HALL & ASSOCIATES

Suite 701
1620 I Street, NW
Washington, DC 20006-4033
Telephone: (202) 463-1166 Web: http://www.hall-associates.com Fax: (202) 463-4207

Reply to E-mail:
jhall@hall-associates.com

September 23, 2013

Via Electronic Filing

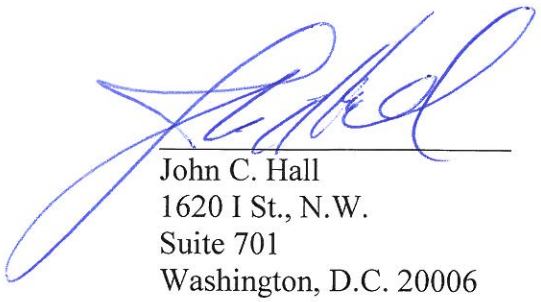
U.S. Environmental Protection Agency
Clerk of the Board
Environmental Appeals Board 1103M
1200 Pennsylvania Avenue, N.W.
East Building
Washington, D.C. 20460-0001

Re: Town of Newmarket Wastewater Treatment Plant
Permit Number: NH0100196
Appeal Number: NPDES 12-05

Dear Ms. Durr,

Please find Petitioners' Motion Requesting Leave to File a Supplement to the Administrative Record and Notice of Supplemental Authority, and accompanying Certificate of Service regarding NPDES Appeal No. 12-05.

Sincerely,



John C. Hall
1620 I St., N.W.
Suite 701
Washington, D.C. 20006
Tel: (202) 463-1166
Fax: (202) 463-4207
jhall@hall-associates.com

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

In re:	)	
Town of Newmarket	)	
	)	NPDES APPEAL No. 12-05
NPDES Permit No. NH0100196	)	
	)	

PETITIONERS' MOTION REQUESTING LEAVE TO FILE A SUPPLEMENT TO THE ADMINISTRATIVE RECORD AND NOTICE OF SUPPLEMENTAL AUTHORITY

Petitioners, the Great Bay Municipal Coalition ("the Coalition"), hereby files this motion requesting leave to file a supplement to the administrative record and notice of supplemental legal authority to the Environmental Appeals Board (the "Board" or "EAB"), applicable to the above captioned matter. As discussed below, these records, which are directly relevant to the legal and technical issues raised in this appeal, include:

> (1) Two filings by EPA in pending Freedom of Information Act ("FOIA") appeals regarding records addressing the specific factual allegations underlying the Coalition's objections to this permit action and the Coalition's science misconduct allegations. These responses confirm that the Coalition's scientific error and related factual averments were correct and there are no agency records disproving their accuracy. Thus, EPA's representations that it had documents and analysis showing the Coalition's concerns were addressed was in clear error;
>
> (2) Internal EPA documents released under FOIA which disclose no post-2009 comments were considered by the 2010 peer reviewers, that EPA directed that reviewers to not consider the comments and issues submitted by the Coalition in April 2010 and that the peer review management and at least on reviewer were biased against the local communities and their representatives;
>
> (3) EPA responsive documents released under a FOIA request regarding the proper implementation of 40 C.F.R. § 122.44(d), which confirm that the public was never informed that EPA would use this rule to generate numeric criteria to claim impairments and narrative violations exist, rather than EPA having to make a demonstration that the pollutant caused or was projected to cause the impairment as required by the adopted narrative standard. Thus, the EPA's claim

that this rule contains no causation requirement is a substantive reinterpretation of the published rule, as Petitioner's asserted;

(4) Documents released by EPA Region 1 for another nearby estuarine system that acknowledge (a) using the worst case condition for nutrient impact evaluation is improper, (b) the level of TN that is protective of northeast estuarine systems is 0.35- 0.5 mg/l TN (long term average) and (c) the impact assessment for nutrients should be based on long term exposures using median flow conditions, not a "mixing zone/low assessment". These Region 1 documents confirm that the endpoint selected was unduly restrictive and that basing permit calculations on conditions including an extreme flow year (*i.e.*, 2006) and dilution limited to a mixing zone, was clear error; and,

(5) New guidance just released by EPA stating that direct effects of nutrients on algal growth should be confirmed prior to deriving appropriate nutrient endpoints. As claimed by Petitioners, and admitted to be correct in the FOIA responses, EPA's analyses never demonstrated that TN triggers excessive algal growth in this system. System data confirmed such increased/excessive algal growth did not occur. In deriving the TN numeric criteria, EPA and DES jumped over this determining fact when it erroneously claimed that DO and transparency impacts were caused by increased algal levels due to TN inputs. The new guidance confirms that action was clear error.

As discussed below, these documents should be included in the administrative record because the records (1) were in EPA's possession and should have been included as part of the original administrative record, (2) contain new information not available at the time of permitting but is directly relevant to the accuracy of EPA's Newmarket permit decision, (3) support the Coalition's claims of bad faith; and/or (4) are relevant and material to the Board's decision as the documents direct address the Coalition's major scientific claims and show the previous peer review relied upon by EPA in issuing the Newmarket permit was biased. Individually, and collectively, these justifications support the Coalition's position that the documents discussed below should now be included as supplemental material.

Additionally, the Coalition wants to bring to the Board's attention to new authority which is relevant to the Newmarket appeal: (1) an opinion in *Iowa League of Cities v. EPA*, 711 F.3d 844 (8th Cir. 2013), setting forth standards on what constitutes a revised rule and when the

Agency must engage in formal notice-and-comment rulemaking under the Administrative Procedures Act and (2) an opinion in *City of Dover v. EPA*, 2013 U.S. Dist. LEXIS 106331 (D.D.C. July 30, 2013), finding a challenge to the Agency's use of the unadpoted 2009 Numeric Nutrient Criteria as if it had the force of law would be improper. As these decisions are also relevant to the Newmarket appeal, as discussed in more detail below, we ask that the Board take into consideration these cases in deciding whether to grant Petitioners' appeal of the Newmarket NPDES permit.

1. Argument For Supplementing the Record

Post-decisional documents may be included in the administrative record in certain limited circumstances:

> (1) If admission is necessary to determine whether the agency has considered all relevant factors and has explained its decisions, (2) if the agency has relied on documents not in the record, (3) when supplementing the record is necessary to explain technical terms or complex subject matter, or (4) when plaintiffs make a showing of agency bad faith.

Lands Council v. Forester of Region One of the U.S. Forest Serv., 395 F.3d 1019, 1030 (9th Cir. 2005) (internal citations omitted) (citing S*w. Ctr for Biological Diversity v. U.S. Forest Serv.*, 100 F.3d 1443, 1450 (9th Cir. 1996); *see also Camp v. Pitts*, 411 U.S. 138, 142-43 (1973) (holding if an administrative record is incomplete a court may permit the record to be supplemented). Additionally, documents confirming specific facts or scientific positions or which are used for "correcting erroneous assumptions, predictions, or facts forming the predicate for agency decision-making...." may be added to the record. *Afghan Am. Army Servs. Corp. v. U.S.*, 106 Fed. Cl. 714, 724 (2012).[1] Furthermore, if the agency "proceeded upon assumptions

[1] *See also Nat'l Wilderness Inst. v. Army Corps*, 2002 U.S. Dist. LEXIS 27743, *10 (2002) (supplementing administrative record permitted where "evidence arising after the agency action shows whether the decision was correct or not"); *Esch v. Yeutter*, 876 F.2d 976, 991-92 (D.C. Cir. 1989) (same); *Am. Mining Cong. v. Thomas*, 772

that were entirely fictional or utterly without scientific support" supplementing the record is permissible. *Ass'n of Pac. Fisheries v. Envtl. Prot. Agency*, 615 F.2d 794, 811-812 (9th Cir. 1980). As these documents were not available pre-decision or were excluded by the Agency from the original administrative record and are relevant to the scientific validity of the Agency's actions, they should be added to the record.

The administrative record may also be supplemented if there is good cause to do so including a showing of bad faith or improper conduct on the part of the agency. *Tummino v. Torti*, 603 F. Supp. 2d 519, 543 (E.D.N.Y., 2009) ("[T]he law is clear that, despite the 'record rule,' a reviewing court may consider extra-record materials in certain circumstances. *See Nat'l. Audobon* [*Soc'y v. Hoffman* (2d Cir. 1997)] 132 F.3d [7,] at 14. Indeed, 'a strong showing of bad faith or improper behavior' may justify supplementing the record.") (citing *Overton Park v. Volpe,* 401 U.S. 402 (1971)*; see also Consejo de Desarrollo Economico de Mexicali v. United States*, 438 F. Supp. 2d 1207, 1221 (D.C. Nev. 2006) (finding the administrative record may be supplemented "[w]hen plaintiffs make a showing of agency bad faith.").[2] EPA's consistent attempts to skew the record, prevent the Coalition from being involved in the peer review

---

F.2d 617, 626 (10th Cir. 1985) (record may be supplemented with post-decisional evidence that "demonstrates that the actions [of the agency] were right or wrong."); *Am. Petroleum Inst. v. Envtl. Prot. Agency*, 540 F.2d 1023, 1034 (10th Cir. 1976) (EPA introduced post-decisional data to support its contention that technologies were practicable and current.); *Dopico v. Goldschmidt*, 687 F.2d 644, 654 (2d. Cir. 1982) (finding the factual issue of what constituted the agency's "informational base" was in dispute, and that summary judgment could not be granted "without at least permitting plaintiffs some limited discovery to explore whether some portions of the full record were not supplied to the Court.").

[2] *See also Consejo de Desarrollo Economico de Mexicali*, 438 F. Supp. at 1221 ("When [a] Plaintiff makes a showing of agency bad faith" supplemental records may be added to the record for the reviewing court to consider); *Portland Audubon Soc'y v. Endangered Species Comm.,* 984 F.2d 1534, 1548 (9th Cir. 1993) (permitting discovery when there is a reason to infer bad faith or improper agency behavior)*; Bar MK Ranches v. Yuetter,* 994 F.2d 735, 739 (10th Cir. 1993) (permitting discovery when a party has made a "showing that the record may not be complete"); *Cmty. for Creative Non-Violence v. Lujan,* 285 U.S. App. D.C. 233, 908 F.2d 992, 998 (D.C. Cir. 1990) (permitting discovery when party has made a showing of bad faith or improper agency behavior); *Natural Res. Def. Council v. Rain,* 519 F.2d 298, 292 (D.C. Cir. 1975) (permitting "limited discovery" to guarantee "documents which are properly part of the administrative record have [not] been withheld."); *Pub. Power Council v. Johnson*, 674 F.2d 791, 795 (9th Cir. 1982) ("[C]ourts will go beyond the agency record when agency bad faith is claimed.").

process and refusal to consider or evaluate major technical concerns raised by the Coalition more than meets this threshold.

Petitioners have raised Agency "bad faith" in purposefully excluding data and analyses from the peer review panel, which confirmed there were major flaws in the 2009 Numeric Nutrient Criteria document (Pet. for Rev., at 37-38; Reply, at 12-14), maintained scientific positions it knows to be in error (Pet. for Rev., at 84-86; Reply, at 12-16), and revised its procedures for implementing 40 C.F.R. § 122.44(d) in the final permit which was contrary to how historically the agency has interpreted this regulation (Pet. for Rev., at 49-52; Reply, at 22-24).[3] Given the factual inconsistencies between what EPA originally told the public, what it has held out as the truth to the Board, the Coalition has shown with particularity that the Agency is acting in bad faith and falsely representing its position before the Board and therefore, these document should be added to the administrative record.

2. Documents that Belong in the Administrative Record

As discussed below, the following documents should be included in the administrative record: (1) two filings by EPA in pending FOIA appeals regarding the Coalition's science

[3] As the Coalition has argued before (*see* dkt # 43), a demonstration of bad faith on the part of the Agency may justify the supplementation of the administrative record through discovery. *Am. Farm Bureau,* 2011 *U.S. Dist. LEXIS 148637,* *11-12. In order to justify discovery, a party must only provide facts indicating that the administrative record is incomplete, not demonstrate bad faith. *Id.* at *19 (there are "two situations where discovery might be permitted: (1) where plaintiff alleges that bias corrupted the agency's decision; and (2) where factors indicate that the administrative record submitted to the district court is incomplete. Thus, to overcome the strong presumption against discovery, Plaintiffs must make a strong showing of bias or incompleteness"). Similarly, in *Nat'l Wilderness Instit.,* the court noted that when an agency, intentionally or not, excluded evidence from the administrative record that was adverse to its position, discovery would be allowed to supplement the record. 2002 U.S. Dist. LEXIS 27743, 7-8. As explained by the court:

> However, some determinations can only be achieved by looking beyond the record. For example, when the completeness of the record or the good faith of the agency are at issue, there necessarily must be inquiry beyond the record.

Id. at *10-11. As here, the Coalition has more than demonstrated bad faith on the part of the Agency in withholding documents showing Agency misconduct, the Coalition firmly believes the Board should grant its previous motion for depositions.

misconduct allegations; (2) internal EPA documents released under FOIA regarding the scope of the 2010 peer review; (3) responsive documents released under FOIA regarding the proper implementation of 40 C.F.R. § 122.44(d); (4) draft NPDES Permit No. MA0100897 for Taunton Wastewater Treatment Plant; and (5) EPA's guidance document entitled "Guiding Principles on an Optional Approach for Developing and Implementing a Numeric Nutrient Criterion that Integrates Causal and Response Parameters."

a. Two filings by EPA in pending Freedom of Information Act ("FOIA") appeals regarding the Coalition's science misconduct allegations

As discussed in Petitioner's filings, on May 4, 2012, the Coalition filed a science misconduct charge with EPA Headquarters alleging Region 1 had repeated ignored the available scientific data, precluded the Coalition's participation in the 2010 peer review, and excluded critical studies confirming the 2009 Numeric Nutrient Criteria were in error from the peer review. A.R. H.14.; *see* Pet. for Rev., at 20. These science misconduct allegations are, in part, the same assertions that are the basis for this permit appeal. In response, on September 27, 2012, EPA Office of Water issued a letter stating that "[b]ecause of the seriousness of these allegations, the EPA's Office of Water has initiated a careful review of the issues raised in [the Coalition's] letter. … [T]he EPA Office of Waster has not seen evidence that Region 1 has engaged in scientific misconduct. …" A.R. H.20; *see also* Pet. for Rev., at 24. However, because the September 27th letter provided no insight or support for EPA's conclusion, the Coalition submitted a series of FOIA requests to EPA Headquarters and Region 1 asking for the documents in its possession that refute the Coalition's *specific* science misconduct allegations and the *specific* conclusions from the relevant scientific studies showing that nitrogen, in fact, did not cause a decline in system transparency or eelgrass population. A.R. I., at 1-18, 39-47. For the Board's convenience, Attachment A summarizes the specific factual/scientific statements

which the Coalition asked EPA to provide records of its analyses or data showing the scientific and factual statements were incorrect under FOIA. These FOIA responses (or lack thereof) confirm that the Agency's technical claims underlying the draft permit are unsupported. For example, the following are two of the factual statements taken from the Coalition's science misconduct letter, which the Coalition requested Region 1 provide the records showing the statements are false:

- Algal levels [in Great Bay/Little Bay] did not change materially from 1980 to present, despite an estimated 59% increase in TN levels between 1980 and 2012 *and therefore TN inputs could not have caused changed transparency [in Great Bay/Little Bay].* (A.R. I.9).

- Data for tidal rivers (Squamscott, Lamprey, Piscataqua) shows TN control will not meaningfully improve transparency. (A.R. I.11).

In response to these FOIA requests, EPA confirmed it possesses no other records or documents showing that the specific factual and scientific points raised in the science misconduct filing are incorrect. *See* S. Exh. 24, at 11 (EPA has "produced … all of the responsive, non-exempt Agency records subject to the FOIA to which [the Coalition] is entitled."); S. Exh. 25, at 1 (in response to the one FOIA request EPA responded too, EPA stated it "has … produced … all of the non-exempt, responsive records subject to the FOIA to which it is entitled …"), at 14 (with regards to the other eight requests that EPA asserted "do not reasonably describe the records being sought." The Agency stated "EPA properly determined that Headquarters likely did not have any records responsive to this request…").[4]

[4] Under FOIA, the Coalition is "entitled" to any factual statements pertaining to the FOIA requests; EPA cannot hide behind the guise of FOIA exemption 5 in order not to release responsive documents containing factual statements. *See Coastal States Gas Corp. v. Dep't of Energy*, 617 F.2d 854, 867 (D.C. Cir. 1980) (finding FOIA exemption 5 under 5 U.S.C. § 522(B)(5) may only apply "to the 'opinion' or 'recommendatory' portion of [a document], not to factual information which is contained in the document."); *John Doe Agency v. John Doe Corp.*, 493 U.S. 146, 152 (1989) ("But these limited [FOIA] exemptions do not obscure the basic policy that disclosure, not secrecy, is the dominant objective of the Act. Accordingly, these exemptions must be narrowly construed.") (internal quotations omitted).

In various filings with the Board in this matter, EPA has repeatedly claimed that it has conducted an independent evaluation of the data and analyses for the Great Bay Estuary and concluded that stringent nutrient limits are necessary and related science misconduct allegations were unsupported. *See* Memo. in Opp. to Pet. for Review, at 18, 25, 26, 64, 65; Surreply, at 16 n. 5; *see also* A.R. B.1, at 7 n.8, 9, 11-13, 43, 61, 83, 96. Despite numerous references made by the Region of the independent review it has conducted to justify the permit limitations, the two motions filed by EPA in pending FOIA appeals[5] confirm that, in fact, EPA has *no* records and analyses to demonstrate its technical claims are true. S. Exhs. 24, 25.

That EPA claimed to have undertaken a "careful review of issued raised in the [science misconduct] letter" and not a scintilla of evidence or analyses was produced to show the Coalition "concerns" were actually in error is astounding. If such records existed, these FOIA requests would have uncovered them. Therefore, based on these two filings, it is clear that EPA has done no independent analyses/review of the Coalition's key scientific concerns nor does EPA have any records providing the factual basis for disputing the objections made by the Coalition with regards to the scientific validity of the Newmarket permit. These documents confirm that the technical conclusions relied upon in deriving Newmarket's nutrient limit, are invalid and the permit should be vacated and the limit reassessed, as argued by Petitioners. *See Afghan Am. Army Servs. Corp. v. U.S.*, 106 Fed. Cl. 714, *supra*, at 3; *supra* note 1, at 3.

b. Internal EPA Documents Regarding the 2010 Peer Review

These newly released documents confirm that EPA prevented the earlier peer review from considering our major objections to the 2009 Numeric Nutrient Criteria, as the Petitioners

[5] *See Hall & Assocs. v. U.S. Environmental Protection Agency*, No. 13-830-JEB (D.D.C. 2013); *Hall & Assocs. v. U.S. Environmental Protection Agency*, No. 13-823 RLW (D.D.C. 2013). The FOIA requests underlying these appeals are part of the administrative record for the Newmarket appeal: A.R. I.1-18 (Region 1 FOIA requests); A.R. I.39-47 (Headquarters FOIA requests).

argued. S. Exhs. 26, 27. These records, as well as the statements of at least one peer reviewer and Tetra Tech, the manager of the review, confirms that (1) the 2010 peer review *did not* address the Petitioner's concerns and (2) the review was biased against reviewing the kind of issues raised by Petitioners. Therefore, any reliance by EPA on the 2010 peer review to claim that Petitioners objections are not valid is unsupported and a "fictional account" of what actually transpired, as argued by Petitioners. *See, e.g.,* Pet. for Rev., at 37-38, 87-88; Reply, at 5-7, 12-14, 17-19.

Additionally, in various filings with the Board, EPA has continually denied that it withheld information provided by the Coalition from the 2010 peer reviewers and has asserted that the 2010 peer review addressed the Coalition's major technical concerns. *See e.g.,* Memo. in Opp. to Pet. for Review, at 73-77, App. A., at 38-39, 43-45, 47-48; Surreply, at 20. For instance, EPA stated in its Memorandum in Opposition to the Petition for Review:

> The Coalition's implication (Pet. at 87, n. 76) that EPA and NHDES sought to *preclude* the peer reviewers from considering the Coalition's comments *is false* ... Moreover, as evidenced by the peer review results themselves, the *fundamental issues of concern to [sic] Coalition – e.g., correlation versus cause, sufficiency and interpretation of data, adequacy of the weight of the evidence approach – were considered by Boynton and Howarth* ...

Memo. in Opp. to Pet. for Review, at 75 (emphasis added). EPA's recent FOIA response, disclosed that, in June 2010, the Agency specifically directed the peer reviewers to *not* address the Coalition's supplemental comments. This record confirms that the factual representation made to the Board regarding the scope and content of that peer review were false (*i.e.*, a fictional account of what had actually occurred):

> The Coalition, or its representatives, developed several sets of additional comments on the 2009 Criteria document after the March 20, 2009 close of the public comment period (referred to as 'the subsequent Coalition comments'). On May 12, 2010, the Coalition transmitted comments to NHDES and EPA, entitled "Assessment of Appropriate Peer Review Charge Questions Numeric Nutrient

> Criteria for the Great Bay Estuary, New Hampshire." On June 7, 2010, the Coalition submitted their May 12, 2010, comments as well as a final report from EPA's Scientific Advisory Board directly to Drs. Boynton and Howarth. [footnote omitted]. *EPA shortly thereafter decided that these and any further comments would not be allowed within the authorized scope of Drs. Boynton and Howarth's peer review.*

S. Exh. 26, at 2 (emphasis added). The newly released responsive documents, including an email written by the branch chief at EPA/OST which also confirms this position:

> We had N-Step experts review the information that was provided to us by the State and *will not be opening the review up for any more information.* If the State wants to take into account the new information, that is their prerogative....

S. Exh. 27, at 3 (emphasis added). In addition to EPA's admission that it did not provide the Coalition's comments to the peer reviewers, these email documents reveal personal bias on the part of at least one of the reviewers and EPA's contractor's manager who characterized the Coalition's comments in a disparaging manner.

> It's a little sad to see [the comments] coming from the City of Portsmouth. ... Now, [the City of Portsmouth] is a haven for very wealthy people who enjoy the NH seacoast and lack of income tax, while commuting to Boston for work. They can probably afford to pay to clean up their discharge. . . . . (S. Exh. 27, at 2 (email from Dr. Howarth)).

> By the way, thanks for doing such a sound review. You know you are doing something meaningful when you get emails from people at firms with lots of last names in it. Clearly there are dischargers in NH that are concerned with what nutrient criteria mean for their operations. John Hall is a national attorney (Hall and Associates) who has been challenging limits on nutrients on behalf of dischargers nationwide. I am not surprised he has surfaced in one of the first estuaries battlefields. Again you know its important when the lawyers get involved. I am sure both of you are familiar with that ... sadly. (S. Exh. 27, at 2 (email from Mike Paul, manager of EPA's contractors to the peer reviewers)).

These documents, on their face, confirm an inherent bias within the 2010 peer review. It is incredible that EPA and its contractors belief that the submission of specific technical comments by communities legal representatives evidences that the comments should be ignored or lack merit. Moreover, Dr. Howarth apparently has some personal difficulty with the present populace

of Portsmouth. It is not apparent why he believes that the Portsmouth discharge, near the mouth of the estuary, has a demonstrated impact on water quality. Information needed to confirm an impact by Portsmouth was not even included within the scope of the review that he undertook. This is the area of the system where water quality is considered excellent by any objective measure. As a matter of law, the results of this peer review must be struck by the Board due to clear evidence of bias. *See Home Box Office, Inc. v. Fed. Commc'n Comm'n*, 567 F.2d 9, 54 (D.C. Cir. 1997).

Therefore, given the Agency's latest disclosure, the Board should strike the Agencies use of the 2010 peer review due to (1) the serious mischaracterization of the scope of the peer review and (2) the biased nature of that action. The Board should remand the permit action as it is clear that the peer review relied upon by EPA in this action, never addressed the fundamental concerns raised by the Coalition during the review which were the same issues raised two years later in comments by the Coalition submitted regarding the Newmarket permit. *See* A.R. C.2, at 4-5.

c. Responsive Documents Regarding the Implementation of 40 C.F.R. § 122.44(d)

In its Response and Sur-reply, EPA claimed that draft state policies referenced in 40 C.F.R. § 122.44(d)(1)(vi) are used to determine if a water body is violating New Hampshire's narrative criteria. *See* Memo. in Opp. to Pet. for Rev., at 42-44 (EPA admits it did not first demonstrate a narrative criteria violation was occurring and was caused by nitrogen prior to deriving limits), at 45-49; Surreply, at 10-13. In particular, EPA claims 40 C.F.R. § 122.44(d)(1)(vi) is not merely used to determine an appropriate effluent limitation to meet a narrative criterion, it is also used to define whether a narrative criteria violation under § 122.44(d)(1)(ii) exists. After learning of EPA's re-interpretation of 40 C.F.R. § 122.44(d), Hall & Associates submitted a series of three FOIA requests seeking records associated with EPA's

published statements on how the regulation was intended to be implemented. The FOIA requests asked for any records:

> (1) From EPA Headquarters, developed between 1989-2005, directing states to impose nutrient limits under § 122.44(d), for waters that are not nutrient impaired. (S. Exh. 28);
>
> (2) Informing the public that with the adoption of § 122.44(d) and any subsequent amendments, EPA has the authority to impose stringent limitations even where state waters are not listed as impaired or exhibiting signs of impairment (e.g., imbalance in aquatic fauna or flora) due to nutrient (S. Exh. 29); and
>
> (3) Containing guidance, post-2005, for NPDES permit writers, on how to implement a state narrative criteria under § 122.44(d) with respect to nutrients. (S. Exh. 30).

With regards to the first FOIA request (S. Exh. 28), EPA had no responsive documents. For the remaining FOIA requests (S. Exhs. 29 and 30), the only responsive document provided by EPA was entitled "Nutrient Criteria Implementation: Frequent Questions."[6] *See* S. Exh. 31. In the "Frequent Questions" document, 40 C.F.R. § 122.44(d) is only discussed three times. *See id.* at 1 (Question 2); at 3 (Question 3); at 4-5 (Question 8). These references are merely general statements that 40 C.F.R. § 122.44(d) should be used to derive water quality based "effluent limitations" (WQBEL). *See, e.g., id.* at 3 ("even if a water body is not currently impaired for nutrients, a permit writer must include a WQBEL *if* a discharge has the reasonable potential to cause or contribute to an excursion of the nutrient criteria.") (emphasis added). The document does not contain any statements indicating that EPA should use a draft numeric value to determine if a narrative criteria *violation* is predicted to occur or that the "reasonable potential" component allows EPA to simply declare that a nutrient impairment exists without some clear cause and effect demonstration.

---

[6] EPA provided an electronic version of the document as well as the following hyperlinks where the document may be accessed: http://www2.epa.gov/nutrient-policy-data/frequent-questions-nutirent-criteria-implementation and http://cfpub.epa.gov/npdes/faqs.cfm#426.

Thus, EPA's FOIA responses are inconsistent with EPA's argument in this permit appeal that 40 C.F.R. § 122.44(d), or draft policy documents reference therein, can be used to declare waters in exceedance of a state's narrative standard (either presently or in the future). Nor does the guidance allow a permitting authority to dispense with a demonstration that nutrients caused a violation of the applicable water quality standard - in this case Env-Wq 1703.14(c) (requiring a demonstration that nutrients are, in fact, *causing* "cultural eutrophication."). Put differently, EPA's assertion of how to apply 40 C.F.R. § 122.44(d) is not consistent with how EPA has informed the public on how to interpret this rule, as Petitioners have previously asserted. *See* Reply, at 22-24. Accordingly, as EPA's response to these three FOIAs indicates that EPA is employing an unadopted and, therefore, illegal rule interpretation, in issuing the Newmarket permit, these documents should be added to the administrative record.

d. Draft NPDES Permit for Taunton Wastewater Treatment Plant

The Coalition wants to bring the Board's attention to a recently released draft NPDES permit for the Taunton Wastewater Treatment Plant in Taunton, MA where EPA Region 1 discusses what constitutes a protective level of total nitrogen in an "excellent to good" estuarine waterbody and an "unimpaired" waterbody. *See* S. Exh. 32. The discussion in the Taunton draft permit directly contradicts EPA Region 1's position in the Newmarket permit that a 0.3 mg/l TN instream criterion is necessary to protect eelgrass populations in the Great Bay estuary.

The Taunton draft permit is relevant because like the Newmarket permit, it is an EPA Region 1 NPDES permit applying an EPA-selected (nitrogen) nutrient criterion to evaluate the necessary nitrogen limitation for a wastewater treatment plant discharging to an estuarine system. Additionally, Massachusetts, like New Hampshire, has not adopted numeric criteria for total nitrogen and instead applies a case-by-case translator: *Site-Specific Nitrogen Thresholds for*

Southeastern Massachusetts Embayments: Critical Indicators- Interim Report (Howes *et al.*, 2003) ("Critical Indicators Report"). *See* Taunton Fact Sheet, at 17. The Critical Indicators Report provides "guidance for indicators, including total nitrogen, for various water quality classes." *Id.* at 18. More specifically, the Critical Indicators Report states for waters fall under the "Excellent to Good" classification indicators include: "Eelgrass beds are present, macroalgae is generally non-existent but in some cases may be present, … chlorophyll-a levels are in the 3 to 5 µg/L range … total nitrogen levels of 0.30-0.39 mg N/L."[7] *Id.* at 18. Indicators for waters classified as "unimpaired," include "chlorophyll-a levels are in the 3 to 5 µg/L range and nitrogen levels are in the 0.39 – 0.50 range. … eelgrass is not present … and macroalgae is not present or present in limited amounts even though a good healthy aquatic community still exists." *Id.* EPA's Fact Sheet specifically referenced this range of TN as protective of estuarine resources, including eelgrass.

It is clear from the Taunton draft permit, that EPA Region 1's actions in setting the Great Bay nutrient criterion are arbitrary and capricious, as previously argued by the Coalition. *See generally* Pet. for Rev., at 56 - 97 (the Scientific Argument section). EPA Region 1 is simply choosing a random value for TN that has no scientific backing and runs contrary to EPA Region 1's own conclusions on what constitutes a healthy waterbody. Currently for Great Bay, the average TN level for 2009-2011 was 0.376 mg/L and for Adams Point the average was 0.380 mg/L.[8] Based upon the 0.30 to 0.39 mg/l range for TN articulated in the Taunton draft permit for "excellent to good" waters *that are not nutrient mpaired*, Great Bay should not be listed as

---

[7] The ranges for the indicator for nitrogen are "based on long-term (>3 yr) average mid-ebb tide concentrations of total nitrogen (mg/L) in the water column." *Id.* at 18.

[8] *See* Piscataqua Region Estuaries Partnership, *Environmental Data Report December 2012 Technical Support Document for the State of Our Estuaries Report*, at 39, *available at* http://prep.unh.edu/resources/pdf/2013%20SOOE/2012%20PREP%20Env%20Data%20Report%20FINAL%20Compressed%20Adobe6.pdf.

impaired for nitrogen. In addition, the average chlorophyll-a concentrations for Great Bay for 2009-2011 was 3.8 μg/L and for Adams Point was 3.6 μg/L.[9] This is well within the 3 to 5 μg/L range for an "excellent to good" waterbody articulated in the Taunton draft permit. Moreover, for Mount Hope Bay and the Taunton estuary, EPA claims a TN level of 0.45 mg/l TN is sufficient to ensure ecological protection. Great Bay and the Lamprey River already meet this value. Accordingly, we ask the Board to take into consideration these EPA Region 1's conclusions for determining when a waterbody is unimpaired found within the Taunton draft permit, in deciding whether to grant Petitioners' appeal of the Newmarket NPDES permit. There is no rational basis presented by EPA for concluding that TN and algal levels that fall within the "good to excellent" water quality category and are considered fully protective in estuaries for Massachusetts, should be classified as impaired in the Great Bay estuary.

Finally, the Taunton permit action confirms that EPA misapplied the 0.3 mg/l numeric criteria, in deriving the Newmarket permit limits, precisely as Petitioners argues. Pet. for Rev., at 72-74, 75-77. For Taunton, EPA admitted that the worst case wet weather conditions should not be the basis for applying nutrient criteria and that long term average flow conditions should be used in deriving nutrient effluent limitations. Taunton Fact Sheet, at 26, n.5 (EPA excluded the "extremely high rainfall" period in 2006 as it has the "potential to disturb the 'steady-state' assumption that underlies EPA's load analysis"), at 30 (finding allowable TN loads can be calculated based on "long term average conditions, which approximate steady state conditions"). EPA did the *opposite* when it applied the long term average nutrient criteria for Great Bay estuary. In Great Bay, the criteria were applied (1) in a mixing zone, (2) at extreme, short term low flow conditions and (3) the need for the most restrictive limitations were based on extreme wet weather conditions. A.R. B.1, at 117. There is no rational scientific basis for using

[9] *See id.* at 93 (Adams Point), 96 (Great Bay).

diametrically opposed implementation approaches for meeting the nutrient criteria applied in each case. As the Coalition argued, the approach in Great Bay Estuary used by EPA was not scientifically defensible because long term nutrient criteria do not apply to short term flows or in mixing zones. Likewise, the use of a once in 100 year wet weather condition to dictate the need for highly restrictive nitrogen limits was not consistent with accepted scientific practices for development of nutrient limitations. EPA's own actions in the Taunton matter proves that these concerns were valid and that the agency's approach in Great Bay effluent limit development was arbitrary and capricious.

e. Guiding Principles document

On September 12, 2013, EPA released a document entitled "Guiding Principles on an Optional Approach for Developing and Implementing a Numeric Nutrient Criterion that Integrates Causal and Response Parameters." S. Exh. 33. The purpose of the document "is to offer clarity to states about an optional approach for developing a numeric nutrient criterion that integrates causal (nitrogen and phosphorus) and response parameters into one water quality standard (WQS)." *Id.* at 1. A "response parameter" is an ecosystem response such as algal growth, eelgrass growth, transparency or dissolved oxygen ("DO"). *Id.* at 2. This is precisely the structure of the 2009 numeric criteria – a "causal" and "response" parameter. In developing such numeric nutrient criterion, EPA explains, citing 40 C.F.R. § 131.10(a), under the "Sound Science Rationale" heading:

> Assessment endpoints should be relevant to the management goals (e.g., protect and maintain aquatic life) *and should be sensitive to the stressor of interest* (e.g., increased nitrogen and phosphorus concentrations). Appropriate biological response parameters will *directly link* nutrient concentrations to the protection of the designated uses.
>
> Indicators that are *most indicative* of nutrient pollution in streams are intensively measured total phosphorus and total nitrogen, *measures of primary productivity*

> (e.g., benthic chlorophyll a, percent cover of macrophytes), measures of the algal assemblage (e.g., algal assemblage indices), and measures of ecosystem function (e.g., continuously monitored pH and dissolved oxygen). On the other hand, *reliance on higher trophic level* indicators designed to measure general biological donation (fish or invertebrates) *may not be adequately s*ensitive or diagnostic of nutrient pollution. Therefore, *these general higher trophic level indicators* may be used in a suite of response variables but *should not be the predominant or sole indicator of nutrient pollution.*
>
> ...
>
> The EPA recommends the use of one or multiple of these ideal response indicators when deriving a combined criterion. This criterion should demonstrate the *sensitivity of the response indicator(s) to increased nutrient concentrations* and quantify how these *nutrient-response linkages* will achieve the goal of protecting and maintaining aquatic communities.
>
> ...
>
> It is important to have sufficient data to all the development of quantitative relationships (e.g., via regression models). ...

Id. (emphasis added).

EPA's guidance confirms Petitioner's assertion that any criteria, including that applied under § 122.44(d), must be based on a "sound scientific rational." EPA's Memorandum in Opposition to the Petition for Review denied such a demonstration was needed. Memo. in Opp. to Pet. for Rev., at 41. Moreover, the "guiding principles" confirms that Petitioners were correct in stating that the approach used in the 2009 Numeric Nutrient Criteria was not scientifically defensible and not consistent with the development of numeric nutrient criteria using "stressor-response" methods. First, the criteria were not based on a demonstration that increased TN had cause an increase in primary production (algal or macroalgal growth); the direct response parameter that must be demonstrated to conclude nutrients are causing adverse impacts. Increased algal growth never occurred in this system in response to increased TN, as several State of the Estuaries reports confirmed. *See* A.R. K.17; Pet. Exh. 24, at 16-17. Any increase in

macroalgae growth was not confirmed to be caused by any change in nutrient levels. As nutrient levels are now at the same concentration as they were prior to 1980, it is difficult to support an assumption that TN changes caused the macroalgae changes, when nutrient levels did not materially change. Second, one cannot plot TN versus transparency or DO to conclude that TN is the cause of the condition because the causal parameter has no direct effect on this metric. One would have to document the effect of TN on the intervening factors sufficient to cause the significant changes to these parameters. That never occurred. Finally, there was no information presented showing that controlling TN from point and non-point sources would or could actually achieve the DO and transparency targets claimed to be necessary to protect the system ecology. This linkage was discussed as a potential "conceptual model" it was never "demonstrated" for the estuary, rendering the criteria development fatally deficient. Mr. Trowbridge acknowledged that significant data was not available to demonstrate these connections. A.R. D.4.i.3 at 123 ln 19-124 ln 1; 124 ln 22 -125 ln 1; 127 ln 15-22; 230 ln 16-19; A.R. D.4.i.4. at 33 ln 2 -45 ln 4; 369 ln 16-370 ln 8; 371 ln 16- 372 ln 10.

In summary, as argued by the Petitioners, EPA's analysis never demonstrates that TN triggered excessive algal growth in this system. *See* Pet. for Rev., at 56-70, 77-79; Reply, at 4-5. Additionally, the author of the 2009 Numeric Nutrient Criteria document relied upon by EPA has denied that such a direct causal relationship exists in this system. *See* Pet. for Rev., at 84-86; Reply, at 7-17. Therefore, the evaluation used to create the response criteria and the causal variable (nitrogen) was not based on a sufficient or scientifically defensible demonstration, as confirmed by EPA's "Guiding Principles" document.

3. Supplemental Authority

a. *Iowa League of Cities v. EPA*

A recently released opinion of the Eighth Circuit Court of Appeals renounces EPA's attempts to illegally revise rules related to wet weather permitting techniques available to states, including 40 C.F.R. § 122.44(d). Attachment B (*Iowa League of Cities v. EPA*, 711 F.3d 844 (8th Cir. 2013)). This case is relevant to this appeal because the Eight Circuit Court of Appeals was asked to determine whether two EPA letters dealing, in part, with bacteria mixing zones, which are part of a state's water quality standard, constituted rules needing to go through formal rulemaking procedures. On this issue, the court held that the letters "eviscerate[d] state discretion to incorporate mixing zones into their water quality standards … In effect, the EPA has created a new effluent limitation…" *Id.* at 874. Therefore, since the letters set forth standards constituting a revised rule, the court ruled that EPA needed to use the proper APA notice-and-comment rulemaking procedures. *Id.* at 875.

If a letter adopting a new prohibition for mixing zones needs to go through formal rulemaking procedures, a major guidance document entitled "Draft Numeric Nutrient Criteria for the Great Bay Estuary" establishing new numeric water criteria should also have to be adopted through formal rulemaking procedures, since it was used as if it defined the required nutrient concentration under the narrative criteria.[10] Thus, given EPA's reliance on the *unadopted* 2009 Numeric Nutrient Criteria document in declaring the waters in violation of the narrative standard and in issuing the Newmarket permit, we ask that the Board take into consideration the precedent

[10] EPA may consider a draft criteria to calculate an acceptable effluent limitation only after EPA has made the demonstrations that (1) the waters have a narrative criteria violation and (2) the condition that triggered the violation determination was caused by the nutrient in question. EPA admits it did not such analysis and eschewed any need to provide a causation demonstration. Memo in Opp. to Pet. for Rev., at 3-4, 40, 42-44; *see also* 40 C.F.R. §§ 131.6(b), 131.20(b); Guiding Principles, at 2 ("States should clearly and thoroughly document in their [water quality standards] (or supporting documentation) – for public review and submission to EPA – how the criterion was developed ….").

established by the *Iowa League of Cities v. EPA* case when deciding whether to grant review of the Newmarket NPES permit.

b. *City of Dover v. EPA*

The communities making up the Coalition, along with other New Hampshire communities, filed a lawsuit against EPA under 33 U.S.C. § 1365(a)(2) for its failure to perform nondiscretionary duties under the Clean Water Act to review the 2009 Numeric Nutrient Criteria document as it was being used by DES as the applicable water quality standard for nutrients. Attachment C (*City of Dover v. EPA*, 2013 U.S. Dist. LEXIS 106331 (D.D.C. July 30, 2013)). The District Court for the District of Columbia decision confirms that the correct forum for challenging the application of the 2009 Numeric Nutrient Criteria is in the permitting context:

> The 2009 Document may have effects detrimental to the Cities' interest, but it has these effects in the same way as a scientific report arguing for a lower cap on a pollutant or a higher requirement for a nutrient: it can influence subsequent regulatory action only by persuasion, and the Document's validity and persuasiveness can be challenged in the context of that decision.

Id. at *22. This decision confirms that it would be improper for EPA to apply the 2009 Numeric Nutrient Criteria as if it were either the adopted numeric criteria or the adopted definition of the narrative criteria compliance (*i.e.*, give the criteria the force and effect of law). The court goes on to note that "[t]he Cities appear to have done just that, appealing the NPDES permits to the Environmental Appeals Board and challenging the use of the 2009 Document in that appeal." *Id.* at *23, n.3. Therefore, it is apparent that the correct venue for challenging EPA's use of and the scientific validity of the 2009 Numeric Nutrient Criteria document as the basis for permitting decision is in this permit appeal.

4. Conclusion

For the reasons discussed herein, the requested records should be added to the administrative record and accordingly, we respectfully ask the Board to take into consideration the supplemental authority provided herein.

Respectfully submitted,

John C. Hall
1620 I St., N.W.
Suite 701
Washington, D.C. 20006
Tel: (202) 463-1166
Fax: (202) 463-4207
jhall@hall-associates.com

CERTIFICATION OF SERVICE

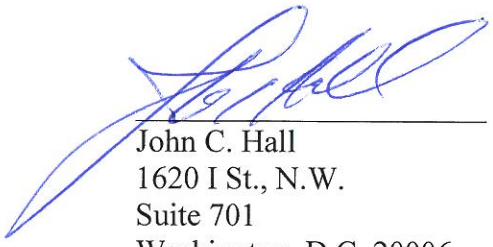
I hereby certify the copies of the foregoing Petitioners' Motion Requesting Leave to File a Supplement to the Administrative Record and Notice of Supplemental Authority, in connection with NPDES Appeal No. 12-5, were sent to the following persons in the manner indicated:

By Electronic Filing:

Clerk of the Board
U.S. Environmental Protection Agency
Environmental Appeals Board 1103M
1200 Pennsylvania Avenue, N.W.
East Building
Washington, D.C. 20460-0001

By First Class U.S. Mail:

Mr. Samir Bukhari
U.S. Environmental Protection Agency
Office of Regional Counsel, Region 1
5 Post Office Square- Suite 100
Mail Code: ORA 18-1
Boston, MA 02109-3912



John C. Hall
1620 I St., N.W.
Suite 701
Washington, D.C. 20006
Tel: (202) 463-1166
Fax: (202) 463-4207
jhall@hall-associates.com

Date: Sept 23, 2013