HALL & ASSOCIATES

Suite 701 1620 | Street, NW Washington, DC 20006-4033

Fax: (202) 463-4207

Telephone: (202) 463-1166 Web: http://www.hall-associates.com

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

February 8, 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

Motion for Reconsideration and to Strike the Amicus Brief of New Hampshire

Department of Environmental Services'

Dear Ms. Durr,

Please find attached the Petitioner's Motion for Reconsideration of the Order Granting New Hampshire Department of Environmental Services' Motion to File a Non-Party Amicus Brief issued by the Board on February 7, 2013 and Motion to Strike the Amicus Brief, and accompanying Certificate of Service.

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)	
)	

MOTION FOR RECONSIDERATION OF THE ORDER GRANTING HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES' MOTION TO FILE NON-PARTY AMICUS BRIEF AND MOTION TO STRIKE THE AMICUS BRIEF

In accordance with 40 C.F.R. § 22.11(b) that allows any party to file a response to a non-party brief within 15 days of service of the non-party brief, the Petitioners respectfully submits this Motion for Reconsideration of the Order Granting New Hampshire Department of Environmental Services' ("NHDES" or the "Department") Motion to File a Non-Party Amicus Brief to the Environmental Appeals Board ("EAB" or the "Board") and Motion to Strike the Amicus Brief.

The Department's Motion should be denied and Amicus Brief struck because the unsupported statements within the amicus brief characterized as "an attempt by NHDES to correct some of the most important mischaracterizations" constitue gross mischaracterizations of the record now before the Board. In particular, the Department fails to cite to any documents supporting its positions and, through counsel, simply makes factual averments in hopes that the Board will accept the statements as true (i.e. this is clearly improper, indirect testimony by NHDES counsel). See e.g., Jin Chun Lin v. Holder, 430 Fed. Appx. 54, 56 (2d Cir. 2011) (citing

INS v. Pinpathya, 464 U.S. 183, 188 n.6 (1984)) (finding "counsel's unsupported assertions in a brief do not constitute evidence"); Puc-Ruiz v. Holder, 629 F.3d 711, 779 (8th Cir. 2010) (citing INS v. Pinpathya, 464 U.S. 183, 188 n.6 (1984)) (giving no weight to counsel's unsupported assertions in counsel's brief); and Camaj v. Holder, 625 F.3d 998, 992 (6th Cir. 2010) ("Arguments in parties' briefs are not evidence.") (citing Duha v. Agrium, Inc. 448 F.3d 867, 879 (6th Cir. 2006). Thus, as a matter of law, these unsupported (and as shown herein) demonstrably false averments may not be considered, as such statements do not provide any relevant factual information for the Boards' review.

Moreover, the following provides specific information showing that the NHDES filing fails to meet the "duty of candor" and in the many respects, constitutes an attempt at "fraud on the court" in that it was "intentionally false, willfully blind to the truth, or is in reckless disregard for the truth." *Demjanjuk v. Petrovsky*, 10 F.3d 338, 348 (6th Cir. 1993). The sworn statements of the NHDES lead scientist (Philip Trowbridge) and program manager (Paul Currier) responsible for the development of the draft 2009 Numeric Nutrient Criteria for the Great Bay Estuary document ("2009 Numeric Criteria"), provided herein, confirm that numerous statements in the amicus brief are fabrications.² Therefore, the Department's Amicus Brief should be struck as it has no probative value and attempts to mislead the Board on critical documented factual averments provided by the Petitioners.

_

¹ The elements of fraud on the court are conduct: "(1) on the part of an officer of the court, (2) that is directed to the "judicial machinery" itself; (3) that is intentionally false, willfully blind to the truth, or is in reckless disregard for the truth; (4) that is positive averment or is concealment when one is under a duty to disclose; and (5) that deceives the court." *Demjanjuk v. Petrovsky*, 10 F.3d 338, 348 (6th Cir. 1993).

² Counsel for NHDES, who submitted the filing, defended the NHDES deposition and was therefore, fully aware of the statements made under oath by Philip Trowbridge and Paul Currier but chose to not reveal them in his filing.

In support of this motion, the following analysis corresponds to the section headings in NHDES' motion and amicus brief and demonstrates statements contained within each section are fabrications and are otherwise materially, misleading.

1. Background (Amicus Brief at 2)

The Petitioners stated that EPA is attempting to impose, without rulemaking, new numeric nutrient criteria for nitrogen and transparency, contained in the draft 2009 Numeric Criteria document, which have no demonstrable relationship to the actual environmental conditions or needs anywhere in the Great Bay estuary. *See* Petition at 3-26. NHDES admits it used the 2009 Numeric Criteria document as "numeric thresholds" to designate waters as impaired. Amicus Brief at 2. However, NHDES claims this was simply the implementation of its existing narrative standard: "[t]hese thresholds guide NHDES's decision as to whether the narrative criteria were or were not being attained. . ."Amicus Brief at 2. This is a fabrication.

However, NHDES admitted, under oath, that these criteria <u>do not</u> prove that a narrative criteria violation has occurred:

- Q. Mr. Currier, you indicated that this analysis of light attenuation versus total nitrogen at trend stations, that this analysis doesn't prove causation, correct?
- A. Yes
- Q. Okay. So is this analysis sufficient in your mind to determine that nitrogen is causing a violation of the narrative standard in that it doesn't demonstrate causation?
- A. It's not sufficient, no.

Exhibit 12A at 80.³ Thus, the sworn testimony admits that the basis for designating the estuary as impaired for nitrogen was <u>not</u> implementation of the narrative criteria, but rather the application of an unadopted criteria. That state action, as well as EPA's reliance on that action in issuing the draft Newmarket permit, plainly violated applicable Federal law.

³ See also Attachment 1 - Philip Trowbridge also confirmed that the 2009 Numeric Criteria did not implement the state narrative standard.

2. Underlying Studies/Uncertainties and "Proof" (Amicus Brief at 2 - 4)

Petitioners stated that underlying studies proving that water column transparency was not impaired due to nitrogen were not included in the 2009 Numeric Criteria document or in the subsequent peer review. Petition at 13. The amicus brief now claims that NHDES "decided not to use" these studies because "the data sets and methodology used in those graphs were both inconclusive and inadequate to reflect the complexity of the Estuary." Amicus Brief at 2-3. However, Philip Trowbridge, NHDES scientist and author of the 2009 Numeric Criteria document, admitted in his deposition testimony that NHDES simply excluded critical data and analyses from the 2009 Numeric Criteria document and never claimed that any of these prior analyses were in error:

- Q. ... 2009 criteria document that you developed, that's a you said you used a weight of evidence analysis to come up with the criteria in that report; right?
- A. Yes.
- Q. Did you include in that report the evidence that indicated that transparency was not the cause of eelgrass loss in the system that you had developed in any of your earlier analyses?
- A. What are you referring to for an earlier analysis?
- Q. That transparency, or analysis of transparency had not changed over time; was that included anywhere in that report?
- A. No.
- Q. What about all the statements that Great Bay is not a transparency-controlled system, from EPA and Dr. Short, and those are the ones you and I walked through in your first round of the deposition. Did you include the statements that Great Bay was not transparency-controlled?
- A. I'm not sure; I don't believe so.
- Q. Okay. What about the did you include the statements that the cause of eelgrass losses and changes in the system were unknown, statements that were contained in the various 303d listing documents?
- A. Uhm, I have to look through. I'm not sure. I'm not seeing it here.
- Q. Did you include any of Morrison's conclusions that the major factors controlling transparency in the system were, in fact, turbidity and color-dissolved organic matter, and not chlorophyll?
- A. I believe we included equations from the Morrison study.
- Q. Did you highlight the Morrison study concluded that the transparency level of Great Bay was acceptable, and that you needed to look at something else as the cause of eelgrass demise?

- A. I'm not sure if we have that statement in here.
- Q. It's pretty important statement, isn't it? It made your report. Did you well, did you include any discussion about how the primary graphs that you were using to develop the transparency and nitrogen relationships were merely correlations and did not demonstrate causation?
- A. I don't believe so.

Exhibit 12B at 436-438. NHDES <u>never</u> claimed any of these analyses were in error. Thus, the amicus brief statements to the contrary are complete and utter fabrications. Moreover, the correspondence between EPA and NHDES acknowledged the basis for proposing the restrictive TN criteria, unlike the earlier assessment, was a confounded analysis that <u>did not</u> represent "cause and effect" in the system:

The comment that seems the hardest to refute is that nitrogen is correlated with light attenuation. Nitrogen was not proven to be the causative agent for light attenuation. Moreover, nitrogen is a component of all the factors causing attenuation (phytoplankton, CDOM, particulate organic matter) so a correlation would be expected.

Exhibit 6A- an email between Jim Latimer (EPA) and Philip Trowbridge on November 19, 2008. In addition, NHDES admitted that it knew that system transparency had never changed when it proposed the stringent transparency-based TN standards:

- Q. ... So you plotted the water quality -- water clarity data over time and then you showed some of the same regressions. And you showed the preliminary results, the Ru Morrison study, that chlorophyll-a is only eight percent of the transparency affecting the system.
 - Now let's go to the conclusions. Can you read the first conclusion?
- A. Eelgrass biomass declining in Great Bay but no apparent decline in water clarity.

- Q. You've got water on the Piscataqua River which showed it didn't change over time. The only available data do you have any other available data other than these data showing whether water quality changed over this 15-year period in the Piscataqua River and Great Bay where most of your eelgrass resources were?
- A. No.

Q. So the only available data you have shows water clarity didn't change in the Piscataqua River and in Great Bay, right?

A. Right.

- Q. So let me see if I under this. You had specific data on Great Bay that said experts are telling you Great Bay's not a transparency issue, you have specific the only data set you have for the entire system saying transparency didn't even change over time, you have other information confirming that the nitrogen loads did not even cause a significant change in phytoplankton growth, and you ignored all of that information and simply claimed you had a weight of evidence of something else unrelated to this system that said you needed to have these stringent numbers in place? Is that what you're telling me? I mean, I just need to understand because you've got specific data and analysis and you did it repeatedly—
- A. Hmm
- Q. -- and it doesn't show up in that statement.
- A. Uh-huh.

Exhibit 12B at 227, 230, and 232-233. Thus, the depositions confirmed that NHDES simply decided to ignore its own detailed assessments showing transparency was not the issue:

- Q. Okay. Was this moored array report part of the studies that you considered in order to determine what was affecting transparency in the system and why?
- A. Yes.
- Q. Did you include this as a reference in that 2009 criteria document?
- A. Yes.
- Q. Okay. I'm going to read it. Are you an author on this study?
- A. Yes.
- Q. I'm going to read you a quote from the report, page 51.

 The results of the the results suggest that water clarity in Great Bay, Little Bay, and Lower Piscataqua River were sufficient for eelgrass growth. The virtual absence of eelgrass from all but Great Bay suggests that other processes apart from light restricted growth and are important for limiting eelgrass survival.
 - Is that a false statement in this report?
- A. No.

Id. at 235-236.

All of these critical analyses and findings were (1) absent from the 2009 Numeric Criteria document and (2) withheld from the peer reviewers. These statements confirm nitrogen did not cause the alleged eelgrass decline. Nonetheless, NHDES also claims to this court that the "peer

reviewers" found the thresholds to be "reasonable and well-supported by the data presented." Amicus Brief at 3. This is purposefully misleading statement not in accordance with counsels "duty of candor." The peer review was based on the assumption that nitrogen had changed phytoplankton levels in Great Bay causing lower water column transparency, which both NHDES and EPA knew had not occurred in this system:

Q. And where do you have data, in Great Bay, do you have data showing increased nitrogen levels caused phytoplankton blooms which reduced water clarity in Great Bay?

A. ... We don't have that information related to nitrogen causing phytoplankton blooms in the Great Bay Estuary.

Exhibit 12B at 124-125. Thus, NHDES amicus brief claims that "underlying studies" were not excluded from the 2009 Numeric Criteria document and that the 2009 Numeric Criteria document was not "based on erroneous technical assumption" (Amicus Brief at 3) are demonstrably false, as its own scientist repeatedly admitted that actual data showed TN had not caused excessive algal growth or adverse changes in transparency in the system but that information was excluded from the 2009 Numeric Criteria document.

3. Impairments (Amicus Brief at 3-4)

NHDES does not provide a single citation to support its claim that "much of the Great Bay Estuary is suffering from cultural eutrophication manifested by low dissolved oxygen in the Estuary's tidal rivers, increased macroalgae, and declining eelgrass." Amicus Brief at 3-4. This is because such information does not exist. Philip Trowbridge confirmed the following, under oath, with respect to dissolved oxygen:

- Q. Can you tell me what kind of natural what type of natural condition could cause low DO in the system?
- A. I think there are many, but I'm not sure exactly.

- Q. ... How can we know at this point in time how much of that low DO is caused by algal growth versus other factors if we haven't analyzed the other factors that affect DO in the system?
- A. We don't have the information to do that analysis.

Id. at 39, 44-45.4

Likewise, Philip Trowbridge confirmed that there is no demonstrated macroalgae impairment in Great Bay:

- Q. What about macroalgae impairments? Are they are they document in the Squamscott River, excessive macroalgae in the Squamscott, have you seen a report on that?
- A. No.
- Q. How about the Lamprey?
- A. No.

- Q. What about the Piscataqua, Upper or Lower, excessive macroalgae?
- A. I'm not sure.

- Q. ... Have any of the indicator reports ever addressed the extent of macroalgae growth in the system and whether or not it's causing an impairment?
- A. No.

Id. at 150 - 152.

Finally, NHDES confirmed that they do not know what caused the eelgrass changes in this system:

- Q. . . . There was a major decrease in eelgrass populations in Great Bay; right?
- A. You mean in 2006, 2007, 2008?
- Q. Yeah. Big Drop-off?
- A. Yes.
- Q. I mean, actually, would you describe that as a relatively dramatic drop-off?
- A. It was a -- I just say it's a large change. It was a large decrease.
- Q. A large decrease that happened quickly; right?
- A. Uhm-hmm.

⁴ See also Attachment 2- excerpt from Philip Trowbridge deposition going into further detail confirming the lack of data related to the periodically low dissolved oxygen in the Great Bay estuary. Due to the size of the excerpt, it has been attached, not because of its lesser relevance to this point.

- Q. Okay. That decline in eelgrass was basically used as the basis for updating the impairment listings for 2009 and thereafter to call Great Bay eelgrass impaired for eelgrass; correct?
- A. Yes....

- Q. Here's the question: That major decline you don't what caused that in 2006, '7 and '8; right?
- A. Uhm-hmm. Yes. We do not know.
- Q. ... do we know what caused the decline in Portsmouth Harbor?
- A. No.
- Q. Okay. Do we have data showing that there's major increases in algal growth in Great Bay or the Portsmouth Harbor area occurring during this time? I suppose the answer's no, or we might have tagged that as a indicator of what was happening; right?
- A. You're referring to phytoplankton?
- Q. Phytoplankton, yeah.
- A. For phytoplankton, no, there's no information.

Id. at 369-372. Thus, NHDES' amicus brief statements that this system suffers from "cultural eutrophication" and exhibits "classic symptoms" of excess nitrogen is not merely unsupported, it is demonstrably incorrect. As demonstrated by Philip Trowbridge's testimony, these unsupported statements are simply fabrications that belie the factual record in an intentional attempt to misled this Board.

4. Other Corrections

The following responses address the other "corrections" listed by NHDES on pages 5-7 of the Amicus Brief. Petitioners have only chosen a handful of the most relevant points to compare with the deposition testimony of Philip Trowbridge and Paul Currier which directly and thoroughly contradicts what NHDES claims as factual "corrections" in its brief.

Correction #1. NHDES admits that microalgae (i.e., phytoplankton) have not increased but claims macroalgae have increased and, therefore, the transparency-based TN criteria is supported. The position is facially absurd. The transparency criterion was based on water column effects. However, macroalgae grow on the bottom and do not affect water-column transparency.

Consequently, NHDES' attempts to defend the 0.3 mg/l TN "transparency-based" standard are plainly unsupported. Amicus Brief at 5.

Correction #3. NHDES states that "light attenuation is a good indicator of eelgrass survival" in the Great Bay Estuary and "nitrogen is most likely the dominant cause of ... eelgrass declines." Amicus Brief at 5, 6. First, as noted previously, NHDES admitted it has no idea what caused the major eelgrass declines in this system. *Supra*, at 9, 10. Second, Philip Trowbridge admitted that Great Bay is <u>not</u> a light-limited system (meaning light attenuation is essentially irrelevant for the vast majority of eelgrass habitat in the system):

- Q. You've got emails from Dr. Short, Phil Colarusso, Jim Latimer, I don't know what he's an expert on, all saying the same thing, the system is not a light-limited system, Great Bay. What information did you have that demonstrated that expert advice was incorrect?
- A. None.

Id. at 211-212. Thus, these amicus brief statements are pure fiction.

Correction #4. NHDES' claims that "unless nitrogen concentrations in the tidal rivers are reduced, eelgrass cannot be restored to its historic range in these rivers". Amicus Brief at 6. This statement is another fabrication, in direct conflict with Philip Trowbridge's testimony that (A) tidal rivers cannot now support eelgrass populations and (B) TN control is ineffective in the tidal rivers to restore eelgrass:

- Q. ... Regardless of why the eelgrass are not there [in the tidal rivers] at this point in time, the transparency data shows it [i.e., the tidal rivers] cannot possible support eelgrass at this time; right? That's what this data indicates?
- A. Uhm, at a yes. ...

Id. at 429.

- Q. ... So controlling nitrogen to control chlorophyll in this system will not allow this water body to even come close to attaining the transparency level that is contained in the 2009 criteria; right?
- A. Based on this analysis, no.

Q. All right. This data had been submitted to you and to EPA. Is there any basis that you know for claiming that the analysis presented in this graph is incorrect?

A. No.

Id. at 423.

- Q. [Do the] [d]ata or analyses that show you control nitrogen, you're going to fix that transparency problem, transparency issue in the Lamprey River?
- A. The answer is I don't believe so. It's the same issue as the Squamscott.

Id. at 432-433. Paul Currier, Philip Trowbridge's supervisor, also confirmed there is no analysis showing TN control is significant to eelgrass restoration in the tidal rivers:

- Q. Back to my last question, though. Have you ever seen an analysis that shows regulating nitrogen for the tidal rivers, and I'll say upper Piscataqua, Squamscott and Lamprey will, in fact, result in a significant improvement in the transparency such that eelgrass can be restored? Has anybody ever showed you a site-specific analysis of the data for those sections that show that?
- A. No.
- Q. Okay. I hadn't seen it either. That's why I thought you might have seen it.
- A. I'm fairly sure it doesn't exist.

Exhibit 12A at 137-138.

Correction #7. NHDES claims it only used the 2009 Numeric Criteria in the preparation of § 303(d) list of impaired waters. Amicus Brief at 6. The statement is also patently false. Under deposition, Philip Trowbridge and Paul Currier both admitted that the 2009 Numeric Criteria was used by NHDES to develop the 2010 Wasteload Allocation Report and that report was submitted to EPA to serve as the basis for setting more restrictive effluent limitations for the permits:

- Q. So the, again, the purpose of the wasteload allocation report was to determine how much reductions in nitrogen would be needed to meet the 2009 criteria?
- A. Yes.

Exhibit 12B at 285 (Trowbridge).

- Q. And I'd like you to go back to the first page, where it's your e-mail where you're saying, "Hi Carl and Brian. Attached is a draft of the wasteload allocation." It's the very first thing. "I hope it will be useful in our consideration of the Exeter and subsequent permits." Was it—one of the purposes of developing this wasteload allocation was that it could be considered as a basis for setting the, whatever more restrictive permit limitations might be necessary in the next round of permitting?
- A. Yes.

Exhibit 12A at 139 (Currier). Thus, NHDES' claim that the only action it took using the unadopted 2009 Numeric Criteria was to use those values in the impairment listing process is a complete fabrication.

Correction #8. While NHDES correctly states the conclusion of the October 19, 2012 letter from NHDES Commissioner Thomas Burack (Amicus Brief at 7), NHDES fails to acknowledge that Commissioner Burack's letter admitted the scientific errors highlighted by the Petitioner's filing were accurate. The admitted scientific errors included: (1) admission that algal levels in the system [the Great Bay Estuary] did not change materially from 1980 to present, despite an increase in TN levels between 1980 and 2004; (2) admission that transparency in the major tidal rivers (Squamscott, Lamprey, Upper Piscataqua) is poor, but the available data (not previously analyzed by DES) shows that the effect of algal growth on transparency is negligible and that naturally occurring CDOM and turbidity are the key factors controlling transparency in the system; and (3) admission that Great Bay itself is generally not a transparency limited system because eelgrass receive sufficient light during the tidal cycle. Exhibit 22A at 1-2, 5, and 7. It is these scientific errors, not the Commissioner's ultimate refusal to correct the 2009 Numeric Criteria, despite these errors, that controls the Board's review in this matter.

Moreover, the NHDES' claim that the letter disagreed that "reducing nitrogen would have no material effect on transparency in tidal rivers" is materially incomplete and misleading.

To the contrary, the letter, in fact states: "During the deposition, DES staff agreed that the graphs

supported these conclusions [i.e. TN control would not materially alter transparency in the tidal

rivers]." Burack letter at 5. As noted earlier, both Paul Currier and Philip Trowbridge confirmed

there is no analysis showing that TN control will materially improve the naturally poor

transparency in the tidal rivers. Supra, at 11-12. This new attempt to discredit those admissions is

baseless and must be rejected.

Conclusion

The NHDES amicus brief is materially misleading, unsupported by any referenced

materials and contains statements of counsel that are directly at odds with documented NHDES

sworn testimony from depositions over which NHDES counsel presided. At a minimum, the

NHDES amicus brief provides no probative value to the Board's review. Accordingly,

Petitioners request the Board reconsider its order granting NHDES' Motion to File a Non-Party

Amicus Brief and strike the Amicus Brief.

Respectfully submitted,

Date: Feb 8,2013

John C. Hall

1620 I Street, NW, Suite 701

Washington, DC 20006

(202) 463-1166

(202) 463-4207 fax

jhall@hall-associates.com

Attorney for Petitioner

14

CERTIFICATION OF SERVICE

I hereby certify the copies the Petitioner's Motion for Reconsideration of the Order Granting New Hampshire Department of Environmental Services' Motion to File a Non-Party Amicus Brief in connection with NPDES Appeal No. 12-5 and to Strike said Amicus Brief, 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

Date: Feb 8, 2013

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

15