

Summary of Legal and Policy Issues/Comments (cont.)

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scientific evidence to demonstrate that it will work] meets the requirements of the DEP regulations which require that the treatment be the best practical.

The Draft Permit is riddled with procedural deficiencies and consideration of inappropriate matters.<sup>2</sup> The irrational, arbitrary and capricious, and *ultra vires* actions by EPA in proposing the challenged permit provisions, which would impose a severe financial hardship on the District's member communities, many of which contain Environmental Justice populations, deprive the District and the City of Worcester of the ability to resolve environmental, social, and economic issues in an effective and appropriate manner.

While costs are generally not given much weight in considering compliance with permit conditions, where, as here, the costs are "wholly disproportionate" to the benefits [if any] sought, the conditions should be deemed arbitrary and capricious.<sup>3</sup> The proposed limit changes of concern, here, constitute an unfunded mandate.

**B. CO-PERMITTEES.**

For several reasons (explained below), the co-permittees should be deleted from the proposed permit. The District challenges the proposed expansion of its NPDES permit to include co-permittees comprised of satellite sanitary sewer collection systems not owned or operated by the District or of any entity whose wastewater, septage or sludge the District accepts. The Agency's unwarranted expansion of its authority fails to consider the numerous and varied legal relationships and state municipal powers governing intercommunity collection systems, and is not in accordance with law.

EPA's attempt to regulate entities discharging wastewater to the District's treatment facility usurps and undermines state and municipal authority. As the District has previously informed EPA (e.g., during the 1999 Permit renewal process), the District does not have the authority to legally bind co-permittees in the manner proposed by EPA. None of the affected municipalities participated in or signed the Permit application, nor did they intend to be permit applicants. In addition, EPA did not make any provision in the Draft Permit for the targeted co-permittees to become signatories (thereby binding them to the terms of the permit). Before EPA

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<sup>2</sup> The procedures employed in developing this Draft Permit have, we believe, resulted in procedural irregularities in the implementation of the Massachusetts and Federal Clean Water Acts, and violate fundamental state and federal administrative law, federalism, Home Rule, separation of powers doctrine, due process, and other constitutional principles. The District is concerned that EPA may have endeavored to force its interpretation of water quality standards on DEP, and has consistently ignored DEP's comments and interpretation of its own water quality regulations. By its actions, EPA purports to have the power to dictate to permittees and Massachusetts how DEP's state water quality regulations are to be interpreted and implemented.

<sup>3</sup> See *BASF Wyandotte Corp. v. Costle*, 598 F. 2d 637, 656 (1<sup>st</sup> Cir. 1979), cert. denied, 444 U.S. 1096, 100 S. Ct. 1063, 62 L. Ed. 2d 784 (1980).

can add any co-permittees to the permit, it will need to resolve these legal issues with the State and the respective municipalities involved.

The Draft Permit imposes legal and administrative burdens on the District for management of member sewers through the co-permittee process that are not allowed in the District's enabling legislation and that the District has no authority to accept.

The District does not own or operate the wastewater collection systems which discharge to its facility. The operation and maintenance of such systems is adequately regulated by the Commonwealth pursuant to 314 CMR 12.00. We understand that under NPDES permit issued to the Massachusetts Water Resources Authority ("MWRA") (permit no. MA0103284), co-permittee status is driven by ownership of infrastructure (e.g., pipes, treatment facility). We further understand that MWRA member communities are not included as co-permittees [with very few exceptions] and that, for portions of the regional sewer system operated by member communities, reporting of sanitary sewer overflows are governed by the reporting and basic operation and maintenance requirements contained in the DEP regulations at 314 CMR 12.00. That practice should be followed here.

The Draft Permit's language purporting to limit which entities may discharge to the District conflicts with and undermines the District's authority under its enabling statute [Chapter 752 of the Acts of 1968, as amended] which authorizes the District to determine which entities may become members of the District and/or discharge to the District's regional treatment facilities. Since it is questionable whether such federal action is a valid exercise of Congress' constitutionally delegated powers, under the Tenth Amendment of the U.S. Constitution, the State enabling statute should be given precedence.

As explained below, the Draft Permit purports to regulate satellite wastewater collection systems as co-permittees under a proposed (not final) Sanitary Sewer Overflow (SSO) Rule regardless of whether or not these systems result in overflows that reach waters of the United States. This raises serious questions about whether the Agency has subject matter jurisdiction under the Clean Water Act [over discharges that do not reach, nor are they likely to reach, waters of the United States].

The Second Circuit recently ruled, in the *Waterkeeper Alliance* case (also known as the CAFO decision) that unless there is an actual discharge of a pollutant to navigable waters, there is no point source discharge, no statutory violation of the CWA, no requirement to comply with EPA regulations for point source discharges, and no duty to seek or obtain an NPDES permit in the first instance. See *Waterkeeper Alliance et al. v. EPA*, 399 F.3d 486 (2<sup>nd</sup> Cir. 2005). The Court stressed that: "The CWA gives the EPA jurisdiction to regulate and control only *actual* discharges - not potential discharges, and certainly not point sources themselves." (Emphasis in original)

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The primary function of collection systems is to convey wastewater to the District's regional plant for treatment, but not to provide treatment. Under the current regulatory definition of POTW, neither CSOs nor SSOs may be deemed part of the POTW because they do not convey wastewater to the POTW, but instead result in a discharge prior to the POTW. The D.C. Circuit ruled in the *Montgomery Environmental Coalition v. Costle* case, 649 F.2d. 568 (D.C. Cir. 1980), that CSOs are not part of the "treatment works" under the 1979 or the 1980 definition, and consequently they are not subject to the "secondary treatment" standards applicable to POTWs. Since this decision, neither EPA nor the courts have formally determined that SSOs must be treated differently from CSOs.

The proposed addition of the satellite collection systems as co-permittees violates and/or circumvents the rulemaking procedural requirements. Any attempt to implement a proposed rule or materially change or rewrite a regulation through policy deprives the District and the impacted ratepayers of their fundamental rights to public notice, review and comment on such important matters.

While a proposed SSO regulation was signed by EPA Administrator Browner in 2001, the Administration withdrew the proposal before it was published, and the actual regulatory proposal still appears to be far in the future. Had the proposed SSO Rule been promulgated, it would have applied NPDES permit conditions to satellite systems in one of two ways: the NPDES permitting authority would have been given the discretion to give a collection system permit to either the satellite collection system owner/operator or the regional publicly owned treatment works (POTW) that accepts its flow.

The Association of Metropolitan Sewerage Agencies ("AMSA") has submitted substantial comments on the proposed SSO Rule opposing the discretion the Rule would have given to NPDES permitting authorities to decide which entity receives a collection system permit, stating that "the only appropriate permittee is the satellite collection system owner/operator entity." See AMSA letter to EPA Administrator Christine Todd Whitman, dated June 8, 2001. As EPA is aware, the draft rule's CMOM (capacity, management, operation and maintenance), reporting, public notification and recordkeeping provisions would be burdensome to all potential permittees regardless of the size.

The Draft Permit states, on page 1 of 19, that "[o]nly municipalities specifically listed as co-permittees are authorized to discharge wastewater into the UBWPAD facility." The Draft Permit's proposed list does not include all dischargers to the District. For example, Sutton, Oxford, Paxton, and Shrewsbury discharge to the District's facility through their respective collection systems.

The Draft Permit and its Fact Sheet are unclear as to whether its co-permittee language precludes the District from continuing to accept sludge and septage per its authority under the state enabling act. The Draft Permit language should not alter or diminish in any way the District's current authority under its enabling statute including, without limitation, its authority to accept wastewater, sludge or septage from member municipalities or otherwise.

**C. COMPLIANCE SCHEDULE.**

The Draft Permit Fact Sheet contains EPA's admission that the District will not be able to comply immediately with the proposed nutrient limits and states that EPA will work with the District to develop a schedule for the planning, design and construction of facilities necessary to meet these limits and that takes into account currently ongoing facility upgrades. EPA should include that schedule in the District's final permit. The Massachusetts permitting regulations control the issuance of permits in that state and these regulations allow compliance schedules and do not specify any term limits for such schedules.

In addition, the Fact Sheet states that Draft Permit would supersede the permit issued on September 30, 1999. As the Agency knows, the District appealed certain conditions of the 1999 permit. After extensive negotiations with EPA, and in consideration of various accommodations by the parties (including the District's withdrawal of its appeal), a settlement agreement was executed and the permit was modified on December 19, 2001 (the "2001 Permit"). The settlement agreement, and the administrative consent order issued thereunder in 2002 (the "Consent Order"), gave the District an 8-year compliance schedule, until August, 2009, to complete treatment plant upgrades and meet many of the 2001 Permit limits, including a phosphorus limit of 0.75 mg/l. Public notice of this compliance schedule and the interim permit limits effective during the permit was provided in the 2001 Permit's fact sheet or statement of basis.

Significant upgrades are currently underway at the District at costs of over \$180 million, which will further limit the discharge of pollutants to the Blackstone River including nitrogen and phosphorus. In 2009, the new facilities will achieve a better than required reduction in phosphorus for half of the year under the existing permit and provide nitrogen removal approaching the 40-50% nitrogen summer nitrogen reduction sought by the Rhode Island Governor's Special Committee without a new standard. In light of this significant progress, an appropriate adaptive management plan would consist of allowing the significant upgrades in Worcester to occur, address all local sources to the impaired waters in Rhode Island, and monitor the results of these actions prior to requiring additional severely restrictive and costly upgrades in Massachusetts.

The Draft Permit's provisions, particularly the new nutrient limits, conflict with the existing, enforceable compliance schedule established under the settlement agreement and Consent Order signed by the EPA. The settlement agreement and Consent Order were more than merely agreements between the NPDES permitting authorities and the District; they are administrative determinations entitled to substantial deference. One such determination was that a phosphorus limit of 0.75 mg/l would lead to attainment of the Massachusetts water quality standards, yet no new information has been provided to conclude otherwise. Like any written instrument affecting the rights and obligations of a party, a settlement agreement and consent order must be given effect according to its terms. The District has, in good faith, complied with the terms of these agreements including the compliance schedule. It expects that the Agency will, likewise, abide by its commitments under these agreements.

If additional measures are required in the permit beyond those specified in the amended 2001 Permit and settlement agreement, or if a more stringent water quality-based effluent limitation is included in the permit, the District is entitled to a compliance schedule under Massachusetts law. State regulations provide for compliance schedules as follows:

A permit may, when appropriate, specify a schedule leading to compliance with the Massachusetts and Federal Clean Water Acts and regulations. The purpose of a schedule of compliance generally is to afford a permittee adequate time to comply with one or more permit requirements or limitations that are based on new, newly interpreted or revised water quality standards that became effective after both issuance of the initial permit for a discharge and July 1, 1977. The Department may include a schedule of compliance in a permit at the time of the permit reissuance or modification where the permittee either cannot comply with such permit requirements or limitations, or where there is insufficient information available to determine whether the permittee can comply with such permit requirements and limitations. A schedule of compliance shall require compliance at the earliest practicable time, as determined by the Department. A schedule of compliance shall include dates for specified tasks or activities leading to compliance and may include interim effluent limitations, as the Department deems appropriate. 314 CMR 4.03(1)(b).

Although the District does not agree that a more stringent limit is authorized or appropriate, EPA acknowledged in the Draft Permit fact sheet that the District likely will not be able to comply with such a limit. Accordingly, a compliance schedule should be included in the permit for any more stringent water quality-based effluent limit. The state compliance schedule provision is consistent with federal regulations, which allow compliance schedules that require compliance "as soon as possible." 40 CFR § 122.47(a)(1).

The District requests that long-term compliance schedules, if necessary, be included in the permit itself, rather than in an administrative order or other agreement. There is no time limit on such compliance schedules under federal or state law. In other situations, EPA has authorized compliance schedules that extend beyond the term of the permit, and that extend for more than five years. For example, federal regulations concerning Great Lakes dischargers provide that compliance schedules may extend beyond the term of the permit. 40 CFR Part 132, Appendix F, Procedure 9. In addition, California provides long-term compliance schedules that can extend for several permit terms, consistent with the requirements of any TMDL. *See, e.g., Basin Plan Amendment* (Los Angeles Regional Water Quality Control Board, May 14, 2003). EPA approved those provisions on February 10, 2004. *See Water Quality Standards: Examples of Alternatives to Changing Long-term Designated Uses to Achieve Water Quality Goals* (EPA, March 2005) at p. 6. Therefore, a long-term compliance schedule—so long as it requires

compliance “at the earliest practicable time” or “as soon as possible”—may be included within the permit itself, consistent with both federal and state regulations.

**D. NUTRIENTS:**

As a matter of law, policy and fairness, the Draft Permit’s proposed nutrient limit changes should be stricken from the Permit and deferred or postponed until Total Maximum Daily Loads (“TMDLs”) are developed. Such postponement is consistent with the DEP’s May 9, 2007 comments regarding TMDLs for nutrients. The Draft Permit Fact Sheet fails to address the DEP’s concerns about the uncertainties and inadequacies of the scientific knowledge used to develop the total nitrogen limits and about establishing effluent limits for nitrogen and phosphorus without the benefit of scientific guidance provided by TMDLs and the water quality goals they establish. DEP’s comments, which were previously documented in the administrative record of the RIDEM permits and certain Massachusetts NPDES permits (e.g., Attleboro and North Attleboro), continue to go unanswered. Given the DEP’s well-documented concerns and the fact that the District’s capital improvements and upgrades slated for completion in 2009 will significantly reduce nutrient levels, it is proper to defer these newly proposed limits pending revision of the relevant water quality standards and TMDL development.

In addition, any proposed seasonal limits for nutrients should be based on temperature and flow in the River, and such limits should not start until the month of June. Some Rhode Island-issued permits recognize this relationship and, accordingly, have used June as the starting month for its seasonal nutrient limits. The Draft Permit acknowledges that nutrient limits are dependent on the temperature by selecting various months that are assumed to be representative of the spectrum of receiving water temperatures that are experienced in the Blackstone River.

**1. TOTAL NITROGEN (TN).**

For several reasons (explained below), the Draft Permit’s total nitrogen limits should be stricken and the determination of such limits should be deferred to the future completion of a TMDL.

The DEP has declined to impose the total nitrogen limit contained in the Draft Permit, nor does it support this limit. The interstate nature of this predicament raises several legal and policy issues, which are discussed more fully below.

This problem is exacerbated by the absence of TMDL calculations as well as other reliable data supporting the nitrogen limit proposed by Rhode Island and/or EPA here. The Draft Permit’s total nitrogen limit rests upon an approach that the Clean Water Act attempted to avoid, that Massachusetts regulators contest, and that science cannot justify. This raises additional factual, legal and policy issues under the Act.

The problem of nitrogen should be addressed at a watershed level by completion of a TMDL. The identification of all sources and their relative importance has not been

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well established in the RIDEM documents, which are the basis for the proposed permit limits. Major omissions include nitrogen loads from local contributing non-point sources such as groundwater (i.e. septic system) and CSOs, atmospheric deposition, effect of sediments on nitrogen flux, and effects of tidal ranges and currents within the Bay and River systems on dispersion, dilution, and effective retention time. Without a complete, consistent, and logically progressed evaluation of the sources and their contributions, financially expensive solutions are being proposed for implementation in both Rhode Island and Massachusetts without confidence that the projected benefits will be obtained once construction is completed and the solutions are implemented. See DEP letter to RIDEM, dated February 11, 2004, commenting on RIDEM Permits and Documents in Support of Permit Limits (Appendix, Tab B-2); see, also, MA DEP Review Comments (February 8, 2005) RIDEM Discharge Permits and Modification to Permits (Attached to Technical Comments).

- a) The TN limit is fatally flawed because it is based on criteria that are not scientifically defensible. In EPA's recommended water quality criteria for nutrients [published in January 2001 (66 FR 1671)], EPA states "wherever possible, develop nutrient criteria that fully reflect localized conditions and protect specific designated uses." The criteria used to develop the TN limit failed to determine causal relationships between the nutrients and attainment of the designated uses; they are not effects-based criteria. The causal relationships between the nutrients and response variables (e.g., Chlorophyll a, Dissolved Oxygen, pH) were not adequately determined. Experts recommend 3-5 years of growing season data to account for annual variability and such nutrient data should not be developed using data reflective of unusual hydrologic and physical conditions of the water body. This was not done. See *Guidance on Developing Nutrient Criteria for Protecting Designated Uses of Water Bodies*, Benjamin R. Parkhurst, Ph.D., et al., prepared for Federal Water Quality Coalition, Fredric Andes, Barnes & Thornburg LLP (Appendix, Tab B-3).
- b) Current multiple plant upgrades already under construction by the District and other WWTFs are expected to significantly reduce the TN loading to the Upper Bay. Requiring additional treatment to meet a 5 mg/l TN limit will result in extremely high construction and operating costs to acquire additional, non-renewable resources such as chemicals and electricity without any reasonable confidence that it will attain the designated uses. In addition, the use of substantial amounts of non-renewable resources is not consistent with the EPA's sustainable development policies. See discussion of Sustainability, below.

c) **TMDL considerations:**

- i. The results of the 1981-84 MERL laboratory tank studies are not an acceptable substitute for a TMDL to establish TN effluent limits. RIDEM should complete the federally-required TMDL before EPA imposes the proposed TN permit modification.<sup>4</sup>
- ii. Without a TMDL, the current approach lacks (a) clear, scientific justification, (b) a definite schedule or endpoint, and (c) a clear assessment plan to determine the need for future tighter restrictions.<sup>5</sup>
- iii. TN loading to Narragansett Bay is a regional, interstate issue that needs a comprehensive plan [as was implemented in Long Island Sound], which plan cannot be developed without a working TMDL.
- iv. The District shares the concern of the Narragansett Bay Commission (NBC) about the unanticipated effects that could result from a dramatic TN reduction from WWTFs on the Upper Bay.<sup>6</sup>
- v. Total N loading to Narragansett Bay has been essentially level in the past 3 decades, based on evaluations by Dr. Scott Nixon of URI/GSO.<sup>7</sup> Such findings underscore the need for a TMDL to determine the appropriate relationship and relative importance of nutrient loading and climatic conditions to producing hypoxic conditions.
- vi. Research efforts are needed to clarify the role of nutrients in seasonal hypoxic events along with a TMDL that can replicate the physical and chemical conditions observed in Narragansett Bay. There is a growing tendency [among estuarine and coastal scientists] to view eutrophication in a more complex manner. The interaction of nutrient limitation to light limitation, as well as to the

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<sup>4</sup> See February 7, 2005 letter from Narragansett Bay Commission (NBC) to RIDEM commenting on proposed N limits (Attached to Technical Comments).

<sup>5</sup> See Footnote 4.

<sup>6</sup> See Footnote 4.

<sup>7</sup> See Nixon, S. et al. February 2005. *Anthropogenic Nutrient Inputs to Narragansett Bay: A Twenty-Five Year Perspective*, A Report to The Narragansett Bay Commission and Rhode Island Sea Grant.

influence of residence time on community structure and ecological interactions are still poorly understood, and an improved understanding of the factors that determine the sensitivity of estuaries to nutrients may eventually lead to better management of coastal nutrient pollution.<sup>8</sup>

**d) Interstate/Transboundary Pollution considerations:**

- i. The Draft Permit seeks to apply a Rhode Island legislative mandate [RI Gen. Laws §46-12-2(f); requiring that nitrogen discharges be reduced by 50% by December 31, 2008] to Massachusetts dischargers. That mandate does not constitute a state water quality standard that has been promulgated and then approved by EPA. As such, it is not part of Rhode Island's water quality standards under Federal law, and there is no legal basis, under the "Alaska Rule" (40 CFR 131.21) to apply it in NPDES permits.
- ii. In order to subject a point source to permit requirements based on another state's water quality standards, EPA must demonstrate that the point source's discharge is causing or contributing to a violation of those out-of-state standards.<sup>9</sup> As discussed elsewhere in these comments, EPA has not made any showing that the proposed limits in the Draft Permit are needed to prevent violations of Rhode Island water quality standards. The burden is on EPA to show how the proposed limits will lead to attainment of the Rhode Island standards, and EPA has not done this. Therefore, there is no legal basis for those limits.
- iii. Dischargers in Rhode Island, which are much closer to the Bay than is the District's facility, have received TN limits as high as 8 or 10 mg/l and, in some cases, no limit at all. If attenuation is considered (as it must be), an equivalent limit for the District,

<sup>8</sup> Howarth, R.W. and Marino, R. 2006. Nitrogen as the limiting nutrient for eutrophication in coastal marine ecosystems: Evolving views over the decades. *Limnol. Oceanogr.*, 51:364-376.

<sup>9</sup> Related legal concerns of the District include whether the imposition of Rhode Island requirements on Massachusetts point source discharges, without the CWA-required demonstration that the point source's discharge is causing or contributing to a violation of those out-of-state standards/requirements: (1) violates Section 510 of the Clean Water Act, 33 U.S.C. s.1370, which prohibits construing any provision of the statute as impairing "any right or jurisdiction of the States with respect to waters (including boundary waters) of such states"; and/or (2) violates the Tenth Amendment of the United States Constitution or invades Massachusetts' sovereignty and, thus, is unconstitutional.

based on alleged impacts to the Bay, would be much higher than those limits. Yet, without justification, EPA has applied a limit of 5 mg/l to the District. In light of RIDEM's actions concerning its own dischargers, EPA's interpretation of the Rhode Island narrative water quality standards is erroneous.

- iv. Requiring that Massachusetts plants meet more stringent limits than Rhode Island plants, without a technical justification based on protection of water quality, violates the Commerce Clause of the Constitution to the extent that Rhode Island is attempting to employ the Clean Water Act to secure an unfair economic advantage or benefits for Rhode Island [e.g., by unfairly shifting a disproportionate share of the responsibility and expense of reducing/treating the TN load that may not be necessary or economically feasible].
- v. Due process violations: Massachusetts facilities, ratepayers, and taxpayers have not had an adequate opportunity to be informed of, and to participate in the Rhode Island rulemaking process for the out-of-state, narrative water quality standards upon which the total nitrogen limits are based. This deprives the District, other Massachusetts POTWs, and their impacted ratepayers of their fundamental rights to public notice, review and comment on such important matters, thus depriving them of due process under the federal and state constitutions.

## 2. PHOSPHORUS.

For several reasons (explained below), the Draft Permit's phosphorus limits should be stricken and the determination of such limits should be deferred/postponed to the future completion of a TMDL. The limit set in the existing Permit should remain in effect.

There is no adequate technical and legal basis for imposing the reduced phosphorus limits proposed in the Draft Permit. The new phosphorus limits are based on outdated and irrelevant assessments. The manner in which the modified limits were developed is too simplistic, and does not reflect real world conditions. EPA has erroneously concluded that compliance with the proposed limits will have an affect on the cultural eutrophication of the Blackstone River.

Notwithstanding the extensive upgrades and phosphorus limit adjustments to several plants discharging into the Blackstone River, and the improved water quality associated with or expected from those upgrades and permit adjustments, EPA, without any assessment of the beneficial effect of these upgrades and adjustments for phosphorus,