



1130 Connecticut Ave. NW, Suite 1050  
Washington, DC 20036

T (202) 833-2672  
F (888) 267-9505

May 7, 2020

Michael Cobb  
U.S. EPA, Region 1  
5 Post Office Square, Suite 100 (06-1)  
Boston, MA 02109-3912

Submitted via e-mail at [Cobb.Michael@epa.gov](mailto:Cobb.Michael@epa.gov)

**Re: Comments of the National Association of Clean Water Agencies on EPA Region 1's Draft NPDES Great Bay Total Nitrogen General Permit for Wastewater Treatment Facilities in New Hampshire**

Dear Mr. Cobb:

The National Association of Clean Water Agencies (NACWA) appreciates this opportunity to provide comments on the U.S. Environmental Protection Agency (EPA) Region 1 *Draft Great Bay Total Nitrogen General Permit* (draft permit), which will apply to eligible wastewater treatment facilities in New Hampshire.

NACWA represents public wastewater and stormwater agencies of all sizes nationwide. NACWA's members are committed to doing their fair share to address the growing challenge of nutrient over-enrichment in our nation's waterways, and are working to ensure that science-based and effective controls are put in place to address all sources of nutrient pollution.

NACWA has long advocated for flexible, adaptive approaches to nutrient discharges that make meaningful progress towards water quality goals without placing undue and overly burdensome limits on clean water agencies. NACWA therefore appreciates the draft permit's more holistic approach to nutrient management in the Great Bay watershed. Adoption of a truly adaptive management approach that provides flexibility for wastewater utilities to focus on nonpoint source nutrient reductions could greatly benefit the communities in Great Bay.

However, NACWA has multiple concerns with the draft permit as proposed. NACWA has carefully tracked efforts by Region 1 as it works to address nutrient-related pollution. For many years, NACWA has raised questions about the translation of narrative criteria to numeric permit limits underlying Region 1's work in the Great Bay watershed (see attached letter). These concerns remain unaddressed in the draft permit, and Region 1 continues to bypass the important work of developing and fully vetting numeric criteria for incorporation into state water quality standards.

The draft permit also raises several questions around the technical and economic feasibility of its requirements. As proposed, it is unclear how adaptive the "adaptive management approach" will actually be once implemented. Likewise, the excessive monitoring and optimization

requirements could impose significant undue costs on communities and severely restrict their ability to grow in the future. Nor does the draft permit appropriately take into consideration seasonal variations. NACWA is also concerned that the permit as drafted fails to comport with the requirements of the Clean Water Act (CWA) and EPA's implementing regulations.

While the draft permit will only directly apply to certain wastewater facilities in the Great Bay watershed, the fact that it is being issued by EPA will potentially shape nutrient policies nationwide. NACWA's members outside of New Hampshire therefore have the potential to be significantly impacted indirectly by EPA's approach to nutrient management in Great Bay. NACWA looks forward to working with EPA to address the concerns outlined below as Region 1 moves towards finalizing a nutrient reduction strategy for Great Bay.

### **EPA Must Provide Additional Information on How the Draft Permit Functions Within the NPDES Framework**

According to Region 1, nitrogen discharges from eligible wastewater treatment facilities "warrant coverage under a General Permit" because they are located in the same geographic area, utilize substantially similar operations, generate wastewater with similar composition, have the same or similar applicable effluent limitations and monitoring requirements, and "would be more efficiently, efficaciously and appropriately regulated under a General Permit than under individual permits for nitrogen."<sup>1</sup>

While NACWA appreciates Region 1's support of a holistic, watershed-based approach to nutrient management, EPA must provide additional information with respect to how the draft permit comports with EPA's National Pollutant Discharge Elimination System (NPDES) regulations and the text of the CWA.

Specifically, EPA's general permit regulations, found at 40 CFR 122.28, state that general permits "shall be written to cover one or more categories or subcategories of discharges...except those covered by individual permits, within a geographic area."<sup>2</sup> The proposed general permit, however, expressly *only* applies to discharges that *are* covered by individual permits. Additionally, while the regulations allow for general permits to cover categories of *discharges*, the draft permit instead only covers a *single pollutant* from specified *dischargers*.

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<sup>1</sup> 2020 Fact Sheet for EPA Region 1's Draft National Pollutant Discharge Elimination System (NPDES) Great Bay Total Nitrogen General Permit for Wastewater Treatment Facilities in New Hampshire (NPDES General Permit: NHG58A000) at page 4.

<sup>2</sup> 40 CFR 122.28(a)(a) (emphasis added).

Moreover, the text of the CWA requires all NPDES permits – including general permits – to require that discharges “will meet *all* applicable requirements” of the CWA.<sup>3</sup> Yet on its face, the draft permit only purports to require what is needed to meet water quality-based requirements related to nitrogen. According to Region 1, “the discharge of all pollutants other than nitrogen shall continue to be covered under each facility’s individual NPDES permit.”<sup>4</sup> Region 1’s legal basis for requiring a single discharge to be subject to two wholly separate NPDES permits to meet the applicable requirements of the CWA is unclear.

It is unclear why Region 1 believes a General Permit is necessary in this instance. Some of the utilities covered by the General Permit already have provisions in their individual NPDES permits similar to the provisions being applied via the General Permit. The adaptive management approach EPA appears interested in using for Great Bay could be accomplished by modifying the individual permits and outlining any other, watershed-wide elements in a separate document, such as an Integrated Plan, that would reference binding requirements in the individual permits without overlaying another legal instrument. EPA should better explain why it feels the addition of the General Permit is necessary to achieve water quality standards or to provide for an adaptive approach.

It is especially important to NACWA’s members, who make significant investments to comply with their permitting obligations, that NPDES permits be written in a sound, legally defensible manner. In light of the statutory text and regulatory language cited above, NACWA has concerns that, absent additional explanation or modification, the draft general permit could be vulnerable to legal challenges. EPA should therefore provide additional information with respect to how the draft permit appropriately functions within the NPDES framework and why it is needed to implement the desired adaptive approach.

### **The Draft Permit Inappropriately Bypasses the Standards Setting Process**

NACWA reiterates its concerns with Region 1’s translation of narrative nutrient criteria to numeric permit limits, including those in the draft permit. EPA’s presumption that narrative nutrient criteria can simply be translated into numeric limits is inappropriate from a policy and scientific standpoint, and effectively bypasses the rigorous state nutrient criteria development process which involves, among other things, robust public comment opportunities. NACWA therefore supports the request of the Great Bay communities<sup>5</sup> that the New Hampshire

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<sup>3</sup> 33 U.S.C. 1342(a)(1) (emphasis added).

<sup>4</sup> 2020 Fact Sheet at page 4.

<sup>5</sup> February 21, 2020 letter to Gov. Sununu and Commissioner Scott from the City of Dover, City of Rochester, Town of Milton, Town of Epping, Town of Exeter, Town of Rollinsford, Town of Newfields Village Water and Sewer District, and N.H. Water Pollution Control Association.

Department of Environmental Services and Region 1 initiate a State peer review of the proposed 100 kg/ha/yr loading threshold contained in the draft permit, and hold open the comment period on the draft permit pending its completion.

### **The Proposed Adaptive Management Approach Lacks Necessary Flexibility and Specificity**

EPA acknowledges that “non-point sources and stormwater point sources of pollution represent the majority of the nitrogen load” in the Great Bay watershed.<sup>6</sup> While EPA may be correct that “both the state and the permittees have made it clear that they favor an approach that includes both achievable reductions at wastewater facilities and significant reductions in non-point source and stormwater point source nitrogen loads,”<sup>7</sup> as drafted the proposed permit places the onus completely on clean water utilities to ensure non-point source reductions at the threat of future costly modifications to their own discharge limits. And while utilities can seemingly “credit” additional reductions from their own discharges towards the nonpoint source reduction tallies, what is good for the goose is apparently not good for the gander, as better progress in nonpoint source nitrogen control cannot be applied in lieu of making point source reductions, which is inconsistent with a true adaptive management approach. Nor is it clear how utilities will be credited for achieved nonpoint source reductions in future permit iterations and loading determinations.

NACWA appreciates Region 1’s acknowledgement that nutrient reduction strategies must take into account all nutrient sources in a watershed and attempt at providing wastewater utilities with more flexible approaches to nutrient reductions. However, a truly adaptive management approach must allow and incentivize utilities to work collaboratively with nonpoint dischargers to achieve nonpoint source reductions prior to having significant new requirements imposed on their own point source discharges or at the very least to offset the need to make reductions already reflected in the point source allocations in their permits. If, as EPA states, nonpoint source loads represent the majority of the problem, the CWA and EPA’s implementing regulations provide legal frameworks within which true adaptive approaches can work. For example, Category 4b (as described in EPA’s Integrated Reporting Guidance for CWA Sections 303(d), 305(b), and 314) can be used if other pollution control requirements are expected to result in the attainment of an applicable WQS.

Regardless of the approach Region 1 ultimately selects, requirements and credits must be clearly outlined, and Region 1 should not leave utilities facing such significant uncertainty regarding the potential imposition of more stringent requirements in future permit iterations.

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<sup>6</sup> 2020 Fact Sheet at page 28.

<sup>7</sup> *Id.*

## **The Proposed Optimization Mandates Are Unlawful and Unduly Restrict Future Community Growth**

The proposed Nitrogen Optimization Plan (NOP) requirements contained in the draft permit mandate that permittees “develop, implement, and maintain an NOP which will evaluate alternative methods of operating the existing wastewater treatment facility to optimize the removal of nitrogen throughout the year, including, but not limited to, operational changes designed to enhance nitrification and denitrification, incorporation of anoxic zones, septage receiving policies and procedures, and sidestream management.”<sup>8</sup>

This mandate of a specific internal process or combination of processes in the draft permit clearly conflicts with the holding of the U.S. Court of Appeals for the Eighth Circuit in the case of *Iowa League of Cities v. EPA*.<sup>9</sup> In that case, the court held that EPA-imposed requirements which “apply effluent limitations to a facility’s internal secondary treatment processes rather than at the end of the pipe” “clearly exceed EPA’s statutory authority,” as effluent limitations – including water quality related effluent limitations – “are restricted to regulations governing ‘discharges from point sources into navigable waters.’”<sup>10</sup> The U.S. Court of Appeals for the D.C. Circuit likewise has held that “the statute is clear: the EPA may regulate the pollutant levels in a waste stream that is discharged directly into the navigable waters of the United States through a ‘point source’; it is not authorized to regulate the pollutant levels in a facility’s internal waste stream.”<sup>11</sup>

In other words, EPA generally cannot, in setting either technology-based or water quality-based effluent limitations (WQBELs), mandate any particular treatment control technology or facility design. Rather, EPA has the authority to set discharge limits that apply at the point of discharge into a navigable water, and permittees have the flexibility to determine which process(es) are necessary to achieve compliance.

Also importantly, permit writers may only impose WQBELs to the extent “necessary to meet water quality standards.”<sup>12</sup> However, the NOP requirements are being mandated in *addition* to the numeric loading requirements in the draft permit, which are themselves designed to ensure compliance with the applicable water quality standards. As such, while the utilities may choose

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<sup>8</sup> Draft Permit, Section 2.2 Nitrogen Optimization Plan.

<sup>9</sup> *Iowa League of Cities v. U.S. Environmental Protection Agency*, 711 F.3d 844 (8<sup>th</sup> Cir. 2013).

<sup>10</sup> *Id.* at 877.

<sup>11</sup> *Am. Iron & Steel Inst. v. EPA*, 115 F.3d 979, 996 (D.C. Cir. 1997).

<sup>12</sup> 33 U.S.C. 1311(b)(1)(C).

to use nutrient optimization to achieve the required discharge limits or otherwise reduce nutrient levels, Region 1 does not have the authority to require utilities to make the operational and design changes contemplated by the draft NOP requirements.

Additionally, such requirements would entail mandatory restrictions on the utilities' capacity, thereby potentially limiting the ability for Great Bay communities to grow in the future. For many communities, excess treatment capacity has been planned and installed to ensure the community can continue to grow and remain economically healthy. The proposed NOP would instead potentially require part or even all of that excess capacity to be used for optimization modifications. While optimization can provide a low-cost option for certain utilities to employ in nutrient reduction, it must be left up to the utility to decide to employ these operational and design changes.

### **The Proposed Monitoring Requirements are Overly Prescriptive and Burdensome as Currently Structured**

The draft permit requires permittees to contribute to an estuary-wide monitoring program, which is specified in great detail. By proscribing exact stations to be monitored, what must be measured, and how often measurements should be taken, the draft permit makes it excessively difficult for this "Adaptive Management Ambient Monitoring Program" to be modified should the science indicate a different set of stations, parameters, or frequency would be more appropriate. Rather, changes within the first five years of a facility's operation under the permit would require permit modification, and changes thereafter might not be possible at all, leaving permittees to have to collect data long after any scientific questions have been answered, possibly for decades. Region 1 should instead outline any necessary monitoring provisions in a separate document, such as a Memorandum of Understanding, that can be referenced in the permit while allowing changes to the monitoring program to be made more easily.

These extensive monitoring requirements will also likely be very costly and unduly burdensome for clean water utilities. It is unclear why only wastewater utilities are being required to do monitoring that is arguably the shared responsibility of the State and other stakeholders. To the extent the utilities are required to contribute to a monitoring program, they should be allowed to do so in the most cost-effective manner, including using utility staff or contracting for professional services as they deem appropriate. Region 1 should modify these requirements before finalizing the permit.

### **The Draft Permit Does Not Appropriately Account for Seasonal Variations**

NACWA has concerns with Region 1's use of a four-year average flow from a period that was particularly dry in the region when determining its annual load limits. Additionally, in colder regions such as the Northeast, seasonal limits are typically used for nutrients because removal during colder months is far more challenging. To meet the proposed rolling annual average,

utilities will be required to achieve extreme reductions in warmer months to meet annual averages. Region 1 should modify the loading requirements in any final permit in a manner that appropriately accounts for this seasonal variability.

NACWA appreciates the opportunity to submit these comments on Region 1's draft permit and looks forward to continuing a dialogue with EPA on these issues going forward. Please contact me at [chornback@nacwa.org](mailto:chornback@nacwa.org) or (202) 833-9106 with any questions regarding these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Hornback".

**Chris Hornback**  
**Deputy Chief Executive Officer**

ATTACHMENT

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**PRESIDENT**

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**Ken Kirk**

March 7, 2013

**Nancy Stoner**

Acting Assistant Administrator, Office of Water  
U.S. Environmental Protection Agency

Ariel Rios Building

1200 Pennsylvania Avenue, NW, MC 4101M

Washington, DC 20460

Via Electronic Mail: [stoner.nancy@epa.gov](mailto:stoner.nancy@epa.gov)

Dear Nancy:

As you know, NACWA remains actively engaged in the U.S. Environmental Protection Agency's (EPA) efforts to address the growing challenge of nutrient over-enrichment in our nation's waterways. NACWA's members are committed to doing their fair share to address nutrients and are working to ensure that science-based and effective controls are put in place to address *all* sources of nutrient pollution.

Making meaningful progress toward our common water quality goals is important, but permit limits and controls on point sources must be carefully considered before being imposed. NACWA is particularly troubled by recent efforts by EPA to use state narrative nutrient criteria to establish numeric permit limits for clean water agencies while states continue to develop numeric nutrient criteria.

NACWA understands that EPA and many environmental NGOs are frustrated over the delay in development of numeric nutrient criteria by the states. These delays underscore the complexities inherent in trying to establish water quality goals and permit limits for nutrients. Nutrients behave differently than other Clean Water Act (CWA) pollutants and establishing criteria, permit limits and other controls to address nutrient discharges deserves thoughtful deliberation to ensure the appropriate level of protection for designated uses. Translating generic narrative nutrient criteria directly into numeric permit limits – effectively short-circuiting any thoughtful deliberation – is not the way to make progress. EPA's water quality standards regulations include provisions for developing permit limits when a state has not yet developed a water quality criterion for a particular pollutant (40 CFR §122.44(d)(1)(vi)), but these provisions were intended as an interim measure to



address priority pollutants until a numeric criterion could be developed. It is hard to imagine that these regulations were intended for use on the scale that would be necessary to address nutrients.

The push to utilize 40 CFR §122.44(d)(1)(vi) to address nutrients began in earnest at the regional level, but NACWA understands that EPA Headquarters is also working to develop information and training to encourage state permitting authorities to translate narrative nutrient criteria into numeric permit limits. This Agency-wide effort – whether consistent with EPA regulation or not – which effectively bypasses the state nutrient criteria development process, is bad policy. Based on the inconsistent implementation of the provisions in §122.44(d)(1)(vi) so far, it is clear that this approach will only lead to more delay in addressing nutrients as permits are challenged on a case-by-case basis.

### Push for Narrative to Numeric Translation Begins at Regional Level

The first effort NACWA is aware of to leverage §122.44(d)(1)(vi) to address nutrients began with a January 2011 letter from EPA Region 5 to Illinois. The letter stressed that Illinois, in the absence of numeric nutrient criteria, should conduct reasonable potential determinations based on the state's narrative nutrient criteria and that where a discharger has the potential to cause or contribute to an exceedance of the narrative criteria, that the state should develop a permit limit using one of the options in §122.44(d)(1)(vi). Since that time NACWA has been following this issue closely.

Most of the recent activity on this issue has been in Region 1, specifically in New Hampshire and Massachusetts where EPA is responsible for issuing CWA permits. In both states, efforts by Region 1 to impose permit requirements for nutrients have stemmed from an interpretation of the states' narrative nutrient criteria using the provisions in §122.44(d)(1)(vi). And, in both states, permits incorporating these requirements are now being challenged. How the §122.44(d)(1)(vi) provisions have been used in Massachusetts and New Hampshire has differed and the specific situations<sup>1</sup> leading to the challenges are complicated and troubling for a number of reasons, but the key issue is the underlying 'translation' of the state's narrative criteria and the precedent it sets.

The term translation is loosely applied here, especially in the case of the recent permits in Region 1. In Massachusetts, EPA Region 1 relied on literature values from the 1980's – at the limit of technology for phosphorus – to establish a permit limit for one utility. In New Hampshire, Region 1 used a translation to evaluate reasonable potential and then imposed limit of technology requirements on several clean water agencies discharging to Great Bay.

NACWA has taken a keen interest in Region 1 given EPA's direct role in issuing permits and the potential implications for EPA national policy, but EPA Headquarters has also been signaling for some time its interest in broader use of the provisions of §122.44(d)(1)(vi) nationwide. Shortly after the Region 5 letter to Illinois, EPA Headquarters issued a memorandum on March 16, 2011, urging states to make "meaningful near-term reductions" in nutrients in return for a more flexible timetable to develop numeric criteria. Later that year, EPA

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<sup>1</sup> NACWA understands that in at least one instance, EPA has used a §122.44(d)(1)(vi) translated value to determine whether a discharge would cause or contribute to an exceedance of the state's narrative criterion, inconsistent with the instructions it provided when §122.44(d)(1)(vi) was added to its regulations: "The requirements of paragraphs [§122.44(d)(1)] (iii), (iv), (v) or (vi) apply *after* the permitting authority has determined that water quality-based effluent limits are necessary under paragraph (ii)" (54 Fed. Reg. 23868, at 23873; June 2, 1989) (emphasis added).

Headquarters indicated that it would begin to develop guidance to help states better implement the provisions of §122.44(d)(1)(vi) to help them make progress on controlling nutrients. While EPA has abandoned its plans to develop a formal guidance document, NACWA understands that the Agency still plans training and other information for state permit writers to push continued use of these provisions.

**NACWA Concerned About Increased Reliance on §122.44(d)(1)(vi) to Address Nutrients**  
EPA's regulations at §122.44(d)(1)(vi) were finalized in 1989 and were intended to provide an "interim measure" to address priority pollutants until a numeric criterion for the pollutant of concern could be developed. Many of the same concerns NACWA is raising here were also raised when EPA proposed to add these provisions to §122.44, including that such approaches do not provide adequate opportunity for public participation and that these provisions "circumvented the state's role in developing water quality standards" (54 *Fed. Reg.* 23868, at 23876; June 2, 1989).

The §122.44(d)(1)(vi) regulations were developed at a time when the focus of EPA's water quality programs – as a complement to its technology-based programs to address conventional pollutants like biochemical oxygen demand and total suspended solids – was the control of toxic pollutants. With toxic pollutants, acute water quality impacts were a real concern and the need to develop permit limits to address generic, catch-all "no toxics in toxic amounts" narrative criteria before pollutant-specific criteria were in place was paramount. Developing water quality criteria and permit limits for toxic pollutants, however, has rarely presented the same challenges that are encountered with nutrients. Unlike toxic pollutants, nutrients do not have clear toxic and non-toxic thresholds that universally apply to most waterbodies. Establishing meaningful nutrient criteria and permit limits that are protective of designated uses has proven challenging even with the significant resources states have dedicated to their statewide efforts. To now presume that narrative nutrient criteria can simply be translated into numeric limits simply does not make sense, from either a policy or scientific standpoint.

Making progress is important, but these early actions in Region 1 and the potential precedent they set for the rest of the nation is troubling. Translating a narrative nutrient criterion into limit of technology requirements for a clean water utility is inconsistent with the intent of this provision – to provide protection, in the interim, while pollutant-specific numeric criteria are developed – and does not represent progress. The situation in New Hampshire is even more disturbing considering that the point source contribution is less than 20 percent. Even with permit limits being set at limits of technology, some of the dischargers in New Hampshire are being asked to accept potentially onerous commitments to address nonpoint source contributions to avoid more stringent discharge limits. This is not an attempt to make progress, but an effort to zero out the point source contribution and use the threat of backstop limits on clean water utilities to address the nonpoint source contribution.

The specifics in Region 1 are complicated, and while not the sole focus of our concerns they do serve as disconcerting examples that could influence how these provisions are implemented elsewhere. NACWA's broader concerns are with the process and how these efforts to implement §122.44(d)(1)(vi) on a permit-by-permit basis will short-circuit the important dialogue and public comment opportunities that accompany statewide nutrient control program development. These state level efforts allow for open dialogue with all stakeholders throughout the process. Individual permittees then have the opportunity to review and comment on any related draft permit conditions before any requirements are imposed. Boiling down what has been a very complicated discussion about linking numbers and limits to designated uses and aquatic life impacts into

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a permit-by-permit process will simply not provide sufficient opportunity for all stakeholders to evaluate and comment on the permitting authorities' methodologies.

### NACWA Urges EPA to Stay the Course in Assisting States to Develop Meaningful Criteria and Nutrient Control Programs

Unlike the situation for many of the toxic pollutants that §122.44(d)(1)(vi) was originally intended to address, most states are already working to develop numeric nutrient criteria and/or broader nutrient control programs. Meaningful dialogues have been established, data collected and models run. In other words, progress is being made. NACWA encourages EPA to continue its efforts to assist the states in this work, rather than pursuing a piecemeal approach based upon translation of narrative criteria. Statewide dialogues including all stakeholders, with recent successes in Wisconsin for example, will be more productive in developing nutrient control programs that are more widely accepted by the discharger community, ultimately leading to more meaningful progress.

If EPA intends to pursue its plans to push broader implementation of §122.44(d)(1)(vi), NACWA urges EPA to initiate a formal guidance development process through which the clean water community can more fully engage in a dialogue with the Agency and state permitting authorities on its concerns with the approach.

NACWA has already discussed some of these concerns with your staff, but we welcome the opportunity to discuss them further with you. Please contact me at [chornback@nacwa.org](mailto:chornback@nacwa.org) or 202/833-9106 if you have any questions.

Sincerely,



Chris Hornback  
Senior Director, Regulatory Affairs

cc: Ellen Gilinsky, EPA  
Randy Hill, EPA  
Deborah Nagle, EPA  
Alexandra Dunn, Association of Clean Water Administrators