs into this General Permit to be a breach of that "continued cooperation."

Re-issuing the permits for the Assabet's four WWTFs when three of them are in a General Permit while the fourth – and largest discharger at the headwaters – is separately permitted creates a logical problem. If the large Westborough WWTF comes up for re-permitting a year or two after the General Permit has been reissued and the Assabet still does not meet Water Quality Standards, it may be necessary to require more stringent TP effluent limits and/or measures to address phosphorus in the impoundments. How can that be coordinated with the other three WWTFs that are under a General Permit that has been recently renewed? Note also that as the climate and land use continue to change, the 7Q10 and other factors affecting limitation calculations are also changing for each facility and each watershed. The Westborough limitations affect the receiving waters and dilution calculations of the downstream plants. When we asked EPA staff how this would be handled, we were advised that the facilities in the General Permit could be assigned those new requirements when the General Permit *next came up for renewal* 3 or 4 years later. That unnecessary delay would likely mean that no progress will be made in reducing eutrophic conditions in the river for a number of additional years. That's neither cooperative nor effective coordination.

If, despite the above arguments EPA remains of the view that the Maynard and Hudson facilities are more appropriately regulated under this General Permit (and that Marlborough Westerly should be covered as well in the future), please state in your Response to Comments all the reasons that support your conclusion.

We also note that pursuant to 40 CFR 122.28(b)(3)(i):

> The Director [here, the Regional Administrator] may require any discharger authorized by a general permit to apply for and obtain an individual NPDES permit. Any interested person may petition the Director to take action under this paragraph.

This regulation goes on to list seven examples of situations where the Regional Administrator may require an individual permit for facilities covered by a general permit. The Hudson and Maynard WWTFs arguably fit within three of these:

> (C) Effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit;
> (D) A Water Quality Management plan containing requirements applicable to such point sources is approved;
> (G) The discharge(s) is a significant contributor of pollutants. In making this determination, the Director may consider the following factors:
> *(1)* The location of the discharge with respect to waters of the United States;
> *(2)* The size of the discharge;

(3) The quantity and nature of the pollutants discharged to waters of the United States; and
(4) Other relevant factors;

Unless circumstances change, if a final General Permit is issued that includes the Hudson and Maynard WWTFs, OARS will consider petitioning the Regional Administrator to require that these facilities be covered by specially tailored individual permits, just as they are now.

Conclusions: All river systems are not the same—some have a TMDL; some have different conditions and discharges that require different needs (seasonal monitoring, frequency, etc.), etc. Similarly, the effluent limitations and monitoring needs of all WWTFs are not the same, nor even "substantially similar." Thus, the General Permit is not appropriate—especially not for the Assabet and its TMDL. This permit should not be applied to the Assabet facilities.

[7] https://www.mass.gov/doc/final-nutrient-tmdl-report-for-the-assabet-river/download

Response 233

This comment contends that a TMDL with adaptive management cannot be implemented properly when 2 or 3 permits within a watershed are covered by a general permit and the remaining 1 or 2 permits are covered by an individual permit. EPA disagrees with this notion and does not see any hinderance to implementing the adaptive management aspect of a TMDL under this kind of permitting scenario. Just as with 4 separate individual permits, some will be reissued first and others later. Given that changes in one permit may impact other permits, it may take several years before consistent changes may be implemented in all 4 permits. Contrary to the comment, inclusion of some such facilities in a general permit will allow EPA to implement such changes in multiple facilities at the same time. This would only serve to expedite implementation of the adaptive management aspect of the TMDL and allow for even more consistency through each permit reissuance. Moreover, EPA expects the efficiencies gained by the General Permit will result in more frequent reissuances of both the General Permit and the individual permits, further expediting adaptive management. Finally, EPA considers that this process will include "continued cooperation" in the same manner as through individual permits, albeit more efficiently.

For reasons specified in Responses 231 and the General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach, these dischargers will remain eligible under the General Permit. The commenter may petition for these facilities to be covered by an individual permit under 40 CFR 122.28(b)(3)(i). EPA's response to such a petition would be subject to further review and evaluation based on the rationale presented in the petition and, whether approved or denied, may result in further justification at that time.

Comment 234

Request for Public Hearing. Regardless of EPA's decision, OARS requests EPA to hold public hearings to give all communities with eligible facilities an opportunity to pose directly to EPA employees the many questions this permit raises, to hear answers to those questions in a public setting, and to voice their concerns directly to EPA.[8] Such hearings "might clarify one or more issues" raised by the proposed Permit, specifically those detailed in this letter.[9]

We note that due to the high degree of public interest in the permit, public hearings are mandatory.[10] Given the specific concerns raised in this letter pertaining to the Assabet and Concord rivers in particular, we request that a public hearing be held in the SuAsCo watershed.

[8] OARS makes this request pursuant to 40 C.F.R. § 124.12. *See also* Fact Sheet at 48.
[9] *Id.* § 124.12(a)(2).
[10] 40 C.F.R. § 124.12(a)(1) (EPA "*shall* hold a public hearing whenever he or she finds, on the basis of requests, a significant degree of public interest in a draft permit") (emphasis added).

Response 234

See Response 213.

Comment 235

OVERALL CONCLUSIONS

We appreciate the intent of the proposed change in the permitting process to achieve efficiencies and hence reduce NPDES permitting backlog. However, the proposed draft permit not only appears to not achieve these goals but also undermines the intent of the Clean Water Act to restore the attainable uses of our rivers. We have all achieved so much through rigorous research, proper application of the Clean Water Act, successful collaboration, and major investments by all stakeholders. We cannot support an approach that will undermine this progress and the end goal of fishable and swimmable rivers.

Thank you for your work over several decades to restore the health of our rivers and watershed. We hope that these comments are useful.

Response 235

EPA acknowledges this comment and disagrees that this General Permit undermines the CWA but asserts that it promotes the goals of the CWA to attain uses of our rivers more expeditiously.

II. Comments from Stephen J. Silva TRWA Secretary, Taunton River Watershed Alliance, on April 22, 2022:

Comment 236

Thank you for the opportunity to submit comment on draft NPDES Permit No. MAG590000 Medium Wastewater Treatment Facilities General Permit.

I. General Comments

Taunton River Watershed Alliance, Inc. (TRWA) requests that instead of a General Permit that individual permits incorporating the effluent limitations contained in Draft Authorization Table found on the EPA region 1 website at https://www.epa.gov/npdes-permits/region-1-draft-medium-wastewater-treatment-facilities-general-permit-massachusetts be issued for Bridgewater WWTF, MFN Regional WPCF, and Middleborough WPCF in the Taunton River watershed. Region 1 has already included in the Draft Authorization Table the required elements of the NPDES permit renewals for these facilities and the Fact Sheets. We believe that individual

permits would be simpler for the public and the regulated facilities to understand, comply with and track compliance than the proposed bifurcated General Permit and Notice of Authorization process proposed.

Response 236

EPA disagrees that individual permits would be simpler for interested parties. *See* General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach. By requesting that the limits presented in the Draft Authorization Table on EPA's website be incorporated into individual permits rather than a general permit, the commenter confirms their support for the substantive requirements and updates included in this General Permit for these facilities in the Taunton River watershed. The comment objects to the process by which these requirements are applied, not the substance of the permit requirements. As discussed in the General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach, this General Permit is consistent with all procedural requirements. As such, it is within EPA's discretion to elect to employ a general permit rather than individual permits.

The comment suggests that individual permits for eligible facilities are necessary (1) to be understandable, (2) so that facilities may comply with the permit and (3) to track compliance. Regarding understandability, while the General Permit process is more complex than that of an individual permit in certain ways, EPA created the draft authorizations to provide for the public a clear summary of all of the requirements applicable to each facility under the General Permit. See also Responses 219 and 227. Regarding compliance, EPA notes that the ability of a facility to comply with the requirements is not impacted by whether those same requirements are in an individual permit or an individual authorization under the General Permit. Regarding compliance tracking, EPA does not foresee any challenge with tracking compliance under a general permit compared to an individual permit and has done so effectively in many other general permits for many years. Therefore, EPA does not agree that any of these reasons would justify removing these facilities from the General Permit, especially in light of the significant advantages of the General Permit as discussed in the General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

Comment 237

Since 1988, the Taunton River Watershed Alliance (TRWA) has been a voice for the 562 square mile Taunton River watershed which extends from Mount Hope Bay in Fall River to the City of Brockton, including all or parts of 43 cities and towns. We are an advocate for environmental protection, sustainable development, and responsible stewardship of our precious water resources. We are an Alliance of concerned residents, businesses, and organizations united to restore and properly manage water and related natural resources within the Taunton River Watershed.

The purposes of the Alliance are:

- To protect and restore the watershed's natural resources for current and future generations
- To build and support responsible stewardship of fragile ecosystems, water quality, forests, farmland, and wetlands

- To provide opportunities for people to enjoy the river and the watershed's open space
- To be an integral resource for environmental education and be voice for threatened land and water resources.

II. Background of Permitting in the Taunton Watershed

In early 2013 in preparation for permitting of the six WWTFs that discharge to waters tributary to the Taunton River estuary, EPA developed a site-specific total nitrogen (TN) criterion of 0.45 mg/l for the estuary and Mount Hope Bay based on the Commonwealth's narrative nutrient criteria. The Region also developed a TN wasteload allocation for six WWTFs which discharge to waters tributary to the Taunton River estuary or directly into the estuary itself and subsequently issued 5 of the 6 WWTFs between 2014 and 2017. The Fact Sheets for the 5 reissued draft permits all contained the wasteload allocations listed in the WLA column of table 1 below. Attachment A 1-3 contains the wasteload allocation draft permit fact sheet pages for MFN Regional WPC (A-1), Middleborough WPCF (A-2) and Bridgewater WWTF (A-3). The fact sheets for Taunton and Brockton have the same wasteload allocations as well.

Table 1 Taunton River Estuary Wasteload Allocation and Permit Issuance Summary

WWTF	Design Q (MGD)	**WLA lbs/day** (mg/l)	End of Pub. Not.	Reissue Date	Compliance Date
MFN Reg. WPCF	3.14	**131** (5)	08/29/2013	09/11/2014	12/01/2019
Middleborough	2.16	**90** (5)	11/16/2013	05/05/2014	02/01/2019
Bridgewater	1.44	**60** (5)	09/08/2014	05/01/2017	05/01/2022
Taunton	8.4	**210** (3)	06/17/2013	07/01/2016	07/01/2021
Brockton	18.0	**450** (3)	04/20/2015	01/11/2017	04/01/2022
Not Re-issued					
Somerset*	4.2	**130** (3.7)			

* The Somerset permit expired on 09/30/2008 making it over 13 1/2 years overdue for re-issuance despite having a wasteload allocation since early 2013.

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

Response 237

EPA acknowledges this comment.

Comment 238

Specific Comments

TRWA requests that the permits for MFN, Middleborough and Bridgewater be reissued as individual permits to simplify understanding of the permits by the public and the regulated community. We think relying on a complex legalistic General Permit document even supported by an Authorization Letter (as described in the EPA website Draft Authorization Table) that looks like a typical wastewater discharge permit is unnecessarily confusing for all parties.

TRWA supports the anti-backsliding provisions of the draft permit which preserve the water quality-based effluent limitations imposed in the watershed permits re-issued to date listed in Table 1.

TRWA supports the new proposed requirements for monitoring PFAS.

TRWA supports the proposed revisions of the total phosphorus average monthly effluent limitations for MFN Regional WPCF from 0.17 mg/l to 0.16 mg/l and Bridgewater WWTF from 0.2 mg/l to 0.12 mg/l based on an updated reasonable potential calculations using instream concentrations upstream of the discharge.

Response 238

As in Comment 236, this comment again confirms the commenters support for the substantive requirements and updates included in this General Permit and merely objects to the process by which these requirements are applied. Again, EPA contends that the General Permit will more efficiently incorporate these requirements which the commenter supports. See Response 219 and General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

Regarding the request for individual permits, for reasons specified above and in Responses 231 and 236 these dischargers will remain eligible under the General Permit at this time.

Comment 239

Although not a part this proceeding, TRWA and its watershed partners strongly favor Region 1 issuing a public notice to reissue the long overdue Somerset NPDES permit. The permit language and fact sheet basis for MFN Regional WPCF, Middleborough WPCF or Bridgewater WWTF Draft Authorization Table could readily be used with the 2013 TN wasteload allocation TN 130 lbs/day cited in the fact sheets for the 5 previously issued permits which impact the Taunton River Estuary (included in Table 1) to develop a Somerset individual permit.

In a related matter, TRWA currently has over 100 signatures on a petition to EPA and MassDEP (see TRWA website for petition language) for reissuance of the long overdue Somerset permit (13 years, 6 months overdue) and Fall River permit (16 years, 4 months overdue) in order to demonstrate the high level of public support in the watershed for re-issuance of these final 2 necessary water quality-based permits. After collecting additional signatures at the June 12th annual Taunton River Festival, TRWA plans to send EPA and MassDEP the petition, write and call our federal and state legislators to solicit their support and publish several Op-eds to demonstrate support for EPA and MassDEP's efforts to reissue these two permits.

Response 239

EPA acknowledges this comment.

JJ. Comments from Andrea Donlon, River Steward, Connecticut River Conservancy, on April 25, 2022

Comment 240

I am submitting comments on the draft National Pollutant Discharge Elimination System (NPDES) permit for medium wastewater treatment facilities that are 1-5 MGD in capacity, on behalf of the Connecticut River Conservancy (CRC). CRC signed on to a letter prepared by the Massachusetts Rivers Alliance. Our letter that follows is meant to supplement theirs, and includes examples from the 12 facilities proposed to fall under the general permit that are in the CT River watershed, which discharges to Long Island Sound.

Generally, we do not support the adoption of this permit. There are too many facilities covered under a single permit, it is too burdensome to review permit updates for this number of facilities at the same time, and there are enough facility-specific details that may be lost or are different from the general permit, that it is confusing. Moreover, EPA is weakening some of the limits and monitoring frequencies, in some cases after less than a year after updating the existing permits.

Response 240

See Response 219 and the General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

Regarding monitoring frequencies, see Response 275.

EPA disagrees that the General Permit is "weakening some of the limits" given that any existing limits are being carried forward based on footnote 13 of Table 1 of the General Permit and in accordance with anti-backsliding regulations. See Response 221.

Comment 241

<u>The permit does not comply with EPA's regulation governing general permits</u>

The letter submitted by MassRivers in Section III demonstrates that this general permit does not meet the standards for general permits. We provide the following examples of several facilities in our watershed that are different in some way and do not belong in the general permit.

Erving POTW #2. As stated in EPA's 2021 fact sheet for this facility in Section 3.1, "The Erving POTW #2… is a secondary wastewater treatment facility that is engaged in the collection and treatment of industrial and municipal wastewater. Approximately 95% of the flow to Erving Center WWTF is from Erving Industries, which manufactures tissue and towel grade parent rolls from 100% recovered paper with a high postconsumer furnish content. The remainder is from separate sanitary sewers serving a population of approximately 200." This facility is 95% an industrial facility, and therefore does not belong in a general permit for POTW's.

Response 241

While EPA notes that the General Permit is designed to include a variety of WWTFs (and not merely POTWs), EPA agrees that any WWTFs with significantly dissimilar waste streams should not be included. In this case, due to the extremely high percentage of industrial flow (*i.e.*, above 90%), EPA has determined that Erving Center WWTP 2 would be more appropriately controlled by an individual permit rather than this General permit. Therefore, Erving Center WWTP 2 has been removed from Attachment E in the

Final General Permit and is not eligible for coverage. See also General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

Comment 242

Easthampton's wastewater treatment facility has a primary outfall to the Connecticut River, but when the flows are high in the Connecticut River, the facility discharges to a secondary outfall to the Manhan River. Though the draft authorization reflects this, the general permit does not. The table in Attachment E gives no indication of the different outfalls.

Response 242

EPA confirms that this somewhat unique situation (*i.e.*, a primary and secondary outfall) was considered in relation to this General Permit and it was determined that this did not present any hinderance to including Easthampton as an eligible facility. Regarding any existing limits, the draft authorization for Easthampton includes both outfalls and the associated limits that apply to either outfall based on footnote 13 of Table 1 that requires all such limits (for either outfall) to be carried forward. Regarding any new or more stringent limits, EPA evaluated both outfalls and determined that the only pollutant that needed a new or more stringent limit was total nitrogen. As noted in Part III.G.3 of the General Permit, this limit is "the total allowable mass discharge from both Outfalls 001 and 002 combined," indicating that this outfall was considered in the development of the General Permit and, as noted in the comment, these requirements were also reflected in Easthampton's draft authorization. Regarding additional monitoring (*e.g.*, PFAS), EPA only requires such monitoring for Outfall 001 because the same effluent is discharged through both outfalls (when Outfall 002 is active) and monitoring them both would be duplicative.

Comment 243

Spencer's annual flow limit is on the influent rather than the effluent because of its a unique discharge to lagoons that leak into the nearby Cranberry River, making it impossible to get an accurate reading on the effluent flow amount. This will change when Spencer makes needed upgrades to its treatment facility, but those aren't scheduled to be completed for another year. It is not yet appropriate to put Spencer into this general permit.

Response 243

EPA acknowledges that the mass-based limits in Spencer's draft authorization and current individual permit are based on influent flow. Mass-based limits based on influent flow are more conservative than limits based on effluent flow as there can be flow loss throughout the treatment process and using influent flow ensures compliance using the larger flow value. Therefore, EPA has determined it is not necessary to wait for the upgrade to be completed to include this facility in the General Permit. After a facility upgrade is completed, EPA may reevaluate how mass-based limits for Spencer are calculated in future reissuances or modifications of the General Permit.

Finally, EPA confirms that Spencer will be required to monitor both influent and effluent flow under the General Permit which will provide EPA with sufficient data to compare influent and effluent flows in a future permitting analysis.

Comment 244

Greenfield, Spencer, and Ware all have BOD and TSS limits that are different than that of the General Permit. These are carried through to the draft authorization letter, but there is no indication of different effluent limits in the general permit itself, *which begs the question which document contains the enforceable limits*?

Response 244

EPA agrees that the draft authorizations for these facilities have more stringent BOD_5 and TSS limits than secondary treatment standards but disagrees that there is no indication of different effluent limits in the General Permit itself. Rather, footnote 13 of Table 1 of the General Permit requires than any existing limits that are more stringent must be carried forward. Therefore, the General Permit is the basis for the limits in the draft authorizations. Additionally, and as explained in Response 227, EPA has created a new Attachment to the General Permit, "Attachment I – Facility-Specific Permit Terms," which explicitly incorporates the terms contained in the Draft Authorizations into an attachment to the General Permit itself. Regarding enforceability, EPA notes that the requirements of the final authorizations will be based on the General Permit and will be directly enforceable once they become effective.

Comment 245

Belchertown and Spencer have a DO limit that is carried through to the draft authorization letter, but there is no indication of different effluent limits in the general permit itself, *which begs the question which document contains the enforceable limits*?

Response 245

See Response 244 which also applies to these DO limits.

Comment 246

Spencer, Gardner, and Belchertown each have dilution factors of close to 1 in their receiving waters in small tributaries. These facilities contribute to much of the flow in those receiving waters, unlike those with dilution factors between 45 and 371.

Response 246

EPA acknowledges these various dilution factors, as presented in Attachment E of the General Permit, and asserts that the General Permit was designed to allow for a wide range of dilution factors because of the site-specific analysis conducted for each facility.

Comment 247

The General Permit hinders public participating in the permitting process

Like the letter from Mass Rivers and watershed organizations says in Section VI, by aggregating the renewal of 44 permits together, the Permit creates a significant burden to review and comment on the permit.

CRC typically reviews draft permits up for renewal in the Connecticut River watershed. We review the draft permit, the Fact Sheet, the discharge monitoring summary, and any other documentation applicable to the facility. In the case of the proposed draft permit, 12 facilities in

our watershed are proposed to fall under it. We were unable to devote sufficient staff time to do the level of review for each facility that we normally would have done.

In the 16 years that we have been reviewing NPDES permits in the watershed, we have gained much useful knowledge from the Fact Sheets for each facility. That information will be lost if EPA adopts this general permit, which we think is a large enough reason to reject the idea of this permit. We have missed that level of detail for the smaller wastewater treatment facilities, which now fall under a different general permit.

Response 247

See Response 219 and General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

Regarding detailed site-specific information, see Response 272.

Comment 248

<u>The Permit includes relaxed requirements that violate anti-backsliding regulations.</u>

The comment letter from Massachusetts Rivers Alliance in section VIII states that the Permit includes relaxed requirements that violate anti-backsliding requirements. While in some cases the general permit sets more stringent monitoring requirements, in our review, monitoring frequencies less stringent were far more common. We noted the following changes that decrease the frequency of effluent monitoring for certain parameters. *In some cases, these relaxed requirements are being proposed for facilities that just went through a permit renewal only 6-14 months ago.*

Response 248

See Response 275.

Comment 249

ATHOL
Athol is currently operating under NPDES permit MA0100005 which was signed on January 5, 2021. Despite having been updated only one year ago, EPA is proposing the following decreases in sampling frequency.

-pH range: measurement frequency 1/day in the existing permit. This is reduced to 5/week in draft GP.
-Total Lead: 1/month testing and reporting has been eliminated altogether.
-Total Copper: 1/month testing and reporting has been eliminated altogether.
-Total Phosphorus (April 1-October 31): measurement frequency of 1/week in existing permit is reduced to 2/month in draft GP.
-Total Phosphorus (November 1-March 31): measurement frequency of 1/week in existing permit is reduced to 2/month in draft.

Response 249

See Response 275. Regarding lead and copper, EPA notes there was a typographical error in the draft authorization and these pollutants should increase to 2/month monitoring and

reporting requirement to confirm compliance with the limits, consistent with the frequency shown in Table 1 of the General Permit for "Total Recoverable Metals" limits.

Comment 250

BELCHERTOWN

Belchertown is currently operating under NPDES permit MA0102148 which was signed on July 31, 2014.

-Monitoring for pH is currently set at 1/day. The proposed GP sets monitoring frequency of pH at 5/week.
-Monitoring for TP year-round is currently set at 1/week. The GP proposes reducing it to 2/month.

Response 250

See Response 275.

Comment 251

ERVING WWTP #1

Erving #1 is currently operating under NPDES permit MA0101516 which was signed on September 14, 2021. Even though EPA took the time to update this permit only a little over 6 months ago, they are inexplicably ready to reduce monitoring frequency for several parameters.

-pH range: measurement frequency of 1/day in existing permit, reduced to 5/week in draft.
-Total Phosphorus (April 1-October 31): measurement frequency of 2/month in draft, 1/week in existing permit. No maximum daily in draft, report mg/L in existing permit.
-Total Kjeldahl Nitrogen (November 1-March 31): measurement frequency for 1/week in existing permit, reduced to 1/month in draft GP.
-Nitrate + Nitrite (November 1-March 31): measurement frequency 1/week in existing permit, reduced to 1/month in draft.
-Total Nitrogen: measurement frequency of 1/week in existing permit reduced to 1/month in draft GP.
-Rolling average total Nitrogen: measurement frequency 1/week in existing permit, reduced to 1/month in draft GP.

Response 251

See Response 275.

Comment 252

ERVING WWTP #2

Erving #2 is currently operating under NPDES permit MA0101052 which was signed on September 14, 2021. **Even though EPA took the time to update this permit only a little over 6 months ago, they are inexplicably ready to reduce monitoring frequency for the following parameters**.

-BOD5 (April 1-October 31): measurement frequency of 3/week in existing permit, reduced to 1/week in draft GP.
-BOD5 (November 1-March 31): measurement frequency of 3/week in existing permit, reduced to 1/week in draft GP.
-TSS (April 1-October 31): measurement frequency of 3/week in existing permit, reduced to 1/week in draft GP.
-TSS (November 1-March 31): measurement frequency of 3/week in existing permit, reduced to 1/week in draft GP
-pH range: measurement frequency of 1/day in existing permit, reduced to 5/week in draft GP.
-*E. Coli* (April 1-October 31): measurement frequency of 2/week in existing permit, reduced to 1/week in draft GP.
-Total residual Chlorine: measurement frequency of 1/day in existing permit, reduced to 5/week in draft GP.
-Total Copper: measurement frequency of 1/week in existing permit, reduced to 2/month in draft.
-Total Phosphorus: measurement frequency of 1/week in existing permit, reduced to 2/month in draft.
-Total Kjeldahl Nitrogen (November 1-March 31): measurement frequency 1/week in existing permit reduced to 1/month in draft GP.
-Nitrate + Nitrite (November 1-March 31): measurement frequency 1/week in existing permit, reduced to 1/month in draft GP.
-Total Nitrogen: measurement frequency of 1/week in existing permit, reduced to 1/month in draft.
-Rolling average total Nitrogen: measurement frequency of 1/week in existing permit reduced to 1/month in draft GP

Response 252

See Response 241.

Comment 253

GARDNER

Gardner is currently operating under NPDES permit MA0100994 which was signed on January 5, 2021. Even though EPA took the time to update this permit only a little over a year ago, they are already reducing monitoring frequency for several parameters.

-BOD5 (April 1-October 31): measurement frequency of 2/week in existing permit, reduced to 1/week in draft GP.
-BOD5 (November 1-March 31): measurement frequency of 2/week in draft, reduced to 1/week in draft GP.
-TSS (April 1-October 31): measurement frequency of 2/week in existing permit, reduced to 1/week in draft GP.
-TSS (November 1-March 31): measurement frequency of 2/week in existing permit, reduced to 1/week in draft GP.
-pH range: measurement frequency of 1/day in existing permit, reduced to 5/week in draft GP.
-Total residual Chlorine: measurement frequency of 1/day in existing permit, reduced to 5/week in draft GP.

Total Phosphorus (April 1-October 31): measurement frequency of 2/week in existing permit, reduced to 2/month in draft GP.
-Total Phosphorus (November 1-March): measurement frequency of 1/week in existing permit, reduced to 2/month in draft GP.
-Ammonia Nitrogen (June 1-October 31): measurement frequency of 1/week in existing permit, reduced to 2/month in draft GP.
-Ammonia Nitrogen (November 1-May 31): measurement frequency of 1/week in existing permit, reduced to 2/month in draft GP.
-Total Kjeldahl Nitrogen (November 1-March 31): measurement frequency 1/week in existing permit of 1/month in draft, no difference in time of year and measurement frequency of 1/week in existing permit.
-Nitrate + Nitrite (November 1-March 31): measurement frequency of 1/week in existing permit, reduced to 1/month in draft GP.
-Total Nitrogen: Measurement frequency of 1/week in existing permit, reduced to 1/month in draft GP.

Response 253

See Response 275.

Comment 254

GREENFIELD

Greenfield is currently operating under NPDES permit MA0101214 which was signed on September 28, 2011.
-Monitoring for BOD and TSS is currently 3/week. The GP proposes reducing it to 1/week. CRC obtained the Monitoring Data Summary for Greenfield, which shows numerous BOD and TSS permit limit violations over the past year. Decreasing the frequency of the testing does not seem justified.
- Monitoring for pH is currently set at 1/day. The proposed GP sets monitoring frequency of pH at
5/week. The Monitoring Data Summary for Greenfield shows that there have been 8 months of pH violations over the last 5 years. Decreasing the frequency of the testing does not seem justified.
-Monitoring for E. coli bacteria is currently 3/week. The GP proposes reducing it to 1/week.
-Monitoring for total residual chlorine is currently set at 1/day. The proposed GP sets monitoring frequency of pH at 5/week.

Response 254

See Response 275.

Comment 255

EASTHAMPTON

Easthampton is currently operating under NPDES permit MA0101478 which was signed on August 13, 2013.
-BOD and TSS testing is currently set at 2/week at outfalls 001 and 002. The proposed GP proposes reducing it to 1/week.

-Monitoring for pH at outfalls 001 and 002 is currently set at 1/day. The proposed GP sets monitoring frequency of pH at 5/week.
-Monitoring for E. coli bacteria at outfalls 001 and 002 is currently 2/week. The GP proposes reducing to 1/week.
-Total recoverable chlorine at outfalls 001 and 002 is currently set at 1/day. The proposed GP sets the monitoring frequency at 5/week.
-Current permit requires monthly TP testing April 1 to October 31. Proposed general permit **eliminates** the requirement altogether.
-Current permit requires quarterly testing of total recoverable aluminum from outfall 002 to the Manhan River. Proposed general permit **eliminates** the requirement altogether.

Response 255

See Response 275.

Comment 256

ORANGE
Orange is currently operating under NPDES permit MA0101257 which was signed on January 4, 2021. Even though EPA took the time to update this permit only a little over a year ago, they are already reducing monitoring frequency for several parameters.

-pH range: measurement frequency of 1/day in existing permit, reduced to 5/week in draft GP.
-Total residual chlorine: measurement frequency of 1/day in existing permit, reduced to 5/week in draft GP.
-Total Phosphorus: measurement frequency of 1/week in the existing permit, reduced to 2/month in draft – April 1-October 31 in existing permit.

Response 256

See Response 275.

Comment 257

WINCHENDON

-BOD5 (June1-October 31): measurement frequency of 1/week in draft, 2/week in existing permit.
-BOD5 removal: measurement frequency of 1/month in draft, no frequency specified in existing permit.
-TSS (June 1-October 31): measurement frequency of 1/week in draft, 2/week in existing permit.
-TSS removal: measurement frequency of 1/month in draft, no frequency specified in existing permit.
- pH range: measurement frequency of 5/week in draft, 1/day in existing permit.
-*E. Coli* (April 1-October 31): measurement frequency of 1/week in draft, 2/week in existing permit.
-Total Aluminum: monthly average of 87 mg/L (if new WQS not approved before issuance) in draft, 87 µg/L in existing permit. Measurement frequency of 2/month in draft, 1/month in existing permit.
-Total Lead: measurement frequency of 2/month in draft, 1/month in existing permit.
-Total Copper: measurement frequency of 2/month in draft, 1/month in existing permit.

-Total Phosphorus (April 1 – October 31): measurement frequency of 2/month in draft, 1/week in existing permit. No report lb/day requirement in draft, but requirement included in existing permit.
-Total Phosphorus (November 1 – March 31): Not specified in draft, specified in existing permit.
-Ammonia Nitrogen (November 1 - May 31): Not specified in draft, specified in existing permit.
-Total Kjeldahl Nitrogen: measurement frequency for November 1-March 31st of 1/month in draft, no difference in time of year and measurement frequency of 1/week in existing permit.
-Nitrate + Nitrite: measurement frequency November 1-March 31st of 1/month in draft, no difference in time of year and measurement frequency of 1/week in existing permit.
-Total Nitrogen: measurement frequency of 1/month in draft, 1/week in existing permit.
-Rolling average total Nitrogen: measurement frequency of 1/month in draft, 1/week in existing permit.
-Sludge characteristics: sample type of composite in draft, grab/composite in existing permit.
-Ambient characteristic: total Phosphorus: measurement frequency of once per month, May-September every other calendar year, with sampling days preceded by at least 72 hours without rainfall following the last rainfall of 0.1 inches or greater in draft; frequency of 1/month from April 1-October 31 in existing permit.

Response 257

See Response 275.

Comment 258

SOUTH HADLEY

South Hadley is currently operating under NPDES permit MA0100455 which was signed on September 27, 2012.

-BOD and TSS testing is currently set at 2/week. The proposed GP proposes reducing it to 1/week. The discharge monitoring report summary table provided by EPA indicated several BOD and TSS violations in the last year. The testing frequency should not be reduced.
-Monitoring for pH is currently set at 1/day. The proposed GP sets monitoring frequency of pH at 5/week. The discharge monitoring report summary table provided by EPA indicated several pH violations in the last year. The testing frequency should not be reduced.
-Monitoring for E. coli bacteria is currently 2/week between April 1 and October 31. The GP proposes reducing it to 1/week. The discharge monitoring report summary table indicates numerous E. coli daily maximum violations in recent years. The testing frequency should not be reduced.
-Monitoring for total residual chlorine is currently set at 2/day (which translates to 14/week) between April 1 and October 31. The proposed GP sets monitoring frequency of pH at 5/week.
-Current permit requires monthly TP testing year-round. Proposed general permit **eliminates** the requirement altogether.
-Current permit requires weekly testing of Ammonia Nitrogen, TKN, and nitrite + nitrate. Proposed general permit reduces monitoring frequency to 1/month between November 1 – March 31.

Response 258

See Response 275.

Comment 259

SPENCER

Spencer is currently operating under NPDES permit MA0100919 which was signed on February 28, 2019.
Though there was a very well attended public hearing when EPA updated the existing permit three years ago, EPA is now proposing to make the following reductions in monitoring frequency without informing any of the members of the public who attended the public hearing.

-Monitoring for pH is currently set at 1/day. The proposed GP sets monitoring frequency of pH at
5/week.
-Monitoring for TP (April 1 to October 31) is currently 3/week. The GP proposes reducing it to 2/month.
-Monitoring for TP (November 1-March 31) is currently 1/week. The GP proposes reducing it to 2/month.
-Monitoring for Ammonia Nitrogen (May 1- October 31) is currently 1/week. The GP proposes reducing it to 2/month.
-Total nitrogen (May 1 to October 31) is currently 1/week. The GP proposes 1/month.
-Test toxicity testing species is currently both the daphnid *Ceriodaphnia dubia* and the fathead minnow *Pimephales promelas*. The GP proposes only the daphnid.

Response 259

See Responses 219 and 275. Additionally, the reduction of test species was a typographical error in the draft authorization that will be fixed in the final authorization.

Comment 260

WARE

Ware is currently operating under NPDES permit MA0100889 which was signed on September 3, 2013.

-Monitoring for pH is currently set at 1/day. The proposed GP sets monitoring frequency of pH at 5/week.
-Monitoring for total residual chlorine is currently set at 1/day. The proposed GP sets monitoring frequency of pH at 5/week.
-Monitoring for total phosphorus during April 1 to October 31 is currently set at 2/week and during November 1 to March 31 it is 1/week. The proposed GP sets monitoring year round at 2/month.
-The current permit requires monitoring for dissolved orthophosphorus between November 1 to March 31 at a frequency of 1/week. The proposed GP **eliminates this requirement** altogether.
-The current permit requires monitoring for ammonia nitrogen between June 1 and October 31 1/week. The proposed GP has the same limits, but the testing frequency is changed to 2/month.

Response 260

See Response 275.

Comment 261

WARREN

Warren is currently operating under NPDES permit MA0101567 which was signed on September 14, 2016.
-Monitoring for pH is currently set at 1/day. The proposed GP sets monitoring frequency of pH at 5/week. According to the Monitoring Data Summary prepared by EPA, **Warren's compliance record for pH is horrible**. There are 52 months in the last 5 years where the minimum pH has been violated. Reducing the testing frequency is not warranted.
-Monitoring for total residual chlorine is currently set at 1/day. The proposed GP sets monitoring frequency of pH at 5/week.
-Total phosphorus sampling will go from 1/week to 2/month testing between April to October 31, but increasing from 1/month testing to 2/month testing between November 1 and March 31.

Response 261

Changing monitoring frequency from 7/week to 5/week is unlikely to have a significant impact on the facility's compliance (or non-compliance) with their pH limit. EPA recently issued a $13,219 penalty to Warren in relation to pH and reporting violations, which EPA considers a more effective measure at deterring future violations than minor changes in monitoring frequency.

See also Response 275.

Comment 262

Greenfield: MassDEP issued an Administrative Consent Order (ACOP-WE-16-1N001) on May 11, 2016 for noncompliance at the Greenfield Water Pollution Control Facility for violations of their flow limit and BOD and TSS. Greenfield was required to complete a comprehensive analysis of infiltration and inflow (I/I) into their system. In 2020 and 2021, the flow violations have been held to one month which may be signs of improvement. We are concerned that oversight of progress in reducing I/I may be lost in the GP.

Response 262

EPA disagrees that oversight of progress in reducing I/I will be lost in the General Permit. The General Permit is designed to replace individual permit coverage. As the comment states, the facility has made progress in reducing I/I under an administrative order. If the facility is unable to meet the flow limit (or any other limits) under the General Permit, EPA may establish a new administrative order to ensure continued progress in reducing I/I as required under the permit.

Comment 263

Belchertown has a dilution factor of 1.01, and under the general permit, should have a toxicity testing frequency of 4/year. The existing permit and draft authorization allows for 2/year. There was one chronic toxicity violation shown in the Monitoring Data Summary table for Belchertown. Given that result and the number of parameters shown in Appendix A to have a reasonable potential for toxicity, CRC requests that the toxicity testing be increased to 4/year.

Response 263

According to Footnote 14 of Table 1 of the General Permit current frequency reductions are carried forward from the individual permits. The fact that the facility has had one violation does not justify reverting to 4/year. However, if there are more consistent violations in the future EPA may consider increasing the monitoring frequency in future General Permit reissuances.

Comment 264

In the South Hadley authorization, Chicopee is no longer listed as a co-permittee. Why?

Response 264

The City of Chicopee has an individual permit (No. MA0101508) that includes requirements to properly operate and maintain the collection system which it owns. This permit requirement covers all collection systems owned by the City of Chicopee, regardless of whether they contribute flow to the Chicopee Water Pollution Control Facility or the Belchertown Water Reclamation Facility. Therefore, including Chicopee as a co-permittee for Belchertown would result in duplicative requirements and is unnecessary.

Comment 265

Warren's bacteria treatment season in the existing permit and proposed draft authorization letter is shorter than everywhere else – May 1 to September 30. The Fact Sheet for the permit re-issuance in 2014 states that the bacteria limit will be in place April 1 to October 31, so this appears to be an error that has been continued into the draft authorization letter. The Quaboag River downstream of the Warren WWTP (MA36-16) is impaired for E. coli and fecal coliform bacteria, according to the Final Massachusetts 2018-2020 Integrated List of Waters. Please correct this and align the schedule with those of the rest of the state.

Response 265

EPA agrees that this is an error and will be corrected in Warren's authorization.

Comment 266

Permits that require both chronic and acute toxicity testing currently have a footnote in Part I.A.1 that helpfully define the meaning of the tests. These are missing in both the draft general permit and draft authorization letters. CRC recommends that they be reinstated so that members of the public who do not write permits for a living can be helped in interpreting these permit limits. The following text is from the existing Warren permit:

14. The LC50 is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.
15. The chronic-no observed effect concentration (C-NOEC) is defined as the highest tested concentration of toxicant in effluent to which organisms are exposed in a life cycle or partial life cycle test which causes no adverse effect on growth, survival, or reproduction…. The "14.3% or greater" is defined as a sample which is composed of 14.3% (or greater) effluent, the remainder being dilution water.

Response 266

EPA notes that definitions similar to those presented in this comment are included in Part VII.E. of this General Permit, as referenced in Footnote 14 of Table 1 of the General Permit. EPA does not consider it necessary to reproduce these definitions again in the footnotes of Table 1 of the General Permit.

Comment 267

Proposed elimination of TP monitoring at South Hadley and Easthampton and elimination of orthophosphorus requirement in Ware not explained in Fact Sheet. Understand that SH and Easthampton don't qualify for a TP limit based on the reasonable potential table. Ware does have TP limits in place. But Outfall 002 in Easthampton discharges into the Manhan River, which flows into the Oxbow, which is lake-like and contains invasive aquatic plants like water chestnut.

The CT River upstream of the Holyoke Dam is also an impoundment, with coves that contain invasive aquatic plants. CRC recommends that facilities discharging into the CT River be required to monitor TP. EPA recently required Springfield to monitor TP.

Response 267

The monitoring and reporting requirement for orthophosphorus in several individual permits is no longer a requirement in the General Permit. EPA's intention in requiring winter orthophosphorus monitoring was to verify the assumption that the vast majority of the phosphorus discharges would be in the dissolved phase. It was EPA's determination at the time that the non-particulate orthophosphorus would pass through the river system and not accumulate in the sediments. However, EPA has since determined that winter phosphorus loadings may accumulate in the sediment. Given that both dissolved and particulate phosphorus may contribute to water quality impairments, EPA has determined that total phosphorus is the appropriate focus and thus no longer necessary to continue monitoring orthophosphorus in the wintertime or add such monitoring in the summertime.

EPA does not agree to add total phosphorus monitoring to all of the Connecticut River discharges based on this limited data. However, EPA notes that total phosphorus data collection will be required for all facilities in the fifth year of the permit term. See Response 272. This data will be used in future General Permit reissuances to determine if any further phosphorus requirements are needed.

Comment 268

CRC appreciates the opportunity to provide comments on the draft permit. We think EPA should have conducted a public meeting that included stakeholders from the very beginning. This general permit is flawed, and EPA should revert back to individual permits for these facilities.

Response 268

EPA acknowledges this comment and disagrees that the included facilities should be covered under individual permits. See Response 231 and General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

KK. Comments from Heather Miller, General Counsel and Policy Director, Charles River Watershed Association, on April 26, 2022

Comment 269

Charles River Watershed Association ("CRWA") submits the following comments on the Draft National Pollutant Discharge Elimination System ("NPDES") General Permit for the Discharge of Wastewater from Medium Sized Wastewater Treatment Facilities ("WWTFs") in the Commonwealth of Massachusetts (Permit No. MAG590000) (hereinafter, the "Draft General Permit"). CRWA has also joined comments filed by the Massachusetts Rivers Alliance ("Mass Rivers"). This letter provides additional comment regarding considerations specific to the Charles River watershed and the two covered facilities located therein, the Medfield and Milford WWTFs.

Response 269

EPA acknowledges this comment and has responded below.

Comment 270

The Draft General Permit is Unlawful and Impractical

As an initial matter, we emphasize the significant legal flaw with EPA's proposed approach described in detail in Mass Rivers' comments: EPA's regulations at 40 C.F.R. § 122.28(a)(2)(ii) allow for general permits that regulate one or more categories or subcategories of "treatment works treating domestic sewage" if they all, among other things, "[r]equire the same effluent limitations." (emphasis added). As even a cursory perusal of the Draft General Permit and the draft authorization letters demonstrates, the facilities to be covered under the Draft General Permit have effluent limitations that are not only not the same, but in fact vary widely. This is because of (among other things) the various dilution factors, receiving water conditions, and past permit conditions for each of the facilities proposed for coverage. It is telling that the Draft General Permit itself does not include effluent limits and monitoring requirements for the facilities to be covered, nor could it, since they are all different. The actual limits that will apply to individual facilities are included in the authorization letters, resulting in authorization letters that look a lot like individual permits.

Indeed, the Draft General Permit does not seem to really be a general permit at all; rather, it is 44 individual permits packaged as a general permit. However, unlike an individual permit, where all pertinent information is included in the permit itself and accompanied by a facility-specific fact sheet, one must now read both the general permit and the facility-specific authorization letter to determine applicable permit terms and conditions, and there is no facility-specific fact sheet explaining how the relevant terms and conditions were developed and why any changes were made. As a result, a complete review of this and future draft general permits is and will be a daunting and overwhelming task requiring review of what are essentially 44 individual permits with associated calculations, as well as a comparison to the current individual permits to ensure that all of the limits and conditions have been correctly considered and carried forward where appropriate.

It is also unclear how this approach is beneficial to EPA in the long term. The agency has expended significant time and effort developing individual authorization letters for each facility

that is proposed for coverage under the General Permit. EPA has not explained why a general permit with lengthy and detailed individual authorization letters is preferable to issuing individual permits based on the same information and analysis.

Response 270

See Response 219 and General Response to Comments on Benefits and Appropriateness of General Permit Approach.

Comment 271

Additional Problems with the Proposed Permitting Approach

Without fact sheets for individual facilities, little if any detail is provided regarding the origin of and basis for the effluent limits in the authorization letters associated with the Draft General Permit. For example, the draft authorization letters for the Medfield and Milford WWTFs include the phosphorus limits from each facility's current permit, but the Draft General Permit fact sheet has no specific statement indicating that these limits are derived from a total maximum daily load ("TMDL") (specifically, the TMDL for Nutrients in the Upper/Middle Charles River (May 2011)); the fact sheet merely states that all TMDL-based limits were carried forward in the Draft General Permit. A future permit writer will therefore not have information about the original basis for the effluent limits and as this information is lost over time, the permit may become more vulnerable to backsliding. This also makes it much more difficult for the public to understand the basis for the effluent limits, inhibiting meaningful public comment.

We echo Mass Rivers' concerns about whether there will be adequate public notice and comment on the authorization letters and notices of intent that will be required under the Draft General Permit; there is not a clear process set forth to provide for public participation before coverage is granted by EPA. Careful public review and comment often leads to the correction of errors in draft authorizations and permits, something that will be lost without robust public participation. This is even more concerning given that EPA has required notices of intent to be submitted within 30 days of the effective date of the General Permit and has given itself discretion to unilaterally determine that a facility is covered by the General Permit even absent submission of a notice of intent. These are significant changes to the current permitting regime that adversely impact the ability of organizations like CRWA and the public to review, understand, and provide input on permit terms and conditions, thereby undermining public participation.

Response 271

EPA agrees with the comment that the original basis for establishing a permit limit can sometimes be challenging to find in future permit reissuances, especially when the existing permit is quite old. However, this problem is not unique to general permits. Even when reissuing an individual permit, many permit limits are often carried forward and the updated permit record does not reproduce the original rationale for the original limit. Therefore, future permitting actions sometimes need to refer back multiple permit terms to find the original rationale. EPA considers this issue may be addressed through improved retention of electronic records (compared to hard copy records utilized in the past), which EPA has now implemented, and does not preclude the use of general permits.

Regarding notices of intent and authorization letters, EPA disagrees that the process to obtain coverage under the General Permit undermines public participation. EPA asserts that there has been robust public participation in the development of the Draft General Permit, as indicated by the degree of public comments addressed in this document. EPA agrees that these comments have been quite helpful in addressing public concerns and correcting errors. However, once the General Permit is finalized, the process to authorize facilities under the General permit is not a public process. Part IV.A of the General Permit indicates that Notices of Intent may be submitted within 30 days of the effective date of the General Permit and must simply include basic information from the facility. It is unclear what value there would be to make these notices available for public review as they will not contain any applicable permit limitations or terms. Further, EPA may then authorize facilities under the General Permit by submitting the updated versions of the Draft Authorizations that have already been reviewed by the public. Again, it is unclear what value there would be to make these authorizations available for another public review. However, EPA will post these authorizations once they become effective for public access during the permit term.

See also General Response to Comments on Benefits and Appropriateness of General Permit Approach.

Comment 272

We have additional concerns regarding data collection for conducting future reasonable potential analyses. On page 15 of the Draft General Permit fact sheet, EPA states that it used the "best available data" in establishing effluent limits and that this included, among other things, data from "permit applications." We assume EPA is referring to prior individual permit applications filed by the permittee, which would have included chemical analysis of a large number of pollutants. *See* 40 C.F.R. § 122.21(j)(4)(iv)(A) and § 122.21, Appendix J. It is vital that EPA gather this information in order to ascertain whether any new pollutants are being discharged by the facility with reasonable potential to cause or contribute to exceedances of water quality standards. However, since facilities covered under a general permit do not have to submit individual permit applications, *see* 40 C.F.R. § 122.21(a)(1), and the general permit does not specify any sampling requirements for retaining coverage under the permit upon expiration, *see* Draft General Permit Part VI B, we are concerned that this vital information gathering may not be done in the future.

Response 272

EPA agrees that some data that would previously be submitted in a permit reapplication would not be submitted under this General Permit. EPA further agrees that these data are useful in evaluating whether any additional permit limits may be necessary in the future. Therefore, based on this comment, EPA has added a provision to the Final General Permit (Part III.H) that requires the collection and submission of three full pollutant scans consistent with the requirements of NPDES Form 2A, Tables B and C, conducted once per quarter in the final 3 full calendar quarters of the 5-year permit term. The results for all three scans shall be summarized and submitted as a single electronic attachment to the DMR for the final full calendar quarter before the expiration date of the General Permit. This submittal shall also include the following information that EPA has deemed necessary for development of the next reissuance of this General Permit:

- Provide the treatment works' current average daily volume of inflow and infiltration (based on Form 2A, Part 2.2)
- Provide an updated Flow Diagram or Schematic for the WWTP (based on Form 2A, Part 2.3)
- Provide a summary and schedule for any ongoing or planned facility upgrades (based on Form 2A, Part 2.5)
- Provide a list of Significant Industrial Users and Categorical Industrial Users contributing flow to the system (based on Form 2A, section 4)
- Provide a summary of sewage sludge treatment and disposal practices (including disposal method, disposal amount in dry metric tons, name and address of any third-party contractor, etc.).

EPA will use these submittals in the next permit reissuance and will make them publicly available on our website as an additional resource to inform site-specific comments on the next Draft General Permit.

Comment 273

Relatedly, the fact sheet states that EPA did not do reasonable potential calculations for facilities that are covered by individual permits issued in 2019 or later (including the Milford WWTF discussed below). EPA's stated reasoning is that there is not enough new data to justify a new review. This is not a particularly compelling reason; there could have been some radical change in effluent or receiving water composition that could now potentially go undetected for an additional five years when the facility receives coverage under the General Permit. EPA is essentially giving these facilities an extended permit term under their current limits without acknowledging that this is what is being done.

Response 273

EPA is not aware of any radical changes in these facilities that were reissued in the past 3 years; neither does the comment present any information indicating any such radical changes. Presumably, if the facility were to undergo a significant change in composition EPA would be made aware (based on provisions similar to Part II.B.7 and Part VIII.B in their individual permits) and EPA's Enforcement and Compliance Assurance Division (ECAD) would continue to ensure permit compliance. In any case, EPA acknowledges that conditions do change over many years and more frequent permit reissuances are preferable to account for these changes. EPA asserts that this General Permit will result in more permitting efficiency and, therefore, more frequent permit reissuances on average. In other words, without the efficiencies gained through this General Permit these same individual permits would likely be reissued less frequently on average resulting in even more extended permit terms.

Comment 274

For several pollutants, EPA has included two sets of limits in the Draft General Permit: one set applicable if new proposed state water quality criteria are approved prior to issuance of the General Permit and another if they are not approved prior to issuance of the General Permit. It is unclear what authority EPA is relying on in issuing a permit under the Clean Water Act that includes state water quality standards which have not been approved by EPA and are not in effect for Clean Water Act purposes. Specifically, we question what will happen if EPA does not

ultimately approve the proposed state criteria or Endangered Species Act consultation results in revisions to the criteria to protect listed species.

There are other problems with this approach as well. For aluminum, if the new proposed state water quality criteria are not approved prior to issuance of the General Permit, the Draft General Permit includes a three-year schedule of compliance if the permittee is not attaining the new, more stringent limit. For each facility, the proposed schedule of compliance is the same, despite regulations at 40 C.F.R. § 122.47(a)(1) that require schedules in permits to require compliance "as soon as possible." It seems unlikely that every permittee would need exactly the same amount of time to attain compliance "as soon as possible." Further, the fact sheet states that the permittee may request an extension of the schedule through permit modification if the limit has not been attained by the end of the compliance schedule, and may also request a permit modification of the limit if the facility is not attaining the limit when the new criteria are approved. *See* Fact Sheet at 13. This approach disincentivizes improvements in discharges. We also note that the fact sheet states that for any new or more stringent water quality-based limit where EPA determines that the facility cannot immediately achieve compliance, EPA will include a two-year schedule of compliance. *See* Fact Sheet at 13. This generic two-year schedule also appears to be inconsistent with regulations at 40 C.F.R. § 122.47(a)(1).

Response 274

Regarding the first paragraph, EPA would only issue the General Permit based on water quality standards that are approved at the time of issuance. The two sets of conditions in the Draft General Permit were designed to solicit public comments on both options given that it was likely the recent submission from MassDEP was likely to be approved during permit development. The revised 2021 Massachusetts WQS for aluminum have now been approved without any changes.

Regarding compliance schedules for aluminum, given that the revised 2021 Massachusetts WQS for aluminum have been approved there are no aluminum compliance schedules in the Final General Permit.

Finally, EPA does consider the 2-year compliance schedules described in Part III.F.1 to be consistent with 40 CFR § 122.47(a)(1) for the following reasons. Each of these facilities are similarly sized and must conduct a similar analysis to consider process improvements and/or optimization efforts to meet a new or more stringent limit that they are currently not attaining. Based on EPA's experience in working with WWTFs, EPA expects that the analysis will take approximately 1 year (accounting for seasonal variability) and implementation of the results will take approximately 1 year, resulting in compliance within 24 months being "as soon as possible." Further, EPA has determined that meeting these limits will likely not require a major facility upgrade, which would have resulted in a longer schedule. However, if a 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.

Comment 275

Specific Concerns Regarding Permitting for the Medfield and Milford WWTFs

We are concerned that sampling and monitoring frequencies have been reduced—in some cases significantly—in the draft authorization letters for the Medfield and Milford WWTFs, as compared to the requirements in the existing individual permits for these facilities. The NPDES Permit Writers' Manual states that "[t]he permit writer should establish monitoring frequencies sufficient to characterize the effluent quality and to detect events of noncompliance, considering the need for data and, as appropriate, the potential cost to the permittee." U.S. EPA Permit Writers' Manual (Sept. 2010) at 8-5. Monitoring frequencies are established to ensure that the monitoring obtained is representative of the discharge and are generally more frequent with more stringent effluent limits and variable discharges. The Permit Writers' Manual sets forth specific factors that should be considered when establishing appropriate monitoring frequencies. Importantly, the Permit Writers' Manual states that "[m]onitoring frequency should be *determined on a case-by-case basis*, and decisions for setting monitoring frequency should be *described in the fact sheet*." *Id.* at 8-5 (emphasis added); *see also* 40 C.F.R. 122.44(i)(2) ("requirements to report monitoring results shall be established on a case-by-case basis with a frequency dependent on the nature and effect of the discharge"). Neither has happened here. EPA appears to be applying standard monitoring frequencies across facilities, despite having previously determined that different monitoring frequencies were necessary. And since there are no facility-specific fact sheets, no explanation for these changes or how the proposed monitoring frequencies were set, including whether any of the required factors were considered, is given. Running directly afoul of the Permit Writers' Manual and deviating from past practice, without explanation for either, is seemingly the definition of arbitrary and capricious.

And the problems do not end there. With respect to reductions in monitoring frequency, the Permit Writers' Manual, referencing 1996 EPA-issued Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies, states that NPDES reporting and monitoring requirements may be reduced on the basis of a demonstration of excellent historical performance. Facilities can demonstrate that historical performance by meeting a set of compliance and enforcement criteria and by demonstrating their ability to consistently discharge pollutants below the levels necessary to meet their existing NPDES permit limitations. Reductions are determined parameter-by-parameter, on the basis of the existing monitoring frequency and the percentage below the limitation at which the parameter is being discharged. The reductions are incorporated when the permit is reissued. To remain eligible for the reductions, permittees are expected to maintain the parameter performance levels and good compliance on which the reductions were based.

Id. at 8-6. None of this analysis has been provided for the reductions in monitoring requirements EPA is proposing. A complete list of the monitoring requirement reductions proposed for the Medfield and Milford WWTFs is included in the chart below.

Facility	Parameter	Change
Medfield WWTF	BOD	Monitoring frequency reduced from 3/week to 1/week
Medfield WWTF	TSS	Monitoring frequency reduced from 3/week to 1/week

Medfield WWTF	pH	Monitoring frequency reduced from 1/day to 5/week
Medfield WWTF	Ammonia Nitrogen (June 1 through Oct. 31)	Monitoring frequency reduced from 2/week to 2/month
Medfield WWTF	*Escherichia coli*	Sampling frequency reduced from 2/week to 1/week
Medfield WWTF	Lead	Sampling frequency reduced from 1/month to 4/year
Medfield WWTF	cadmium	Sampling frequency reduced from 1/month to 4/year
Medfield WWTF	Phosphorus (April 1 through Oct. 31)	Monitoring frequency reduced from 2/week to 2/month
Medfield WWTF	Phosphorus (Nov. 1 through March 31)	Sampling frequency reduced from 1/week to 2/month
Medfield WWTF	Orthophosphate	No longer included
Milford WWTF	BOD	Monitoring frequency reduced from 3/week to 1/week
Milford WWTF	TSS	Monitoring frequency reduced from 3/week to 1/week
Milford WWTF	pH	Monitoring frequency reduced from 1/day to 5/week
Milford WWTF	*Escherichia coli*	Sampling frequency reduced from 2/week to 1/week
Milford WWTF	Ammonia Nitrogen (May 1 through May 31)	Monitoring frequency dropped from 2/week to 2/month
Milford WWTF	Ammonia Nitrogen (June 1 through October 31)	Monitoring frequency reduced from 2/week to 2/month
Milford WWTF	Ammonia Nitrogen (November 1 through April 30)	1/month monitoring not included in draft authorization letter
Milford WWTF	Phosphorus (April 1-October 31)	Monitoring frequency reduced from 2/week to 2/month
Milford WWTF	Phosphorus (November 1-March 31)	Monitoring reduced from 1/week to 2/month

Response 275

Several comments, including this one, raised objections to changes in effluent monitoring frequencies in this General Permit compared to the current individual permits. This comment raises concerns regarding consistency with the Permit Writers' Manual and past practice. Comment 221 raises anti-backsliding concerns. Several other comments requested specific monitoring frequency increases and/or reductions. EPA has responded to these comments below.

The purpose of effluent monitoring is to characterize the discharge and/or ensure compliance with a permit limit. Short of continuous monitoring, which is unrealistic for

most pollutants, the facilities and EPA must rely on a limited number of samples and then make inferences from the data. In EPA's Permit Writer's Manual (PWM), the only specific numeric frequency given is in chapter 8.1.1., "…NPDES permits must require permittees to monitor for all limited pollutants and report data at least once per year." 314 CMR 3.11(9)(b) and 40 CFR § 122.44 (i)(2) also state this one sample per year minimum requirement. The monitoring frequencies required by this General Permit all satisfy that requirement.

The PWM chapter 8.1.1 also states "NPDES permits must also specify the… frequency sufficient to yield data that are representative of the activity." This gives the permit writer a certain amount of discretion in determining sampling/monitoring frequencies. Subsequently, PWM chapter 8.1.3 provides additional guidance for applying this guidance on a "case-by-case" basis. See also 40 CFR § 122.44(i)(2) for reference to "case-by-case" basis. The comment suggests that this "case-by-case" determination must be done through individual permits with individual fact sheets. EPA disagrees and asserts that such discretion and case-by-case determination regarding monitoring frequency may also be applied in the development of a general permit such as this one. In this case, EPA determined that the eligible similarly-sized WWTFs in Massachusetts with 1 to 5 MGD design flow capacity and relatively comparable waste streams and variability all can be categorized to have a similar "nature and effect of the discharge" as described in 40 CFR § 122.44(i)(2). Therefore, EPA determined that these dischargers collectively shall have the same or similar monitoring requirements under this General Permit. EPA notes that this categorical analysis for similar dischargers under a general permit is also consistent with 40 CFR § 122.28(a)(2)(ii)(D). See also General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

The comment suggests that this kind of uniform treatment of these facilities is arbitrary and capricious because it results in changes in frequency from prior permits that had a range of monitoring requirements. Merely because something is different than "past practice" does not mean it is arbitrary or capricious. Rather, EPA considers that consistent treatment of such similar discharges is reasonable and justified as described further below.

When determining monitoring frequencies, PWM chapter 8.1.3 includes some factors that may be considered at EPA's discretion. EPA highlights the following factors with an explanation of how each has been considered with respect to this General Permit:

> <u>Design capacity of the treatment facility</u>: Each eligible discharger has a similar design capacity (*i.e.*, 1 to 5 MGD) and should have similar monitoring.
>
> <u>Treatment method used</u>: Each eligible WWTF has biological secondary treatment of municipal wastewater and should have similar monitoring.
>
> <u>Compliance history</u>: The commenter correctly notes that "NPDES reporting and monitoring requirements may be reduced on the basis of a demonstration of excellent historical performance", but then seems to suggest that compliance history is the *only* reason that monitoring frequency can be reduced. While

compliance history is a factor to consider in reducing monitoring frequency, it is not the *only* reason that testing frequency may be reduced.

Cost of monitoring relative to permittee's capabilities: The monitoring frequency should not be excessive and should be what is necessary to provide sufficient information about the discharge. EPA notes that the General Permit also requires significant increases in monitoring (and associated costs) for PFAS (influent, effluent and sludge), nitrogen, phosphorus (effluent and/or ambient) and other pollutants for which EPA has identified a substantive need for more data. Conversely, for the pollutants for which EPA reduced or eliminated monitoring, EPA considered it appropriate given that they are already highly characterized in the discharge or are deemed unnecessary based on the nature and effect of the discharge.

Nature of the pollutants: Within the General Permit certain pollutants have a monitoring frequency that corresponds to the nature of the pollutant. For example, bacteria monitoring is more frequent than many other pollutants due to the potential to impact human health.

Frequency of the discharge: Each eligible discharger has a similar frequency of discharge (*i.e.*, continuous) and should have similar monitoring.

Number of monthly samples used in developing effluent limitations: Less frequent monthly monitoring will result in higher variability in the average monthly results, potentially making it more difficult to comply with a monthly average limit. Therefore, by reducing the monitoring frequency, dischargers that are close to exceeding a permit limit will need to reduce their load even more to ensure consistent compliance with the limit. EPA considers this to be an environmentally beneficial outcome of reduced monitoring, so long as enough monitoring to track compliance is maintained.

Tiered limitations: For pollutants that have a seasonal impact (*e.g.*, nutrients) or seasonal limit (*e.g.*, bacteria), EPA has reduced monitoring in the off-season. Additionally, the whole effluent toxicity (WET) testing frequency in the General Permit increases as available dilution decreases given that lower dilution scenarios have a higher potential for toxic impacts.

Other considerations: The General Permit includes other considerations that apply to all similar dischargers eligible for coverage. For example, to ensure representative monitoring, the General Permit requires a routine sampling program with monitoring at the same location, time, and days of the week each month. As another example, bacteria and total residual chlorine sampling must be done concurrently due to the interrelatedness of these pollutants and the need to comply with both simultaneously. Relatedly, the General Permit (at Part II.B.9.d) requires the use of chlorination and dechlorination alarm systems to ensure adequate disinfection. This requirement, which is new for many of the facilities, allows for less frequent effluent monitoring of bacteria and TRC while maintaining consistent compliance with both permit limits.

Based on this evaluation, EPA has clearly considered the various factors presented in the PWM and applied its discretion in establishing appropriate monitoring frequencies.

In addition, based on Comments 226 and 279, EPA has reevaluated the monitoring frequencies for total phosphorus and fecal coliform, respectively, and updated the frequencies for these in the Final General Permit accordingly. Additionally, a few comments suggested that frequency reductions not be allowed for pollutants that have historic permit violations. EPA disagrees and notes that minor reductions in monitoring frequency are unlikely to have a significant impact on the facility's compliance (or non-compliance) with their limit so long as enough monitoring to track compliance is maintained. Actually, as noted above, less frequent monitoring can result in higher variability in the average monthly results, potentially making it more difficult to comply with a monthly average limit and the need to reduce their load even more to ensure consistent compliance with the limit. EPA considers this to be an environmentally beneficial outcome of reduced monitoring.

While EPA received several other comments (similar to Comment 275) highlighting monitoring frequency reductions for specific facilities, none of these comments provided any rationale (other than for total phosphorus and fecal coliform mentioned above) for why the proposed monitoring frequency for any pollutant was insufficient to achieve the purpose of the monitoring requirement, other than the issue of historic permit violations discussed above. Therefore, EPA concludes that the monitoring frequencies in the Final General Permit are sufficient to characterize the discharge and/or ensure compliance with permit limits.

Regarding anti-backsliding, EPA agrees that 40 CFR § 122.44 (l)(1) does not apply only to permit limits but also to "conditions" such as monitoring requirements. This regulation says the following:

> Except as provided in paragraph (l)(2) of this section when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under § 122.62.)

In the development of this General Permit, EPA conducted an analysis of appropriate monitoring conditions as described above. Based on this analysis, EPA determined that "circumstances…have materially and substantial changed" based on the amount of data available to characterize each discharge. For example, this comment indicates that BOD_5 and TSS monitoring frequencies from the 2011 Medfield individual permit were reduced from 3/week to 1/week. In the development of this General Permit, EPA determined that circumstances changed regarding the amount of available data to characterize the discharge with respect to these pollutants, indicating that less frequent sampling would be sufficient to continue to characterize the discharge and ensure permit compliance with respect to these pollutants. As another example, the 2013 Easthampton individual permit

included monthly phosphorus monitoring. In the development of this General Permit, EPA evaluated this data and determined that circumstances changed regarding the amount of available data to characterize the Easthampton discharge of phosphorus and resulted in a finding that there is no reasonable potential for the discharge of phosphorus to cause or contribute to an excursion of WQS. Therefore, based on the Agency's judgment and technical expertise, it has determined the monitoring requirements in both examples could be reduced in accordance with anti-backsliding regulations at 40 CFR § 122.44 (l)(1). *See In re: City of Lowell,* 18 E.A.D. 115, 189 (EAB 2020) ("Under the Clean Water Act, the Region has broad authority to impose monitoring requirements"); *In re Evoqua Water Techs. L.L.C.,* 17 E.A.D. 795, 828-29 (EAB 2019) (deferring to the Region's judgment on amount of monitoring needed*).* EPA asserts that all reductions in monitoring frequency in the General Permit comply with anti-backsliding regulations based on such rationale and analysis.[29]

In contrast, if anti-backsliding regulations were to prevent such reductions in monitoring frequency when EPA determines that level of monitoring is no longer necessary for regulatory purposes, it would mean that any time EPA established a monitoring requirement in a permit to collect data for a particular purpose that monitoring requirement would need to continue in perpetuity even after the purpose for its collection has been achieved. Such an interpretation and application of anti-backsliding regulations would have no environmental benefit and would clearly not support the intention of anti-backsliding regulations to ensure actual water quality improvements are maintained.

Comment 276

We also note that for the Medfield WWTF, the C-NOEC effluent limitation in the draft authorization letter is 32%, as compared to 18% in the facility's current individual permit. This change appears to be due to a recalculation of the 7Q10. The fact sheet for the facility's current individual permit has a detailed derivation of the 7Q10 that results in a 7Q10 of 6.73 MGD. The Draft General Permit uses a 7Q10 of 3.19 MGD, which is not explained in the corresponding fact sheet. The new 7Q10 changes the dilution factor from 5.43 to 3.1. As discussed above, the lack of facility-specific fact sheets to explain the limits and underlying assumptions in the Draft General Permit makes it difficult to understand the basis for the effluent limits and prevents a reviewer from determining if the new flow is correct or an error. Moreover, all of the Water Management Act permits for wells in the upper Charles River are expected to reviewed this year. There may be proposed increases in withdrawals which could affect the 7Q10 calculations currently used. It is not clear how these potential changes would be incorporated into the permit limits and calculations, especially given that the potential changes will be site-specific and depend on where a particular withdrawal point is located relative to the discharge/return flow point from the WWTF.

[29] EPA recognizes that some of the facilities covered by this General Permit have individual permits that were reissued quite recently without incorporating these monitoring frequency reductions. Some comments suggested that this was a confirmation by EPA that the higher monitoring frequencies were still necessary. EPA disagrees and notes that the General Permit provided an opportunity to conduct this analysis on a broad scale in order to establish appropriate monitoring frequencies for this category of similar dischargers.

Response 276

EPA confirms that the 7Q10 has been updated, as noted in Section 3 of the Fact Sheet, and the updated 7Q10 for Medfield is 3.19 MGD, as noted in Attachment E of the General Permit. EPA confirms that this is not an error and the background information on this update was available (upon request) as part of the administrative record throughout the comment period. Having this type of information available upon request as part of the administrative record is typical of EPA's process for both general permits and individual permits. EPA will update these 7Q10 analyses in the development of the next permit reissuance and will again make them publicly available as an additional resource to inform site-specific comments on the next Draft General Permit.

The General Permit was developed based on all available information regarding the current status of the receiving waters. Future reissuances of the permit will likewise include site-specific analysis for all eligible dischargers based on all available information such as any potential changes in the receiving waters, including potential increase in withdrawals as referred to in this comment.

Comment 277

Given these significant issues, CRWA echoes the request by Mass Rivers that EPA reconsider its course of action and withdraw the proposed Draft General Permit. Should EPA nevertheless decide to move forward with the General Permit approach, we also reiterate Mass Rivers' request for public hearings on this proposed change to the permitting regime. We appreciate your consideration of these comments and requests.

Response 277

See Response 213.

LL. Comments from Samantha Woods, Executive Director, North and South Rivers Watersheds Association, on April 26, 2022

Comment 278

The Environmental Protection Agency, Region 1 ("EPA") is proposing the Medium Wastewater Treatment Facility General Permit ("Permit") to replace the individual Clean Water Act ("CWA") discharge permits for 44 facilities treating domestic sewage discharging into Massachusetts waters. Two wastewater treatment plant facilities, Scituate and Rockland Wastewater Treatment Plants, discharge into the North and South Rivers Watershed and are eligible for renewal under this General Permit.

The North and South Rivers Watershed Association (NSRWA) is an environmental nonprofit whose purpose is to protect our waters within the watershed to the North and South Rivers. Our organization represents over 1,500 members and provides environmental education and outreach throughout the South Shore. We would like to submit the following comments and concerns related to the renewal of these two permits with a particular focus on the Scituate Wastewater Treatment Plant NPDES permit that releases into the Herring River, a tributary of the North River. In addition, we have signed onto a group comment letter through the Massachusetts Rivers Alliance that outlines other substantive issues we are concerned with regarding the use of a general permit to cover multiple wastewater treatment facilities.

The new general permit for medium wastewater treatment plants will replace the current individual permits. We are concerned that the grouping of treatment plants simply based on the size of their flows will decrease the site-specific protections to protect the waters that they discharge to and limits the ability of the public to participate easily in the review process. For example, Rockland Wastewater Treatment Facility discharges to a small freshwater stream in which phosphorus is the limiting nutrient while Scituate discharges to an estuary where nitrogen is the limiting nutrient. Both of these ecosystems are sensitive in different ways. Estuaries are tidally dynamic and are not biologically or physically comparable to freshwater ecosystems. Wastewater discharges impact to these differing waterbodies impact them in very different and site specific ways. Examples of these site-specific differences are characterized in our comments below.

Response 278

EPA acknowledges this comment and has responded below. Regarding public participation, see Response 219 and General Response to Comments on Benefits and Appropriateness of General Permit Approach.

Comment 279

Scituate Wastewater Treatment Plant Discharges

The Herring River and North River are both classified as SA waters and designated for shellfishing. In order to maintain compliance with the National Shellfish Sanitation Program Guidance, the Massachusetts Division of Marine Fisheries (MassDMF) is closing shellfish harvest areas around wastewater treatment plants due to potential public health concerns from the release of sewage and viruses into the waters from wastewater treatment plants. The shellfish harvest closure area proposed in the North and South Rivers estuary is a 1:1000 dilution area surrounding the wastewater treatment plants that is meant to protect the public from ingestion of shellfish that may have become contaminated by viruses that might be discharged from the treatment plant. The closure areas are based, in part, on new and evolving science that indicates that Male Specific Coliphage (MSC) is a better indicator for viruses than the current water quality standard, which is fecal coliform, particularly in winter months when temperature and light support virus longevity. However, there are currently no water quality standards associated with MSC in ambient surface waters.

Initial studies conducted by MassDMF of the Scituate WWTP influent and effluent indicate a high log reduction of MSC - likely due to the use of ultraviolet (UV) treatment at the plant (see attached preliminary results from MassDMF). While this is good news, it may not reopen all of the shellfish beds because the current NSSP protection zone is based on dilution rather than treatment of any known pollutant. This is seemingly incongruous with the NPDES permitting and Clean Water Act framework for eliminating pollution from the nation's waterways to support designated uses based on pollutant removal. The EPA and MassDEP should examine the efficacy of adding MSC as a pollutant to be monitored and possibly regulated in order to protect designated uses under the Clean Water Act. We understand that the science is evolving but urge the EPA and MassDEP to pursue this issue as the current concerns about viruses and discharges from the wastewater treatment plant are preventing the public from the use and enjoyment of these waters perhaps unnecessarily given the initial test results provided.

In the existing permit, the plant is required to test for fecal coliform 3x/week. The new general permit is only requiring 1x/week. We feel this is a step backward in protecting our waters. Should the treatment process fail for some reason, sampling only 1x/week testing could easily miss it. With the new concerns being raised by the NSSP with regards to bacteria and viral contamination, we are requesting testing 5x/week of fecal coliform to ensure that the standards are met and assure the NSSP and the public that the plant is highly performing at all times. Over the past 70 months of testing the plant has exceeded the daily max fecal coliform standard 13 times or 18% of the time. The plant has met the Geometric Mean 100% of the time. The plant's treatment processes appear to be doing well at meeting the fecal coliform standard and adding 2 more days of testing will continue to assure that any problems will be noticed, remedied in a timely fashion, and allow the MassDMF and NSSP program, as well as the local shellfish warden, to have real-time data to allow for shutting down shellfish harvesting if needed.

Response 279

Regarding MSC, EPA agrees with the comment that high log reduction of MSC at the Scituate WWTF is good news for nearby shellfishing beds. However, as the comment also notes, the NSSP protection zone is based on dilution and would not change even if the permit contained monitoring and/or a limitation for MSC. Given that the science is new and evolving, it is possible that both the NSSP and the Massachusetts water quality standards may be updated in the future to include MSC. At that time, EPA would certainly include a corresponding requirement in NPDES permits.

Regarding fecal coliform monitoring frequency, EPA agrees that discharges to SA or SB waters have the potential to impact human health through contamination of shellfishing beds. Based on this comment, EPA reevaluated the current individual permits for the 10 eligible dischargers to SA or SB waters and found that the current fecal coliform monitoring frequency ranged from 1/week to 3/week for all dischargers except for Newburyport which required 5/week. EPA considers that 3/week is sufficient to ensure compliance with the effluent limit and notes that Part II.E.2 of the General Permit also requires the permittees to notify Massachusetts Division of Marine Fisheries (MassDMF) within 4 hours of any emergency condition, plant upset, bypass, SSO discharges or other system failure which has the potential to violate bacteria permit limits. Upon being notified, MassDMF may also conduct ambient sampling to ascertain any violations of the NSSP or water quality standards and make determinations regarding closure of shellfishing beds. Therefore, the Final General Permit has been updated to require 3/week monitoring for fecal coliform for all dischargers to Class SA and SB waters (including Scituate).

Comment 280

Rockland Wastewater Treatment Plant Discharges

The Rockland Wastewater Treatment Plant flows into French Stream. French Stream segment (MA-9403) is listed as impaired for dissolved oxygen, E. coli, Fecal coliform, fish bioassessments, and total phosphorus. A TMDL is required for phosphorus in this watershed but has not been completed.

The plant has a phosphorus discharge limit of 0.1 mg/L April 1 - October 31 (the growing season) and 1.0 mg/L November 1 - March 31 in an attempt to limit the discharge of this

pollutant into the stream however without a TMDL we do not know what the carrying capacity of the receiving waters are and we know that the discharge volume is large compared with the streamflow. We urge the state and federal agencies to determine what the phosphorus loading limits should be in these waters.

In addition, it was difficult to assess Rockland's past discharge permit compliance because there was no discharge monitoring summary report data nor reasonable potential analysis of limits calculations provided with the permit review.

Response 280

In the absence of a TMDL, EPA has established permit limitations designed to protect the designated uses of the receiving water based on all available information. In the 2021 permit reissuance, the phosphorus limit was reevaluated and lowered from 0.2 mg/L to 0.1 mg/L (April 1 – October 31) with a compliance schedule through November 2024 to achieve the more stringent limit. Given that this reevaluation and lowering of the limit occurred so recently and the facility is in the process of making the necessary process improvements to achieve the limit, EPA expects that this limit will ensure compliance with water quality standards and this General Permit did not include any change to the limit or compliance schedule. EPA notes that it only received comments from the Town of Rockland on its 2021 individual permit reissuance. If a TMDL is developed in the future, then a future permit issuance must ensure compliance with that TMDL.

Similarly, the DMR data for the 2021 Rockland permit reissuance is available on our website and EPA did not create a new DMR summary for this General Permit. To clarify this, the following language was on the Medium WWTF General Permit website during the public comment period:

> "Note that [Discharge Monitoring Report Data]…for facilities whose individual permits were recently reissued (i.e., since January 2019) are not posted below but can be found on our website for each individual permit at https://www.epa.gov/npdes-permits/massachusetts-final-individual-npdes-permits."

Comment 281

PFAS Monitoring

The new permit is requiring annual monitoring of PFAS, an emerging contaminant of concern that the state of Massachusetts has recently set a standard for in drinking water to protect public health. We applaud the monitoring of PFAS and urge the EPA to set a standard as soon as possible and begin regulating it to remove it from wastewater.

Response 281

EPA acknowledges this comment.

Comment 282

In conclusion, the NSRWA is requesting that individual permits be issued for Scituate and Rockland Wastewater Treatment Facilities as we believe this will be simpler for the public and

the regulated facilities to understand, comply with and track compliance than the proposed bifurcated General Permit and Notice of Authorization process proposed.

Response 282

See Response 236.

MM. Comments from Korrin Petersen, Vice President of Clean Water Advocacy, Buzzards Bay Coalition, on April 26, 2022

Comment 283

The Buzzards Bay Coalition ("Coalition") appreciates the opportunity to provide the US Environmental Protection Agency ("US EPA") comments on Draft NPDES Permit No. MAG590000 Medium Wastewater Treatment Facilities General Permit ("Draft General Permit"). **The Coalition opposes the inclusion of discharges within the Buzzards Bay watershed in the Draft General Permit.**

The Coalition is a membership-supported non-profit dedicated to the restoration, protection, and sustainable use and enjoyment of Buzzards Bay and its watershed. Supported by more than 10,000 members, the Coalition works to improve the health of the Bay ecosystem for all through education, conservation, research and advocacy.

The Coalition has signed on to and specifically incorporates by reference the comments of Massachusetts Rivers Alliance. The Coalition offers the following additional comments specifically on the three "eligible facilities" discharging to Buzzards Bay.

Response 283

EPA acknowledges this comment and has responded below. Regarding the comments of Massachusetts Rivers Alliance, see Responses 211 through 223.

Comment 284

Water Quality Challenges in Buzzards Bay

Buzzards Bay was designated by the United States Congress in 1985 as an "Estuary of National Significance," and was further designated by the US EPA as a "No Discharge Area" in 2000. Buzzards Bay is also a state-designated Ocean Sanctuary.

Three of the 44 "eligible facilities" in the Draft General Permit are discharges to Buzzards Bay and include the town of Dartmouth's Water Pollution Control Facility which discharges off Mishaum Point directly to Buzzards Bay, the town of Fairhaven's Wastewater Pollution Control Facility which discharges to Inner New Bedford Harbor and the town of Wareham's Water Pollution Control Facility which discharges to the Agawam/Wareham River.

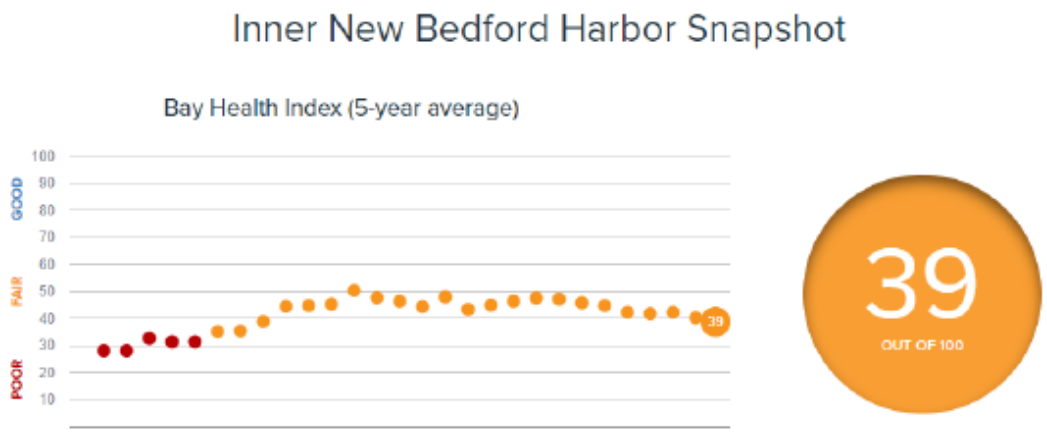
More than thirty years of EPA-approved Coalition water quality monitoring data indicate significant nitrogen impairment in estuaries across Buzzards Bay.[1] It is well established that nitrogen pollution, primarily from wastewater, is the greatest long-term threat to the health of Buzzards Bay waters. Nearly all of the more than 30 harbors and coves in Buzzards Bay are

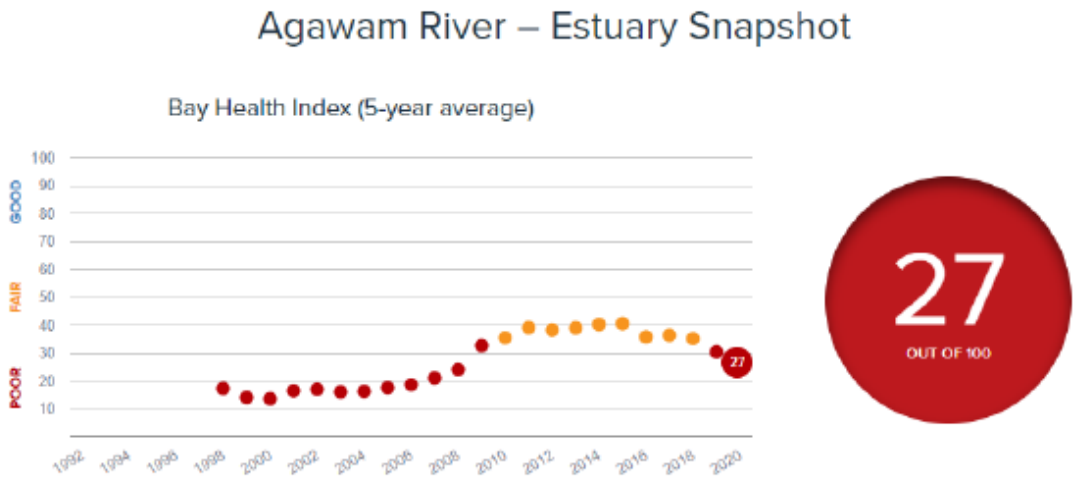
listed as a Category 5 water as impaired for nitrogen requiring a Total Maximum Daily Load ("TMDL") including Inner New Bedford Harbor and Agawam/Wareham River.

More than thirty years of EPA-approved Coalition water quality monitoring data indicate significant nitrogen impairment in estuaries across Buzzards Bay.[1] The Coalition's Bay Health Index measures the nutrient-related health of more than 100 harbors, coves, salt ponds and rivers throughout Buzzards Bay and Vineyard Sound. The index is a snapshot of the Bay's health with 100 indicating pristine water and 0 representing severe nitrogen pollution.

[1] https://www.nature.com/articles/s41597-021-00856-4

Below, the Bay Health Index graphs for Inner New Bedford Harbor, the receiving water of the Fairhaven Wastewater Pollution Control Facility ("Fairhaven WPCF"), and the Agawam River, the receiving water for the Wareham Water Pollution Control Facility ("Wareham WPCF") are provided. Data clearly illustrate both estuaries inability to meet water quality standards. In fact, both estuaries rank among the lowest in nutrient-related water quality of all estuaries around Buzzards Bay.





In an effort to set nitrogen thresholds in the region's estuaries and establish TMDLs, the state adopted a site-specific approach to determine each source of nitrogen pollution to the estuary, the

relative contribution of each nitrogen source, the hydrodynamics and benthic habitat of each water body. Final Massachusetts Estuaries Reports, funded by the state and local communities, were completed for both the Agawam River and Inner New Bedford Harbor concluding that the Wareham WPCF and Fairhaven WPCF were both major sources of nitrogen to each receiving water.

Response 284

EPA agrees that Fairhaven and Wareham are significant sources of nitrogen to receiving waters that are not meeting water quality standards. In their current individual permits, both facilities received stringent nitrogen limits designed to ensure the discharges do not cause or contribute to violations of water quality standards. Upon review of their DMR data, Wareham has been consistently complying with their nitrogen effluent limits. However, Fairhaven is under an administrative order on consent which includes a compliance schedule. They are currently engaged in designing an upgrade to meet the nitrogen limit and are expected to be in compliance with the nitrogen limit by October of 2026. EPA has carried forward these limits under the General Permit. See also Response 143 regarding Fairhaven's administrative order.

Regarding Dartmouth, EPA notes that this facility is also a significant source of nitrogen to Buzzards Bay but discharges to a deep, well mixed portion of the Bay (with significantly more flushing than Fairhaven or Wareham). Further, EPA notes that Buzzards Bay itself is not impaired for nitrogen. The current individual permit did not contain a nitrogen limit for Dartmouth and EPA does not consider that imposing a nitrogen limit under this general permit issuance is warranted at this time.

Comment 285

Federal Regulation Make Buzzards Bay Facilities Ineligible for Coverage Under a General Permit

Federal regulations state that EPA has the authority to issue General Permits when effluent limits are the same. EPA regulations[2] allow for general permits if the sources all:

A. Involve the same or substantially similar types of operations;
B. Discharge the same types of wastes or engage in the same types of sludge use or disposal practices;
C. Require the same effluent limitations, operating conditions, or standards for sewage sludge use or disposal;
D. Require the same or similar monitoring, and;
E. In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

2 40 CFR sec 122.28(a)(2)(ii).

The three "eligible facilities" within the Buzzards Bay watershed require substantially different effluent limitations and operating conditions in order to meet the requirements of the federal Clean Water Act. In order to meet water quality standards of each unique receiving water, discharge permits must be specifically tailored and cannot be the same. The facilities within the Buzzards Bay watershed all require, and currently have, very different effluent limitations and

should be excluded from the Draft General Permit. The table below shows the different limits required of each individual discharge.

	Total Nitrogen Load Limit	Total Nitrogen Concentration Limit	Flow Limit
Wareham WPCF	52lbs/Day	4mg/L	1.56MGD
Fairhaven	125lb/Day[3]	None	5MGD
Dartmouth	None	None	4.2MGD

3 Limit established pursuant to Administrative Order on Consent Docket No. CWA-AO-R01-FY18-04 April 2018

Each facility discharges to unique waterbodies within the Buzzards Bay watershed. Each of those waterbodies has unique hydrodynamics and estuarine ecologies as well as varying pollution contributions from other sources and each receiving water requires substantially different effluent limitations. It is critical that EPA be guided by sound science and not by a desire for administrative efficiency. Including these discharges in the Draft General Permit is not supported by science and is therefore arbitrary and capricious.

Furthermore, the intent of the NPDES general permit program was "to provide administrative flexibility while dealing with numerous *minor* discharges subject to the same limitations."[4] The three discharges within the Buzzards Bay watershed cannot be considered minor. In the case of the Fairhaven and Wareham facilities, the state Massachusetts Estuaries Program found that these facilities account for a major source of pollution in each receiving water. The Wareham WPCF accounts for 16% of the overall load to the Wareham River Estuary, second only to on-site septic systems. The Fairhaven WWTP accounts for 47% of the nitrogen to Inner New Bedford Harbor, the largest nitrogen contributor.

4 National Pollution Discharge Elimination System: Revision of Regulations, 44 Fed. Reg. 32854, 32873 (June 7, 1979) (to be codified at 40 C.F.R. pt. 122).

Clearly, it was not intended that such major sources of pollution be managed through a general permit.

Response 285

See General Response to Comments on Benefits and Appropriateness of General Permit Approach.

Regarding "minor" discharges, EPA disagrees that the general permit program is limited to minor discharges. Indeed, EPA explicitly removed a requirement that the discharges be "minor" in 1985. See 50 Fed. Reg. 6939, 6940 (Feb 19, 1985). As detailed in the General Response to Comments on Benefits and Appropriateness of General Permit Approach, subsequent EPA rulemakings clarified that the general permit program is intended to amenable to a broad range of sources.

Comment 286

Dartmouth Discharges to the Ocean Sanctuary.

The Draft General Permit makes discharges to Ocean Sanctuaries ineligible for coverage. The town of Dartmouth's WPCF discflow harges to Buzzards Bay, a state designated ocean sanctuary. Therefore, the town of Dartmouth's WWTP is not eligible for coverage under the General Permit.

Response 286

EPA acknowledges that the Draft General Permit included an exclusion for discharges to Massachusetts Ocean Sanctuaries. EPA's intention was to ensure compliance with the Massachusetts Ocean Sanctuaries Act rather than to exclude any permits from coverage. Given that certain individual permits (such as Dartmouth's WPCF) already authorize these discharges in accordance with the Massachusetts Ocean Sanctuaries Act, EPA considers that these permits may also be covered under this General Permit so long as compliance with the Massachusetts Ocean Sanctuaries Act is maintained. Therefore, EPA has modified the exclusion in the Final General Permit to say the following:

> "Discharges inconsistent with the Massachusetts Ocean Sanctuaries Act, in accordance with 301 CMR 27.00;"

Similarly, EPA included an exclusion in the Draft General Permit for discharges to territorial seas which has been removed in the Final General Permit and asserts that all such discharges must be consistent with the Clean Water Act whether they are covered by an individual permit or a general permit.

Comment 287

Anti-Backsliding Violation

In all cases for the Buzzards Bay "eligible facilities", the Draft General Permit reduces monitoring frequency over current individual permits without explanation. The goal of the Clean Water Act was the complete elimination of pollutant discharges. The Act assumes that limits on discharges become progressively more stringent until such time that this goal is achieved. The Wareham and Fairhaven facilities discharge to waters that fail to meet water quality standards. Reduced total nitrogen monitoring of these major sources of pollution to nitrogen impaired waterbodies is arbitrary and capricious and fail to further the goals of the Clean Water Act.

The following tables illustrate the difference in measurement frequency between the current individual NPDES Permit and the Draft General Permit among the "eligible facilities".

PARAMETER	MEASUREMENT FREQUENCY Individual NPDES	MEASUREMENT FREQUENCY Draft General Permit	DIFFERENCE
Total Nitrogen (April 1 – October 31)	3/week	1/month	75% reduction in Monitoring

Fairhaven

PARAMETER	MEASUREMENT FREQUENCY Individual NPDES	MEASUREMENT FREQUENCY Draft General Permit	DIFFERENCE
Total Nitrogen (May 1 – October 31)	3/week	1/month	75% reduction in Monitoring

Dartmouth

PARAMETER	MEASUREMENT FREQUENCY Individual NPDES	MEASUREMENT FREQUENCY Draft General Permit	DIFFERENCE
Total Nitrogen	2/month	1/month	50% reduction in Monitoring

As nitrogen limits are established on a case-by-case basis, monitoring should also be tailored to each specific discharge to ensure that water quality standards of the receiving water are being met. This cannot be achieved through a General Permit and must be accomplished on an individual basis.

Response 287

See Responses 216 and 275.

Comment 288

Request for a Public Hearing

For the reasons stated above, and pursuant to page 48 of the Fact Sheet, the Coalition requests that the EPA hold a public hearing on the Draft General Permit and its application to discharges within the Buzzards Bay watershed.

Response 288

See Response 213.

Comment 289

Request for Individual Permits

Discharges to Buzzards Bay must be considered on an individual basis. Pursuant to 40 CFR sec 122.28(b)(3), the Coalition, as an interested person, is petitioning the director to require individual permits for Fairhaven, Wareham, and Dartmouth.

> **Response 289**
>
> For reasons specified in General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach and Responses 231 and 283 through 288, EPA has determined that these dischargers will remain eligible under the General Permit at this time.

Comment 290

Conclusion

It is inappropriate for facilities which discharge within the Buzzards Bay watershed to be included under a General Permit. The restoration of water quality in these estuaries demands that these facilities are permitted on an individual basis to ensure that pollution limits are appropriately tailored and individualized in order to meet the site-specific criteria.

> **Response 290**
>
> See Response 289. EPA confirms that these discharges will be appropriately covered under the General Permit in compliance with the CWA and all relevant water quality standards.

NN. Comments from Andrew Kawczak, President, Hoosic River Watershed Association, on March 29, 2022:

Comment 291

The Hoosic River Watershed Association (HooRWA) is a citizens' group that looks after the river. We are dedicated to the conservation, habitat restoration and enjoyment of the Hoosic River and its watershed, through education, research and advocacy. We envision a watershed that is ecologically sound and adds to the quality of life for its residents. As an organization, we have existed for over 36 years and have been a voice for the 720 square mile watershed in the states of Massachusetts, Vermont and New York. As such, we are again an interested party to ensuring the Hoosic River and its' tributaries are protected, to the extent possible, from abuse, toxins, excessive sediment, nutrients, oxygen depletion, etc. As we read the proposed changes to the issuing permits for medium-sized wastewater treatment Plants, we are NOT supportive of their movement to a General permit status. As written, we do not believe there will be a mechanism for our organization (or others) to effectively comment upon future permits. We do not believe one size (of General permit) fits all situations. For example, our watershed includes the Adams wastewater treatment plant. We believe this facility is due for a permit renewal in July of 2022. We are aware that Adams welcomed several large new (indoor) marijuana growing/ processing operations into the community. Although little is known about the various plant solids/compounds being sent to the wastewater treatment plant, attached is a well written WPI (college research) document that suggests some nasty things could complicate the

filtering/capturing of pollutants at the WWTP. Ideally, we would like to have these items captured before they reach the Hoosic River. Examples include: excessive BOD, COD, TSS, phosphates, nitrates, calcium, magnesium, iron, zinc, pesticides and other industrial chemicals. Please read the attached document carefully to receive a comprehensive picture of the potential issues. That being said, we prefer you find a method of permit writing that can properly regulate the release of these chemicals to the Hoosic River. Since EPA is an organization charged with advocating for river health, we strongly urge the EPA to safeguard our waterways from potential pollutants. We implore you to consider our request seriously and stay with the site-specific permits.

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

Response 291

See Response 231 and General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

Regarding public participation, EPA asserts that interested parties will be able to comment on future permits in the same manner the commenter was able to comment on this permit. See also Response 219 and General Response to Comments on Benefits and Appropriateness of General Permit Approach.

Regarding the pollutants from the industrial users mentioned in the comment, EPA confirms that these will be regulated in accordance with all applicable water quality standards regardless of whether the facility is covered by an individual permit or a general permit. Some of the pollutants listed already have effluent limits in place that Adams will need to continue to achieve. Others have required monitoring that will allow EPA to characterize their discharge and evaluate whether any new or more stringent limits are necessary in the future. Further, EPA notes that Adams conducts a Pretreatment Program as specified in Part III.D of the General Permit. This allows Adams to establish requirements such as local limits or monitoring requirements as well as carry out inspections on these industrial users as necessary ensure continued compliance with the POTW's NPDES permit or sludge use or disposal practices.

OO. Comments from Jody Frymire, Regulatory Affairs Specialist, IDEXX Laboratories, Inc, on April 14, 2022:

Comment 292

IDEXX Laboratories, Inc. appreciates the opportunity from the U.S. Environmental Protection Agency Region I (Agency) to submit our input on the Draft of the National Pollutant Discharge Elimination System (NPDES) General Permit for the Discharge of Wastewater from medium sized Wastewater Treatment Facilities in the Commonwealth of Massachusetts (Permit Number MAG590000), referred to as Draft General Permit. We respectfully request the Agency consider the following comment and revise the draft permit accordingly.

We recommend revising the analytical test method requirements for Class SA and SB water. This comment applies to the Draft General Permit within Section II. General Permit Requirements, Table 1. Effluent Limitations and Monitoring Requirements, Footnote 8.

Both Class SA and SB are marine waters that may be designated for shellfish harvesting and are required to use the bacteria indicator of fecal coliform when monitoring wastewater released to shellfish beds. For Class SA or SB shellfish harvesting fecal coliform monitoring requirements, the acceptable analytical test methods are those used by Massachusetts Division of Marine Fisheries and approved by the National Shellfish Sanitation Program (NSSP), per regulations 314 CMR 4.05 (4).(a).4.a. and 314 CMR 4.05 (4).(b).4.a.

The Draft General Permit is for the testing of wastewater effluent, not shellfish bed nor receiving water testing. The regulatory methodology employed for wastewater effluent testing should comply with EPA wastewater effluent testing per 40 CFR 136.3 to accomplish the quality goals.

The wastewater effluent discharge goal is to meet the criteria set forth by the NSSP and FDA, however, to meet the criteria does not mandate being commensurate with the testing methods. Having wastewater effluent discharge meet or exceed the criteria of the receiving water can, and should, be accomplished by testing wastewater effluent with a sufficiently sensitive EPA-approved fecal coliform testing method.

Revising the requirement to EPA-approved methods for wastewater effluent monitoring, allows utilities and laboratories to choose a sufficiently sensitive method that best supports their data reporting needs and still meet the NPDES Water Quality Standards fecal coliform limits. The limit for fecal coliform can, and should, be irrespective of the method, which is consistent with the approach taken by US EPA.

The method NSSP/FDA approved for shellfish bed monitoring is mTEC and published data indicate the mTEC method can have an undetected target error of 20% and a selectivity index of only 66% [1-2]. Allowing utilities and laboratories to choose methods from the CFR provides flexibility to use methods with higher selectivity and specificity to improve data outcomes.

Only allowing a single analytical method is a risk to compliance. If medium or materials to perform this method become unavailable, the discharger cannot test. Historically, the US EPA encourages multiple testing methodologies to avoid any inability to perform compliance testing. Additionally, the US EPA is forward-looking in updating analytical methods to include methods that improve data quality and precision through the Method Update Rule process.

This process leads to improved environmental and public health protection by allowing methods that are at least equal to, and often better than, older analytical methods. It appears, at least to this commenter, that NSSP/FDA has not updated their analytical test methods in nearly 30 years. The mTEC method, specifically, is not widely used in laboratory settings. The mTEC method has been shown to be less protective of environmental and public health and puts the discharger at risk of not meeting EPA and State quality objectives [2].

1. National Shellfish Sanitation Program (NSSP); Guide for the Control of Molluscan Shellfish 2017 Revision; US Food and Drug Administration, Silver Spring, MD. http://www.fda.gov/Food/GuidanceRegulation/FederalStateFoodPrograms/ucm2006754.htm

2. J. SANTIAGO-MERCADO and T.C. HAZEN; Comparison of Four Membrane Filter Methods for Fecal Coliform Enumeration in Tropical Waters, APPLIED AND ENVIRONMENTAL MICROBIOLOGY, Dec. 1987 https://aem.asm.org/content/aem/53/12/2922.full.pdf

Response 292

EPA acknowledges this comment and confirms that this General Permit (in accordance with applicable Massachusetts regulations at 314 CMR 4.05(4)(a)4.a and 314 CMR 4.05(4)(b)4.a) allows any sufficiently-sensitive test method approved in 40 CFR Part 136 for measuring fecal coliform, including the Colilert-18 method obtained from IDEXX Laboratories, Inc.

Comment 293

As an alternative or in conjunction with revising the acceptable analytical test method, the Agency could consider changing the discharge bacterial target from fecal coliform to enterococci. This would match the US EPA Water Quality Standard guidance, US EPA BEACH Act bacterial targets, current MA surface water quality criteria at 314 CMR 4.00. Updating the Draft General Permit to test for enterococci will protect receiving waters and shellfish bed areas as enterococci are a better indicator of fecal contamination then fecal coliforms.

Fecal coliform bacteria are commonly identified as being thermotolerant bacteria (able to grow at 44.5ºC) [4]. Thermotolerant bacteria consists of Escherichia coli, Klebsiella, Enterobacter, and Citrobacter species [4-5]. When testing for fecal coliforms, the population of the bacteria present can affect the fecal coliform results; for example, Klebsiella, Enterobacter, & Citrobacter species are false-positive indicators of fecal contamination as they are from nonfecal origin [5]. It has been found, up to 15% of Klebsiella (nonfecal origin) are thermotolerant and up to 10% of E. coli are not thermotolerant, thus potentially causing an error rate of 25% when testing for fecal coliforms [6].

IDEXX suggests focusing on the quality and testing of the effluent discharge, which will meet MA water quality criteria objectives. Allow the use of any sufficiently sensitive, EPA-approved fecal coliform testing method listed at 40 CFR 136.3 to meet NPDES effluent discharge requirements. Another alternative would be to use enterococci as the effluent discharge target to better align with federal and state water quality criteria. We encourage the Agency to consider this comment to continue the improvement and protection of the environment and public health.

3. US EPA (2014) Docket EPA-HQ-OW-2009-1019 National Pollutant Discharge Elimination System (NPDES): Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting https://www.federalregister.gov/documents/2014/08/19/2014-19265/national-pollutant-discharge-elimination-system-npdes-use-of-sufficiently-sensitive-test-methods-for
4. Warden, P., DeSarno, M., Volk, S. & Eldred, B. (2011). Evaluation of Colilert-18 for Detection and Enumeration of Fecal Coliform Bacteria in Wastewater Using the U.S. Environmental Protection Agency Alternative Test Procedure Protocol. Microbiological Methods, Journal of AOAC International. 94 (5), 111-114. doi: 10.5740/joaacint.
5. Doyle, M. & Erickson, M. (2006). Closing the Door on the Fecal Coliform Assay. Microbe, 1(4),162-163. https://www-asmscience-org.unr.idm.oclc.org/content/journal/microbe/10.1128/microbe.1.162.1
6. Allen, M., Edberg, S., Clancy, J., & Hrudey, S. (2013) Drinking water microbial myths. Critical Reviews in Microbiology. http://informahealthcare.com/mby

Response 293

See Response 292. EPA does not consider the use of enterococci for protection of shellfishing uses, as it would not be in accordance with current Massachusetts regulations at 314 CMR 4.05(4)(a)4.a. and 314 CMR 4.05(4)(b)4.a.

PP.Comments from Curt McCormick, on April 11, 2022.

Comment 294

Thanks for the opportunity to comment on the draft General Permit for Medium POTWs (Permit Number MAG590000).

The historical concept of using a General Permit to regulate POTWs for technology-based standards (e.g., Secondary Treatment) for certain common type of minor facilities such as lagoons has been well established. In fact, the use of general permits for other Clean Water Act regulated facilities is common (Stormwater, Industrial).

The use of a general permit to regulate POTWs with design flows >5mgd with pretreatment programs and POTWs that are required to have programs with design flows <5mgd (discretionary) has previously been evaluated by EPA Region 8, Region 6, and EPA Water attorneys in the 1980's. The legal review at that time found that the use of a general permit for pretreatment programs was not appropriate. The current draft general permit appears to have the same problems: it is being used in lieu of EPA's individual NPDES permit by arbitrarily calling it a general permit. Is this so the Agency can get backlogged permits issued? For POTWs with a Pretreatment Program, the POTW will generally make at least one modification to its Pretreatment Program that meets the definition of a "Substantial Modification" requiring EPA to public notice and formally approve the modification. This approval is a modification of the NPDES permit. Therefore, an individual NPDES permit is used. The regulations do not seem to support this approach.

Further, for POTWs required to develop a Pretreatment Program, specific compliance dates are included for the POTW to develop and submit a complete program to EPA for public notice and approval. Again, the program would be approved by EPA resulting in a modification of the permit. Again, this is why an individual permit is used. The permit would establish the approved program and set annual reporting requirements (some are based on a calendar year and others on the 12-month period after the program approval date).

Response 294

EPA disagrees that facilities with pretreatment programs cannot be effectively covered by a general permit. Approximately 16 of the eligible facilities have an existing Industrial Pretreatment Program (IPP) and the remaining eligible facilities do not have such a program. In the Draft General Permit, EPA was not requiring any new programs to be developed through the issuance of this General Permit. However, based on Comment 295 below, the Final General Permit does require a new IPP to be developed for one eligible facility (*i.e.*, Northbridge). EPA confirms that this does not preclude EPA from maintaining coverage for this facility under this General Permit. Rather, EPA may address this in at least two ways:

(1) EPA may establish all relevant permit requirements that will apply both before and after approval of the program indicating that requirements that apply after the program approval are based on the date of approval and would therefore not require any modification to incorporate more specific dates.

(2) EPA could modify the General Permit if necessary to incorporate any such dates or other changes. Even in this case, EPA considers the overall efficiency gained through the General Permit to be much greater. Regarding the overall efficiency of the General Permit, see General Response to Comments Regarding Benefits and Appropriateness of General Permit Approach.

In this case, EPA has opted to include all relevant permit requirements as described in the first approach above. If any modifications are necessary during the life of the permit, EPA may subsequently modify the General Permit in accordance with applicable regulations at 40 CFR § 122.62.

Comment 295

While at EPA Regions 6 and 8, and in the 14 years as a POTW consultant after leaving EPA, I used to provide training to POTWs. One aspect of that training was about Enforcement against industrial users that discharge to POTWs. Looking at the list of POTWs in the Reasonable Potential attachment to the General Permit, I noted that Northbridge WWTP is a POTW listed. The general permit for Northbridge fails to include a permit fact sheet (or rationale) that establishes where the POTW that receives wastewater from a Categorical Industrial User is not required to develop and implement a pretreatment program. I understand that there may be an older one but there does not appear to be one that corresponds to the general permit being proposed. It appears that this facility has a history of Pass Through of Zinc from an industrial user. In fact, EPA is not even requiring the POTW to develop and implement local limits to protect against Pass Through or Interference. These decisions should certainly be discussed in the permit fact sheet.

Response 295

The commenter is correct in that the Town of Northbridge does not have an approved industrial pretreatment program. EPA also concurs that the Fact Sheet did not make mention of any categorical industrial users discharging into the POTW or provide rationale as to why a pretreatment program has not been required. Based on this comment, EPA revisited the Town's 2018 permit application and found that there is a large manufacturer of welded wire mesh that performs wire coating. Zinc is the main raw material used in the manufacturing process from this facility. The industrial user discharges approximately 10,000 gallons per day to the sewer system. Given that, EPA has reviewed historical compliance records for Northbridge and found frequent and ongoing NPDES permit exceedances for zinc. Since zinc appears to be a pollutant generated from the categorical industrial user process waste stream, further oversight of the industrial user is warranted.

EPA agrees with the comment that the development and implementation of local limits is designed to protect against Pass Through and/or Interference. Northbridge does not have a design flow of more than 5 million gallons per day (MGD), which would have triggered the development and implementation of an industrial pretreatment program. However, in accordance with 40 CFR § 403.8(a), "The Regional Administrator or Director may require that a POTW with a design flow of 5 mgd or less develop a POTW Pretreatment Program if he or she finds that the nature or volume of the industrial influent, treatment process upsets, violations of POTW effluent limitations, contamination of municipal sludge, or other circumstances warrant in order to prevent Interference with the POTW or

Pass Through." Given the historical NPDES permit violations and potential to cause Pass Through and/or Interference from a known significant industrial user, EPA is requiring the Town of Northbridge to develop an industrial pretreatment program under this General Permit.

Therefore, Industrial Pretreatment Program Development requirements have been added as Attachment J to the Final General Permit and will apply only to Northbridge as noted in Attachment E of the Final General Permit.

Comment 296

EPA's authority to "create" a general permit to require dissimilar type of POTWs and programs (e.g., Pretreatment), is not absolute. While EPA does have some discretion on when to requirement a Pretreatment Program, the Agency appears to be circumventing the nondiscretionary use of a general permit to reduce permit backlogs. Without clear evaluations of which POTWs that need pretreatment programs and having those decisions document in a permit fact sheet, those decisions do not appear to be supportable just because EPA has said so. It is perplexing because each POTW appears to have an individual like permit developed that is different from the general permit and intended to be issued. Again, no fact sheet is found.

If EPA Water legal staff has changed its opinion and approves of this misuse or general permits, their written legal opinion should be included in the public notice.

Response 296

Given that the Draft General Permit did not require the development of any new Industrial Pretreatment Programs, the associated Fact Sheet did not include a description of any such decision. However, see Response 295 above regarding Northbridge for one such decision based on these comments.

See General Response to Comments on Benefits and Appropriateness of General Permit Approach.

Comment 297

I am not making comments on the adequacy of the annual pretreatment program report attachment nor the local limits attachment.

Response 297

EPA acknowledges this comment.