BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of: Town of Newmarket Wastewater Treatment Plant NPDES Permit No. NH 0100196	)	NPDES Permit Appeal No. 05-12

BRIEF OF CONSERVATION LAW FOUNDATION, TOWN OF NEWINGTON, AND NEW HAMPSHIRE AUDUBON IN RESPONSE TO GREAT BAY MUNICIPAL COALITION'S PETITION FOR REVIEW

Conservation Law Foundation ("CLF"), the Town of Newington, New Hampshire, and New Hampshire Audubon submit the following brief in response to the Great Bay Municipal Coalition's ("Petitioner") Petition for Review pertaining to a National Pollutant Discharge Elimination System ("NPDES") permit issued by the Environmental Protection Agency ("EPA") for the Town of Newmarket, New Hampshire's wastewater treatment facility ("WWTF"). The undersigned parties urge the Environmental Appeals Board ("Board" or "EAB") to deny the Petitioner's Petition for Review or, if the Board grants review, to affirm the subject permit.

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Introduction

The permit at issue addresses WWTF discharges to the tidal portion of the Lamprey River, which flows into Great Bay and which is part of the Great Bay estuary, a system designated as part of the National Estuary Program as an estuary of national significance. The permit includes much-needed effluent limits and other requirements relative to total nitrogen to address and reverse the declining health of these water bodies. This appeal by the Great Bay Municipal Coalition – which is really an appeal by two municipalities (Dover and Rochester) with no discernable interest in Newmarket's WWTF, Newmarket's permit, or the Lamprey River[1] – is part of an ongoing, concerted effort by a small collection of municipalities (at this time, primarily Dover, Rochester and Portsmouth) to delay the implementation of nitrogen pollution reductions in the Great Bay estuary. This ongoing campaign of delay, which includes but is not limited to the meritless Petition initiating this appeal, already has resulted in substantial delays in reducing nitrogen pollution in the estuary, thereby undermining the Clean Water Act's intent that EPA promptly and regularly re-issue permits in five-year intervals, *see Upper Blackstone Water Pollution Abatement District v. EPA*, 690 F.3d 9, 22 (1st Cir. 2012) (petition

[1] Petition initiating this appeal was filed by "the Great Bay Municipal Coalition . . . representing the municipalities of Dover and Rochester." Petition at 1. While styled as an appeal of "the Great Bay Municipal Coalition," in actuality this action is an appeal by the cities of Dover and Rochester. *See* **Exhibit 1** (Dec. 14, 2012 email from Dover City Manager to Exeter and Newmarket Town Managers) ("Dover and Rochester are moving forward with an appeal of Newmarket's permit. . . ."). Indeed, in its comments on the draft NPDES permit at issue, the Great Bay Municipal Coalition identified itself as representing and including "Dover, Exeter, Newmarket, Portsmouth, and Rochester." *See* **Exhibit 2** (Dec. 15, 2011 cover letter and first page of Municipal Coalition's comments on draft permit). Notably absent from the Petition is any reference to the Towns of Newmarket and Exeter, and the City of Portsmouth. Indeed, the Town of Newmarket – the recipient of the permit at issue in this appeal – affirmatively elected not to appeal the permit based on a determination that "it is in the best interest of our community to work with the EPA to protect Great Bay instead of entering into a lengthy and costly legal process," and Newmarket officials have publicly expressed disappointment regarding the filing of this appeal. *See* **Exhibit 3** (Dec. 10, 2012 Town of Newmarket Press Release), **Exhibit 4** (Seacoast Online article: "Wastewater mud slinging on Seacoast"). The reason Dover and Rochester are invoking the Great Bay Municipal Coalition's name for this appeal is obvious: neither city submitted comments of their own on the draft Newmarket permit. *See* 40 C.F.R. § 124.19(a) (providing that only persons filing comments on the subject draft permit or participating in the public hearing may initiate an appeal).

for rehearing, and rehearing *en banc* denied Sept. 25, 2012),[2] jeopardizing the health of the estuary, and potentially increasing the costs of reversing the estuary's ecological decline.

Standard of Review

Petitioner bears the heavy burden in this case of demonstrating that review is warranted. *See In re Buena Vista Rancheria Wastewater Treatment Plant*, NPDES Appeal Nos. 10-05, 10-06, 10-07 & 10-13, Order Denying Review (EAB 2011) at 3-5. Petitioner's burden is "particularly heavy" because it "seeks review of issues that are fundamentally technical or scientific in nature, as the Board typically defers to the expertise of the permit issuer on such matters if the permit issuer adequately explains its rationale and supports its reasons in the record." *Id.* at 4-5 (citations omitted). "The Board will not ordinarily review a NPDES permit decision unless the permit conditions at issue are based on clearly erroneous findings of fact or conclusions of law or involve important policy considerations that the Board, in its discretion, should review." *Id.* at 5.

"The Board's review of NPDES permits is guided by the preamble to the permitting regulations, which states that review 'should be only sparingly exercised' and that 'most permit conditions should be finally determined at the Regional level.'" *Id.* (*quoting* 45 Fed. Reg. 33,

[2] As the Board knows, the *Upper Blackstone* case involved an appeal in which the petitioner – similar to Petitioner in this case – challenged the science underlying determination of an appropriate water quality-based effluent limitation for nitrogen. The First Circuit Court of Appeals made clear that the workings of the Clean Water Act preclude putting off needed decisions to allow for more and continued scientific study:

> As to the [petitioner's] computer model, neither the CWA nor EPA regulations permit the EPA to delay issuance of a new permit indefinitely until better science can be developed, even where there is some uncertainty in the existing data. The five-year limit requires the EPA or state permitting authority to re-ensure compliance with the Act whenever a permit expires and is renewed. 33 U.S.C. § 1342(a)(3), (b)(1)(B); 40 C.F.R. § 122.46(a), (b). Thus, in regular intervals, the Act requires reevaluation of the relevant factors, and allows for the tightening of discharge conditions. The Act's goal of "eliminate[ing]" the discharge of pollutants by 1985 underscores the importance of making progress on the available data. 33 U.S.C. § 1251(a)(1).

Upper Blackstone, 690 F.3d at 22.

290, 33, 412 (May 19, 1980) (other citations omitted). Of particular relevance to this case, in which Petitioner repeatedly asserts the same competing scientific and technical opinions that it has asserted for years in regulatory matters pertaining to the Great Bay estuary, the Board has explained:

> If we are satisfied that the [permit issuer] gave due consideration to comments received and adopted an approach in the final permit decision that is rational and supportable, we typically will defer to the [permit issuer's] decision. *Clear error or reviewable excercise of discretion are not established simply because the petitioner presents a different opinion or alternative theory regarding a technical matter, particularly when the alternative theory is unsubstantiated."*

See In re Keene Wastewater Treatment Plant, NPDES Appeal No. 07-18, Order Denying Review (EAB 2008) at 13 (citations omitted). In the recent *Upper Blackstone* decision, the U.S. Court of Appeals for the First Circuit affirmed the extreme deference owed to EPA (and the Board) in matters of a scientific and technical nature. *See Upper Blackstone*, 690 F.3d at 20 ("This deference goes to the entire agency action, which here includes both the EPA's permitting decision and the EAB's review and affirmance of that decision.") (citations omitted).[3]

Argument

Petitioner has failed to satisfy its heavy burden to demonstrate that EPA, in addressing scientific and technical issues relative to nitrogen pollution in the Great Bay estuary, committed clear error warranting review. The Board should deny Petitioner's Petition for Review for the following reasons.

I. THE PETITION IMPOSES AN UNDUE BURDEN ON THE BOARD AND EPA AND IS STRONG EVIDENCE OF A STRATEGY OF OBFUSCATION

[3] That EPA is owed significant deference could not be more clear. *See Upper Blackstone*, 690 F.3d at 20-21 ("[A] reviewing court must remember that [where the agency] is making predictions, within its area of special expertise, at the frontiers of science . . . as opposed to simple findings of fact, a reviewing court must generally be at its *most deferential*." (*quoting Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 103 (1983) (emphasis added)), 21 ("[W]e give an *extreme degree of deference* to the agency when it is evaluating scientific data within its technical expertise." (*quoting Coal. For Responsible Regulation, Inc. v. EPA*, 559 F.3d 512, 519 (D.C. Cir. 2009) (emphasis added)).

The regulations governing appeals of NPDES permits provide, in pertinent part: "The petition shall include a statement of the reasons supporting . . . review, including a demonstration that any issues being raised were raised during the public comment period." 40 C.F.R. §124.19(a). A petition for review also must include a showing that the challenged permit condition is based on "a finding of fact or conclusion of law which is clearly erroneous . . . ." *Id.* In fulfilling these requirements, parties filing petitions for review and other documents with the Board "are strongly encouraged to limit briefs to 50 pages (including the certificate of service, table of contents, and table of authorities)." EAB Practice Manual (June 2012) at 17. "'To assure the efficient use of Agency resources,' the EAB has the discretion to reject a brief on the ground that it is unduly long." *Id.* (*quoting In re Rocky Well Service, Inc.*, SDWA Appeal Nos. 08-03 & 08-04 at 1 (EAB Dec. 15, 2008)).

The Municipal Coalition has proceeded with troubling disregard for these basic requirements – requirements clearly intended to identify and present issues clearly, concisely, and in a manner suitable for the Board's review. It initiated this appeal with a Petition which – at ninety-eight pages – effectively exceeds the Board's fifty-page limit *two-fold*. It submitted a Petition which, in addition to being excessive in length, is rife with unnecessary repetition of arguments, statements either entirely unsupported by citation or supported by references that are unhelpful to the Board,[4] and references that simply do not stand for the proposition for which they are cited.[5]

[4] As an example of the unhelpful manner in which Petitioner has made its arguments, Petitioner sets forth eight enumerated factual assertions which it attributes to "critical statements" made by NHDES scientist Philip Trowbridge in a deposition, which statements Petitioner characterizes as constituting admissions "that the fundamental technical deficiencies raised by the [Municipal] Coalition were correct." *See* Petition at 19-20. Petitioner provides no citation for each of the eight enumerated assertions. *Id.* Rather, in support of those eight detailed assertions, it simply refers the Board, generally, to its August 30, 2012 supplemental comments, a thirteen page letter accompanied by numerous graphics, itself

In addition, the Petition fails to clearly demonstrate whether – and where in the record – each of the many issues it addresses was properly preserved during the comment period. *In re Buena Vista Rancheria Wastewater Treatment Plant*, *supra*, at 3 ("When determining whether to grant review of petitions filed pursuant to 40 C.F.R. § 124.19(a), the Board will first consider whether . . . petitioner has fulfilled certain threshold procedural requirements including . . . issue preservation.") (citations omitted). It also fails to clearly and consistently discuss the manner in which EPA addressed specific issues in its comprehensive Response to Comments, and to clearly demonstrate exactly how – in its Response to Comments – EPA committed clear error. *See In re Buena Vista Rancheria Wastewater Treatment Plant*, *supra*, at 4 ("[P]etitioners must include specific information supporting their allegations, and state why the Region's response to objections voiced during the comment period is clearly erroneous or otherwise warrants review.") (citation omitted). Rather, the Petition largely disregards the detailed reasoning of EPA as set forth in its Response to Comments, employing a scattershot strategy laden with invective,[6] and even going so far as to invoke common law tort principles, the Federal Rules of

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interpreting Mr. Trowbridge's deposition testimony. *See id.* at 20; Petition Exhibit 15. The Board can and should reasonably expect Petitioner to cite directly to relevant, supporting deposition testimony, as opposed to the Petitioner's own written comments putting a gloss on that testimony. Indeed, in light of the troubling manner in which Petitioner characterizes facts in order to construct its arguments (*see* Parts III.B and III.C, *infra*), the Board cannot rely on Petitioner's descriptions of such testimony as reliable, imposing a burden on the Board (should it consider it necessary to consider Petitioner's argument) to locate the primary document and confirm the accuracy of Petitioner's characterizations.

[5] *See*, for example, Parts III.B and III.C, *infra.*

[6] *See, e.g.*, Petition at 10 (characterizing peer review of nutrients analysis as "a complete fabrication"), 12 (charging NHDES scientist Philip Trowbridge as demonstrating "a fundamental lack of honesty and good faith"), 21 (charging that nutrient criteria were based on "a complete fabrication"), 56 (arguing that "EPA's technical positions were clearly in error on virtually every major scientific 'finding' underlying the permit.").

Evidence,[7] and concerns about WWTF engineering (for a WWTF in which the Petitioner simply has no interest).[8]

At bottom, Petitioner vociferously and repeatedly asserts a difference of opinion relative to technical, scientific matters – a difference of opinion that does not justify review. *See In re Keene Wastewater Treatment Plant, supra*, at 13 ("Clear error or reviewable exercise of discretion are not established simply because the petitioner presents a different opinion or alternative theory regarding a technical matter, particularly when the alternative theory is unsubstantiated."). Having failed to comply with basic pleading requirements, and in the process imposing a significant burden on the Board and EPA, the Petition is strong evidence of a strategy of obfuscation with the ultimate intent of delaying the costs of needed pollution-reductions in the Great Bay estuary.

II. PETITIONER'S CLAIM THAT EPA ARBITRARILY FAILED TO CONSIDER CERTAIN INFORMATION IS WITHOUT MERIT

The Petitioners contend that EPA arbitrarily excluded information provided by the Municipal Coalition in developing and finalizing the permit. *See* Petition at 27-29. *See also id.* at 1 ("At each juncture, EPA refused to meet, refused to engage in any technical discussions, precluded public involvement in the decision making, and simply moved forward with a predetermined decision to impose extreme nutrient reduction, regardless of the information presented."). Petitioner is wrong.

First, EPA provided Petitioner more than adequate opportunity to participate in the public permitting process. Like all interested members of the public (and again, the specific interest of

[7] *See* Petition at 52 (*citing* Restatement (Second) of Torts), 91-95 (arguing that "EPA's Action fails the Daubert test," referencing *Daubert v. Merrell Dow Pharmacies*, 509 U.S. 579 (1993), which provides the standard for qualified opinion testimony under the Federal Rules of Evidence).

[8] *See* Petition at 96. To the extent Petitioner's engineering concerns are driven not by the Newmarket WWTF, but by concerns regarding their own WWTFs, this appeal is not the appropriate venue in which to address them.

the true Petitioners, Dover and Rochester, is not evident), the Municipal Coalition was provided the opportunity to comment at the public hearing. The Municipal Coalition also provided detailed written comments on the draft permit during the comment period – a comment period which EPA extended as an accommodation to the Municipal Coalition. Having engaged in the public comment process, Petitioner cannot complain of unfair treatment or a failure on the part of EPA to consider its comments and concerns.

Second, following expiration of the public comment process, the Municipal Coalition continued to submit information to EPA. It bears mention that during this time period, certain members of the Municipal Coalition were engaged in substantial additional activity, all in an attempt to discredit or challenge EPA and some of the science it was considering during the permit development process. Such activity included blatant charges of scientific misconduct leveled at EPA; politicization of nitrogen-related issues in the estuary by helping facilitate, and actively participating in, an "oversight" hearing conducted by Congressman Issa in Exeter; and a relentless barrage of Freedom of Information Act requests to EPA. Petitioner claims that EPA acted arbitrarily by refusing to include post-comment-period information in the record. However, Petitioner provides no evidence that such information was actually excluded from the record. To the contrary, according to EPA, the Municipal Coalition's many post-comment submissions *were* included in the record. *See* EPA Region I's Opposition to Petitioners' Motion for Extension of Time to File a Supplemental Petition for Review (Jan. 4, 2013) at 7.

To the extent Petitioner believes EPA, in its Response to Comments, should have specifically addressed all of the Municipal Coalition's post-comment-period submissions (an argument Petitioner has not made), such an approach could have indefinitely forestalled the issuance of a final permit by EPA – a result Petitioner may in fact have been seeking through its

continued generation and submission of purportedly "new information," but one that would fly in the face of EPA's duty to implement the Clean Water Act. *See Upper Blackstone*, 690 F.3d at 23 (explaining that the ever-existing potential for additional data and "better science" cannot interfere with or delay implementation under the Clean Water Act). Indeed, the many issues raised by Petitioner before and after the public comment period – including, no doubt, the significant resources expended by EPA responding to Petitioner's many FOIA requests, charges of science misconduct, and political inquiries – caused eleven months to elapse (a time period excessively long for the health of the Lamprey River and Great Bay estuary, particularly considering that Newmarket's WWTF was operating under a permit that had expired several years prior) between the close of the public comment period (December 16, 2011) and issuance of the final permit (November 16, 2012).

III. PETITIONER'S ATTEMPTS TO CHALLENGE THE SCIENTIFIC BASES OF THE PERMIT ARE MERITLESS

As discussed *supra*, Petitioner bears a heavy burden in justifying the Board's review of scientific and technical matters underlying EPA's permit (and to overcome the Board's exercise of review of NPDES permits "sparingly"), as well as in overcoming the extreme deference owed to EPA. Petitioner does not satisfy this heavy burden. As set forth *infra*, Petitioner has premised its argument on a basic misapprehension of law as it relates to permitting under the Clean Water Act, as well as on troubling mischaracterizations of fact – mischaracterizations that warrant deep skepticism of all of Petitioner's arguments and assertions.

A. Petitioner's argument misapprehends the relevant law under the Clean Water Act

Petitioner's entire argument is premised on the incorrect assumption that – absent proof by EPA that nitrogen is the *cause* of observed declines in eelgrass and other signs of

eutrophication and impairment – EPA's permitting action is illegal. In its detailed Response to Comments, EPA stated clearly:

> [T]he [Municipal] Coalition misconstrues the causal threshold for imposing a water quality-based effluent limit on a discharge containing a pollutant of concern. Under the federal regulations implementing the NPDES program, permit issuers are required to determine whether a given point source discharge "causes, has the reasonable potential to cause, or contributes to" an exceedance of the narrative or numeric criteria set forth in state water quality standards. *See* 40 C.F.R. § 122.44(d)(1)(i). If a discharge is found to cause, have the reasonable potential to cause, or contribute to an exceedance of a numeric or narrative state water quality criterion, NPDES regulations implementing section 301(b)(1)(C) provide that a permit *must* contain effluent limits as necessary to achieve state water quality standards. *See* 40 C.F.R. § 122.44(d)(1), 122.44(d)(5) (providing in part that a permit must incorporate any more stringent limits required by CWA §301(b)(1)(C)). Thus, EPA does not need to justify the decision to impose a permit limit based on a "site-specific demonstration that nutrients are causing the claimed impairments in the water body of concern," but need only demonstrate that the discharge causes, *has the reasonable potential to cause, or contributes* to an in-stream excursion above a numeric or narrative criteria within a state water quality standard. This is consistent with the Final Rule Preamble for 40 C.F.R. Part 122.44(d)(1), which states:
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> > "Several commenters asked if it was necessary to show in-stream impact, or to show adverse effects on human health before invoking [40 C.F.R. 122.44(d)(1)(vi)] as a basis for establishing water quality-based limits on a pollutant of concern. It is not necessary to show adverse effects on aquatic life or human health to invoke this paragraph. The CWA does not require such a demonstration and it is EPA's position that it is not necessary to demonstrate such effects before establishing limits on a pollutant of concern."

EPA's Response to Comments at 57 (emphases in original). EPA's interpretation and application of these regulations is entitled to deference, *see Upper Blackstone*, 690 F.3d at 21,[9] and is correct as a matter of law. Beyond the clear language of EPA's regulations, the First Circuit affirmed this approach in *Upper Blackstone*, stating that EPA could – and must – proceed with implementation of its duties under the Clean Water Act even in the face of scientific uncertainty. *Id.* at 23. As the First Circuit stated:

[9] As the Court stated in *Upper Blackstone*, 690 F.3d at 21: "We also defer to the EPA's reasonable interpretation of the CWA. . . . This deference increases where the EPA interprets its own regulations . . . ; generally speaking, the agency's interpretation will be 'controlling unless "plainly erroneous or inconsistent with the regulation."'" (citations omitted).

> In almost every case, more data can be collected, models further calibrated to match real world conditions; the hope or anticipation that better science will materialize is always present, to some degree, in the context of science-based agency decisionmaking. Congress was aware of this when it nonetheless set a firm deadline for issuing new permits.
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> As in many science-based policymaking contexts, under the CWA the EPA is required to exercise its judgment even in the face of some scientific uncertainty.

Upper Blackstone, 690 F.3d at 23.

B. Petitioner's argument is premised on gross mischaracterizations of the New Hampshire Department of Environmental Services' nutrients analysis

On October 19, 2012, the New Hampshire Department of Environmental Services ("NHDES") issued a letter to the mayors of Dover, Rochester and Portsmouth responding to numerous claims made by those members of the Municipal Coalition attacking the validity of NHDES's nutrients analysis. *See* **Exhibit 5** ("NHDES letter") (referenced repeatedly by the Petitioner as the "2012 Burack letter"). Petitioner attempts to use this letter to its advantage, arguing that it validates Petitioner's claim that the nutrients analysis underlying the permit is erroneous. It does so, however, based on gross mischaracterizations of the NHDES letter, as the following examples illustrate.

(1) Petitioner disingenuously mischaracterizes the NHDES letter as somehow constituting an admission by NHDES that its nutrients analysis was erroneous

As a core basis of its argument that the subject permit is premised on a flawed scientific analysis, Petitioner makes the incredible claim that NHDES, in its October 2012 letter, admitted "scientific error." *See* Petition at 22 (titling its discussion of the NHDES letter: "**Admitting Scientific Error but Refusing to Change Its Regulatory Stance**") (bold typeface in original). Contrary to Petitioner's characterization of this letter, however, NHDES recently wrote in its *amicus* brief: "The Petitioner has mischaracterized statements and positions made by NHDES

with respect to the development of, use of, and the analyses supporting the document entitled 'Numeric Nutrient Criteria for the Great Bay Estuary'. . . ." NHDES *Amicus* Brief at 2. *See also id.* at 3 ("NHDES stands by the thresholds and scientific evidence that supports them and will continue to use them in developing the list of impaired waters for the Great Bay Estuary."), 7 ("[T]he Oct. 29, 2012 letter from NHDES Commissioner Thomas Burack did not 'verify' that the 2009 Criteria were issued in reliance on erroneous scientific conclusions. Instead, the letter emphasized that eelgrass was not recovering, that the Estuary exhibited all the classic signs of eutrophication, and that excess nitrogen is causing or contributing to the water quality problems in the Estuary."). Simply stated, Petitioner has based substantial argument on a general characterization of this NHDES letter which is patently false.

(2) Petitioner grossly distorts the NHDES letter as it relates to the issue of light attenuation / transparency relative to eelgrass

In attempting to use the NHDES letter to its advantage, Petitioner engages in a disturbingly liberal use of ellipses to alter the meaning of a statement made by NHDES. Specifically, in attempting to argue that nitrogen-related light attenuation / transparency is not a valid concern relative to eelgrass, with a focus on Great Bay proper, which is a shallow area of the estuary, Petitioner extracts the following quote from page 7 of the NHDES letter: "Great Bay itself is not a transparency limited system because eelgrass population [*sic.*] receive sufficient light during the tidal cycle. . . . DES agrees . . . ." *See* Petition at 39 (*quoting* NHDES letter at 7). A review of page 7 of the NHDES letter demonstrates the extreme level of editing conducted by Petitioner to suggest an unqualified acceptance by NHDES of Petitioner's theory. Specifically, on that page, NHDES sets forth in bold typeface a specific claim ("Claim #3") asserted by the Municipal Coalition, followed by NHDES's response to that claim, as follows:

Claim #3

"Great Bay itself is generally not a transparency limited system because eelgrass populations receive sufficient light during the tidal cycle."

DES Response:

> DES assumes that the term "transparency limited" in the claim was intended to mean that the clarity of the water is not the limiting factor for eelgrass survival. DES agrees that one of the reasons why eelgrass still exists in Great Bay proper is the exposure of eelgrass plants to direct sunlight during low tide. However, water clarity is not the only way in which nitrogen affects eelgrass (see response to Claim #1). Therefore, the claim that Great Bay proper is not transparency limited does not mean that nitrogen does not affect eelgrass in the Great Bay proper.
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> In response to similar comments from the [Great Bay Municipal Coalition] on the 2012 Consolidated Assessment and Listing Methodology, DES provided the following explanation of why water clarity is still important even in the shallow areas:
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> > *"The dominant mechanism by which nitrogen affects eelgrass is different in different parts of the Great Bay Estuary and can vary over time. Light attenuation, a general measure of water clarity, is a good indicator of the presence or absence of eelgrass especially in the deeper areas of the estuary. Subtidal eelgrass beds in these areas need clear water to transmit light to the growing depths. In shallower areas, overgrowth and smothering by macroalgae and/or cellular disruption may be the immediate cause of eelgrass loss. However, even in shallow areas, light attenuation is still an important contributing factor for eelgrass viability because sufficient light is a requirement for plant survival in all areas."* (DES, 2012b at 8).

See Exhibit 5 at 7 (bold typeface and italics in original) (underlining added for emphasis).

Petitioner attempts to completely expunge from existence NHDES's affirmative statements about transparency being an issue in all areas of the estuary, including shallow areas (which include Great Bay proper), disingenuously condensing the above language to the statement ". . . DES agrees . . . ." This blatant and intentional distortion of the NHDES letter demonstrates a troubling lack of credibility and candor on the part of the Petitioner.

C. Petitioner's argument is premised on mischaracterizations of the 2013 *State of Our Estuaries* report

Petitioner relies heavily on the Piscataqua Region Estuaries Partnership's ("PREP") 2013 *State of the Estuaries* report ("PREP Report" or "report"), pertinent excerpts of which are appended as **Exhibit 6**, to assert that the permit's effluent limit for total nitrogen is not warranted. Petitioner claims that the report "**Justifies the Immediate Remand of this Permit**." Petition at 25-26 (bold typeface in original).[10] In constructing this argument, however, Petitioner repeatedly makes selective use of language in the report, conspicuously *excluding* language that runs counter to the points Petitioner is attempting to make. Consistent with its distortion of the October 2012 NHDES letter, Petitioner mischaracterizes the PREP Report as follows.

(1) Petitioner mischaracterizes the PREP Report to downplay concerns regarding microalgae

In an attempt to de-legitimize concerns pertaining to microalgae, Petitioner cites page 16 of the PREP 2013 report for the proposition that "[a]lgae blooms in the estuary have not increased in over 30 years." Petition at 26. Absent from Petitioner's selective characterization of this page is the statement that:

> Measurements of chlorophyll-a in the water in Great Bay since 1975 have not shown any consistent long-term trends, nor were there any short term changes in the last three years. *. . . Blooms of microscopic plants are episodic and variable in size depending on factors such as weather. As a result, it can be difficult to detect trends in chlorophyll-a based on a monthly monitoring program which is how monitoring is currently conducted.*

See Exhibit 6 at 16 (emphasis added).

(2) Petitioner mischaracterizes the PREP Report to downplay concerns regarding macroalgae

In an attempt to minimize concerns with respect to macroalgae, Petitioner cites page 44 of the PREP 2013 report for the proposition that "[m]acroalgae are an 'emerging problem' that

[10] Note that the Petition actually cites the "*2012* State of the Estuaries Report." *See* Petition at 26 (emphasis added). The Petition's citation is in error, as PREP did not publish such a report in 2012.

requires further investigation to assess its significance." *Id.* at 26. In contrast to Petitioner's characterization, page 44 of the report states, with respect to macroalgae:

> Recent major research efforts have been completed to inventory the types of macroalge present in the Great Bay estuary, assess their abundance, and map their coverage in the bay. *These efforts have led to recognition that a substantial increase in the abundance of nuisance macroalgae is an emerging problem for the bay* and that increased monitoring and research effort is needed to better understand this issue.

See Exhibit 6 at 44 (emphasis added). Petitioner disingenuously ignores the PREP Report's determination that "Macroalgae, or seaweed, populations have increased, particularly nuisance algae and invasives," as well as its detailed discussion of significant, documented increases in macroalgae in the estuary. *Id.* at 16.

(3) Petitioner mischaracterizes the PREP Report to minimize concerns regarding nitrogen concentrations in the estuary

In an attempt to discount concerns relative to nitrogen concentrations in the estuary, Petitioner cites page 14 of the PREP Report for the proposition that the "[e]xisting TN [total nitrogen] level for the Bay is averaging 0.38 mg/L TN and 0.116 mg/L DIN. DIN levels are comparable to those measured in the 1970s." Petition at 26. Conspicuously absent from Petitioner's proposition are the PREP Report's identification of nutrient concentrations as a negative indicator (Exhibit 6 at 6-7, 14); its finding that "[t]he long-term trend for all of the data collected between 1974 and 2011 shows an average nutrient concentration increase of 68%" (*id.* at 15), and the report's statement with respect to dissolved inorganic nitrogen:

> The apparent conflict between the long-term increasing trend for DIN at Adams Point and recent overall low concentrations for DIN may be explained by the fact that DIN is highly variable. It is rapidly taken up into plants and removed from the water or converted to other forms of nitrogen. Total nitrogen concentrations are a better measure of overall nitrogen availability in the estuary.

Id. at 14.

(4) Petitioner mischaracterizes the PREP Report to downplay concerns about nitrogen loads to the estuary

Petitioner cites page 12 of the PREP Report for the proposition that "[t]he effect of nitrogen loads on the system is not 'fully determined' and requires 'additional research.'" *See* Petition at 26. Petitioner ignores the PREP Report's specific acknowledgment that from 2009 to 2011 WWTFs comprised 32 percent of total nitrogen loads to the estuary, and 52 percent of dissolved inorganic nitrogen ("DIN"), and that WWTF contributions of total nitrogen and DIN increase significantly from April through September, with WWTF contributions of DIN exceeding 80 percent in September. *See* Exhibit 6 at 13. Petitioner also ignores the PREP Report's statement that "global, national and local trends all point to the need to reduce nitrogen loads to the estuary," as well as PREP's explicit goal to "[r]educe nutrient loads to the estuaries and the ocean so that adverse, nutrient-related effects do not occur." *See id.* at 12.

(5) Petitioner mischaracterizes the PREP Report to minimize concerns regarding eelgrass in the estuary

As if to suggest there is no problem with the health of eelgrass in the estuary, Petitioner cites page 20 of the PREP Report for the proposition that "[e]elgrass have rebounded in Little Bay to the highest level in decades." *See* Petition at 26. Petitioner fails to acknowledge the PREP Report's identification of eelgrass as an indicator having a negative trend (Exhibit 6 at 6, 7, 20), and the report's overall conclusion with respect to eelgrass: "Data indicate a long-term decline in eelgrass since 1996 that is not related to wasting disease. Due to variability *even recent gains of new eelgrass still indicate an overall declining trend*." *Id.* at 20 (emphasis added). Petitioner also fails to recognize that it is not presumed that new eelgrass in Little Bay will necessarily persist, and that there are indications that eelgrass beds that remains in the estuary "contain fewer plants [i.e., are less dense] and, therefore, provide less habitat." *Id.*

D. Petitioner's argument regarding peer review is meritless

Throughout its Petition, Petitioner criticizes EPA's peer review of NHDES's nutrients analysis. On the basis of those criticisms and, on the ground that it should have been allowed to directly participate in peer review, Petitioner claims its due process rights have been violated. Petition at 87. In the first instance, and as clearly and specifically addressed by EPA in its Response to Comments, EPA followed its peer-review protocols, submitted the nutrients analysis to experts in the field (Drs. Boynton and Howarth), and received a positive review of that analysis. *See* EPA's Response to Comments at 62-65. It is worth noting that other experts in the field of estuarine eutrophication, Drs. Ivan Valiela and Erin Kinney, conducted a review of NHDES's nutrients analysis and found "[t]he conclusions of NHDES regarding Numeric Nutrient Criteria of the Great Bay estuary are supported by studies in other New England estuaries and can provide a sound basis for permitting decisions, including those for the Exeter wastewater treatment plant." *See* **Exhibit 7** (July 28, 2011 Corresp. from Drs. Valiela and Kinney to Tom Irwin, CLF).[11] While Drs. Valiela and Kinney conducted their own independent assessment, they also found the peer review conducted by Drs. Boynton and Howarth to be a strong affirmation of NHDES's analysis.[12]

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[11] While specifically referencing the Exeter WWTF permit, the analysis conducted by Drs. Valiela and Kinney was submitted by CLF as part of its comments on the Newmarket WWTF permit.

[12] As stated by Drs. Valiela and Kinney:

> There is very strong, empirical evidence that there have been increases in land-derived nitrogen loads and nitrogen concentrations and that eelgrass habitat and minimum dissolved oxygen concentrations are lowered as a result, in global (Waycott et al. 2009) and regional (Latimaer and Rego 2010) terms. The Great Bay estuary shares this fate, judging from the evidence we have seen, and does not differ at all from what we have seen elsewhere.
>
> We therefore agree with the opinion given by Dr. Robert W. Howarth, and Dr. Walter R. Boynton, who were asked by the Environmental Protection Agency (EPA) to provide independent peer reviews of the report by NHDES. Dr. Howarth and Dr. Boynton are highly regarded experts in the field of estuarine biogeochemistry and eutrophication, have published dozens of peer-reviewed studies of the effects of nitrogen on estuaries, and have been well-

Petitioner's claim – that they have been deprived of due process rights – is without merit and should be rejected. Petitioner has provided no legal authority or briefing to demonstrate that it has a due process right to participate in a peer review. EPA properly rejected Petitioner's legal claim for the reasons set forth in EPA's Response to Comments. *See* EPA's Response to Comments at 61-62. EPA also properly noted that it is inappropriate to allow parties to influence a peer review process. *Id.* at 62. While Petitioner may not be satisfied with the results of the peer review (indeed, it appears that Petitioner is the *only* entity dissatisfied with its results), this dissatisfaction does not translate into a legal claim. In light of Petitioner's propensity to mischaracterize facts and politicize science, allowing Petitioner to participate in and influence the process would have transformed that review into something different than valid peer review.

Conclusion

Petitioner has not met its heavy burden of demonstrating that it is entitled to a review of the subject permit, or that EPA, in the exercise of its scientific and technical expertise, committed clear error. Accordingly, Conservation Law Foundation, the Town of Newington, and New Hampshire Audubon respectfully request that the Board deny Petitioner's requested review.

> recognized as leaders in these fields. Both have been part of national and international panels dealing with these issues, both have been Presidents of the Coastal and Estuarine Research Federation, and have been part of many other key organizations in relevant fields. Their opinions have to be taken as authoritative.
>
> We agree with Howarth's and Boynton's assessments that the Numeric Nutrient Criteria for the Great Bay Estuary provides an excellent basis for protecting the estuary and is an improvement over narrative nutrient criteria. Both opined that the NHDES report was easy to follow and the methods were transparent. We also agree with Howarth and Boynton that a nutrient load based approach might have been stronger, but add that we believe that long-term (9 years) extensive empirical datasets on several key indicators of eutrophication status that are available from Great Bay and several of the tributary rivers give considerable strength to the conclusions drawn by NHDES.

See Exhibit 7 at 8-9.

Alternatively, should the Board grant Petitioner's request for review, the undersigned entities urge the Board to:

A. Deny Petitioner's request to stay these proceedings (which stay would achieve nothing but the further delay sought by Petitioner) and proceed expeditiously with the adjudication of this matter;

B. Affirm the permit at issue in this appeal; and

C. Grant such other relief as it deems appropriate and just in support of the subject permit and to advance its prompt finalization.

Respectfully Submitted,

CONSERVATION LAW FOUNDATION

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Dated: February 7, 2013

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Brief in Response to the Great Bay Municipal Coalition's Petition for Review, in connection with NPDES Appeal No. 05-12, were sent this day to the following persons by First Class U.S. Mail, postage prepaid:

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Dated: February 7, 2013

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