STATE OF VERMONT

SUPERIOR COURT ENVIRONMENTAL DIVISION

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| Montpelier (Dog River Road) Wastewater Treatment Facility (Permit #3-1207) | Docket No. 138-10-17 Vtec |
| Alburgh (US Route 2) Wastewater Treatment Facility (Permit #3-1180) | Docket No. 139-10-17 Vtec |
| St. Albans (NW Correctional Facility) Wastewater Treatment Facility (Permit #3-1260) | Docket No. 140-10-17 Vtec |
| S. Burlington (Bartlett Bay) Wastewater Treatment Facility (Permit #3-1284) | Docket No. 141-10-17 Vtec |
| St. Albans (Rewes Drive) Wastewater Treatment Facility (Permit #3-1279) | Docket No. 145-10-17 Vtec |
| Shelburne #1 (Crown Road) Wastewater Treatment Facility (Permit #3-1289) | Docket No. 146-10-17 Vtec |
| Shelburne #2 (Harbor Road) Wastewater Treatment Facility (Permit #3-1304) | Docket No. 4-1-18 Vtec |
| Williamstown Wastewater Treatment Facility (Permit #3-1176) | Docket No. 5-1-18 Vtec |
| Hinesburg (Lagoon Road) Wastewater Treatment Facility (Permit #3-1172) | Docket No. 17-2-18 Vtec |

**Decision on Summary Judgment Motions**

In these coordinated matters, the Conservation Law Foundation ("CLF") appeals wastewater treatment facility permits issued to nine separate municipalities by the Agency of Natural Resources. CLF alleges that the phosphorus limits in each of these permits are inconsistent with the federal Clean Water Act and its implementing regulations. Presently before the Court are the parties' cross-motions for summary judgment.

CLF, represented by Elena M. Mihaly, Esq., moves for judgment in each Docket on Questions 1, 2, and 3 of its Statements of Questions.[1]

The Agency of Natural Resources ("ANR"), represented by Laura B. Murphy, Esq., and Nicholas F. Persampieri, Esq., also moves for judgment on all three questions in all Dockets.

The City of Montpelier, represented by Joseph S. McLean, Esq., moves for judgment on all questions in Docket No. 138-10-17 Vtec by joining and adopting ANR's summary judgment motion.

The Town of Hinesburg, also represented by Joseph S. McLean, Esq., moves for judgment on all questions in Docket No. 17-2-18 Vtec by joining and adopting ANR's summary judgment motion.

The City of St. Albans, represented by Brian S. Dunkiel, Esq., and Jonathan T. Rose, Esq., filed memoranda in support of ANR's motion in Docket Nos. 140-10-17 Vtec and 145-10-17 Vtec.

The City of South Burlington, represented by Andrew M. Bolduc, Esq., filed a memorandum in support of ANR's motion in Docket No. 141-10-17 Vtec.

The Village of Alburgh, represented by Douglas M. Brines, Esq., moves to incorporate and join in support of ANR's motion in Docket No. 139-10-17 Vtec pursuant to the Vermont Rules of Civil Procedure ("V.R.C.P.") Rules 10(c) and 20.

The Town of Shelburne, represented by Brian P. Monaghan, Esq., and James F. Conway III, Esq., moves pursuant to V.R.C.P. 10(c) to join and adopt ANR's motion and opposition to CLF's motion in Docket Nos. 146-10-17 Vtec and 4-1-18 Vtec. Shelburne also moves to join and adopt ANR's opposition to CLF's motion in both Dockets. [2]

The Town of Williamstown filed no response to the pending motions.

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[1] CLF filed Statements of Questions with essentially the same three Questions in each docket. The Questions address the issues of: whether the relevant facility's water-quality-based effluent limitation for phosphorus is sufficiently stringent to meet water quality standards (Question 1); whether the effluent limits adopted within the permit were consistent with the underlying assumptions of the waste load allocations (Question 2); and whether the effluent limitation imposed qualifies as an unlawful condition subsequent (Question 3). Each Question, however, includes references to the individual permit limits and requirements.

[2] The Towns of Shelburne and Alburgh's unopposed motions to adopt and join ANR's motion for summary judgment and opposition to CLF's motion are **GRANTED**.

In its reply memorandum, CLF requested the opportunity to present oral argument to the Court. The Court granted that request by separate Entry Order and conducted the oral argument hearing on July 30, 2017, at the Costello Courthouse in Burlington, Vermont.

**Legal Standard**

This is a de novo appeal. 10 V.S.A. § 8504(h); V.R.E.C.P. 5(g). As such, we sit in the place of ANR, taking and assessing evidence anew and developing our own legal conclusions by applying the same substantive standards that ANR would apply when considering the permits now before the Court. Id.

Summary judgment is appropriate where there is no genuine dispute concerning the material facts and a party is entitled to judgment as a matter of law. V.R.C.P. 56(a), applicable here through V.R.E.C.P. 5(a)(2). When considering the facts on the record, "the nonmoving party receives the benefit of all reasonable doubts and inferences." Gauthier v. Keurig Green Mountain, Inc., 2015 VT 108, ¶ 14, 200 Vt. 125 (quoting Robertson v. Mylan Labs., Inc., 2004 VT 15, ¶ 15, 176 Vt. 356). When considering cross-motions for summary judgment, the Court considers each motion individually and gives the opposing party the benefit of all reasonable doubts and inferences. City of Burlington v. Fairpoint Commc'ns, Inc., 2009 VT 59, ¶ 5, 186 Vt. 332.

**Legal Framework**

The federal Clean Water Act ("CWA") was passed to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). Among other stated goals, Congress declared that "it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985." Id. § 1251(a)(1). That stated goal was passed thirty-three years ago; no current estimate has been offered of when that goal may be realized.

In furtherance of this and other goals, the CWA calls for creating water quality standards, imposing total maximum daily loads to limit the amount of pollutants entering waters with high concentrations of those pollutants (commonly referred to as impaired waters), and regulating discharges through a permitting system.

**Water Quality Standards**

The CWA requires states to develop Water Quality Standards ("WQS"), which are subject to United States Environmental Protection Agency ("EPA") approval. Id. § 1313(a), (c); 40 C.F.R.

§ 131 (EPA regulations regarding the procedures for establishing water quality standards). As part of setting the WQS, states must designate uses for specific waterbodies and establish water quality criteria to support those uses. Id. § 1313(c)(2)(A); 40 C.F.R. § 130.3. The CWA's antidegradation policy requires that WQS "be sufficient to maintain existing beneficial uses of navigable waters, preventing their further degradation." PUD No. 1 of Jefferson Cty. v. Washington Dep't of Ecology, 511 U.S. 700, 705 (1994); 33 U.S.C. § 1313(d)(4)(B). Pursuant to the CWA, Vermont has adopted the Vermont Water Quality Standards. In re Clyde River Hydroelectric Project, 2006 VT 11, ¶ 3, 170 Vt. 606.

**Total Maximum Daily Load**

If a water body fails to meet the WQS for a pollutant, the water is "impaired" for that pollutant and, often, the state must develop a limitation or maximum for the amount of that pollutant which may be discharged into the water body; this regulatory limitation is referred to as a total maximum daily load ("TMDL"). 33 U.S.C. § 1313(d)(1)(C); 40 C.F.R. § 130.7. The TMDL sets the maximum amount of the pollutant that may enter the entire water body, with the goal of bringing the water body into compliance with the WQS. Id.

The TMDL allocates the maximum load among sources contributing the pollutant. 40 C.F.R. § 130.2(i). Pollutants are categorized based on their source: "load allocations" ("LAs") refers to the portion of the pollutant coming from natural background sources and nonpoint sources, and "wasteload allocations" ("WLAs") refers to the portion of the pollutant coming from point sources.[3] Id. § 130.2(g), (h). The regulations allow WLAs (i.e. point source allocations) to be less stringent when LA (i.e. nonpoint source) controls are in place. Id. § 130.2(i). The TMDL must also include a margin of safety to account for any lack of information regarding effluent limitations and water quality. Id. § 130.7(c)(1).

**National Pollutant Discharge Elimination System**

The CWA generally prohibits point-source discharges into waters of the United States. 33 U.S.C. §§ 1311(a) (prohibiting the discharge of pollutants); Id. § 1362(6), (7), (12) (defining relevant terms). Notwithstanding this general prohibition, the CWA allows and regulates certain

[3] A "point source" refers to a specific point that delivers run off or stormwater with pollutants to a stream, river, pond or lake, such as a ditch, culvert, or drainage pipe.

discharges through a permitting system known as the National Pollutant Discharge Elimination System ("NPDES"). Id. § 1342; 40 C.F.R. § 122.1 *et seq*.

In Vermont, the EPA has delegated NPDES permit administration to ANR. In re Stormwater NPDES Petition, 2006 VT 91, ¶ 2, 180 Vt. 261. ANR administers the NPDES permit program under authority set out in Title 10, Chapter 47 (Water Pollution Control) and the Vermont Water Pollution Control Permit Regulations. 10 V.S.A. § 1250 *et seq*; 16-3 Vt. Code. R. § 301:13. NPDES permits issued by ANR must comply with CWA regulations. 40 C.F.R. § 123.25; 16-3 Vt. Code. R. § 301:13.4(b)(1).

NPDES permits must include conditions to achieve compliance with the WQS. 40 C.F.R. §§ 122.4(d), 122.44(d). This is done, in part, by setting effluent limitations. Nat. Res. Def. Council v. U.S. E.P.A., 808 F.3d 556, 563 (2d Cir. 2015). An "[e]ffluent limitation means any restriction . . . on quantities, discharge rates, and concentrations of 'pollutants' which are 'discharged' from 'point sources' into 'waters of the United States.'" 40 C.F.R. § 122.2. These can be either technology-based effluent limitations ("TBELs"), or water quality-based effluent limitations ("WQBELs"). Nat. Res. Def. Council, 808 F.3d at 563. TBELs "set effluent limitations on a point source based on how effectively technology can reduce the pollutant being discharged." Id. (citations omitted). If TBELs are insufficient to meet WQS, then WQBELs are set to limit the amounts and kinds of pollutants that can be discharged. Id. at 564–65.

WQBELs that are included in a NPDES permit and designed to protect a water quality criterion must be "consistent with the assumptions and requirements of" a TMDL WLA. 40 C.F.R. § 122.44(d)(1)(vii)(B). WQBELs must also be designed to meet WQS. 33 U.S.C. § 1311(b)(1)(C); 40 C.F.R. §§ 122.44(d)(1)(vii)(B), 122.4(a), (d).

In summary, if the level of a pollutant in a water body exceeds WQS, a TMDL is imposed to set a cap on the total amount of that pollutant that can enter that water going forward. WLAs are fractions of the TMDL that are used to establish maximum future discharges of a specified pollutant from identified point sources. WLAs are put into effect by translating them into permit limits as WQBELs. See In re City of Moscow, Idaho, 10 E.A.D. 135, 2001 WL 988721, at *8 (EAB 2001).

With these legal foundations in mind, we review the material facts that the parties have presented as undisputed for purposes of our review and make determinations on the pending motions pursuant to the legal standards set forth above.

**Factual Background**

We recite the followings facts solely for the purpose of deciding the pending motions for summary judgment. Our recitation here summarizes the facts that we have deemed undisputed and material to the legal issues raised by the parties, but should not be mistaken for factual findings, which cannot occur until after the Court conducts a trial. Fritzeen v. Trudell Consulting Eng'rs, Inc., 170 Vt. 632, 633 (2000).

1. Lake Champlain ("the Lake") has been determined to be impaired for phosphorus under the CWA. The Lake has been polluted by phosphorus for many years. Excess phosphorus causes algae blooms and obnoxious odors, and leads to low dissolved oxygen concentrations, impaired aquatic life, and reduced recreational uses. In fact, some of the algae blooms have been so significant as to cause sickness and the deaths of fish and animals, including some family pets.

2. In Vermont, the following sources contribute to the phosphorus entering Lake Champlain: agriculture (around 261.5 metric tons/year, or 41.5% of the total Vermont load), streambank erosion (129.9 tons, 20.6% of total load), developed lands (e.g., stormwater runoff from impervious surfaces) (113.9 tons, 18.1% of total load), forested lands (e.g., runoff from timber harvesting) (100.7 tons, 16% of total load), and wastewater treatment facilities ("WWTF") (24.6 tons, 3.9% of total load).

**The 2016 TMDL Drafting Process**

3. In 2002, EPA approved a phosphorus TMDL for Lake Champlain ("2002 TMDL"). EPA withdrew the approval in 2011 following a challenge by CLF.

4. The process to develop a new TMDL began in 2011 with technical workgroups, in-lake and watershed modeling, and nine stakeholder outreach sessions held across the Lake Champlain basin. The outreach sessions were led by EPA, ANR, and the Vermont Agency of Agriculture, Food, and Markets ("AAFM").

5. Vermont developed a draft "Phase I Implementation Plan" ("Phase I Plan") in 2014 which described measures for achieving the phosphorus reductions that models indicated were

necessary to bring the Lake into compliance with WQS. This drafting process involved many meetings between EPA, ANR, and AAFM; input from regulated entities; and six public outreach sessions regarding potential measures for the plan (led by EPA, ANR, and AAFM).

6. EPA evaluated the measures proposed in the draft Phase I Plan against updated modelling and prepared preliminary allocations for the TMDL. The preliminary allocations were discussed at five public outreach meetings in December of 2014 (led by EPA, ANR, and AAFM).

7. In May 2015, Vermont passed Act 64, a clean water law that provided legal authority and deadlines for implementing measures in the draft Phase I Plan. The State revised the draft Phase I Plan in 2015 to ensure consistency with Act 64.

**CLF Comments During the 2016 TMDL Drafting Process**

8. On October 15, 2015, CLF and the Vermont Natural Resources Council ("VNRC") filed a comment letter with the EPA Region I office on the 2015 draft of the TMDL. Among other things, the letter stated:

a. "For Lake Champlain, the annual phosphorus concentrations already exceed water quality standards and impact designated uses. Therefore, the draft 2015 TMDL allocations cannot justify additional discharges of phosphorus pollution into Lake Champlain. For wastewater treatment facilities in impaired lake segments, an allocation set above the actual phosphorus load of that facility is inconsistent with the CWA."

b. "Third, 18 facilities have not received new allocations in the draft 2015 TMDL nor the 2002 TMDL. . . . The phosphorus limits for wastewater treatment facilities should be in greater alignment with and reflective of the best available control technology."

c. "The draft 2015 TMDL's neglect to regulate facilities with appropriately stringent phosphorus concentration limits as well as its delay of upgrade requirements that essentially allows increased phosphorus discharges are contrary to plain requirements of the Clean Water Act and addressing the causes of Lake Champlain impairment."

d. "[T]he draft 2015 TMDL does not ensure implementation is feasible. It places an impractical burden on municipalities [regarding developed land], it requires allocations be finalized before an implementation plan is fully established, and it includes nonpoint source controls that do not demonstrate reasonable assurances phosphorus loads will actually be reduced."

ANR Ex. 43 at 4-5, 9.

9. In a March 15, 2016 email to the EPA Region I office, CLF wrote: "We are quite concerned with the proposed upgrade requirements for wastewater treatment facilities." CLF continued: "As currently written, the TMDL does not require construction of upgraded phosphorus treatment facilities until actual phosphorous loads approach 80% of the facilities' wasteload allocations." ANR Ex. 44.

10. On May 9, 2016, CLF sent another letter to the EPA Region I office regarding the TMDL. Among other things, the letter stated:

a. The "wasteload allocations for wastewater treatment facilities . . . unlawfully permit a substantial increase in actual and facility design-capacity phosphorus loading to the impaired waters of Lake Champlain."

b. "Surely EPA cannot expect the voluntary, unfunded nonpoint source control measures set forth in Vermont's Implementation Plan to achieve enough load reductions over the course of the next five years to bring Lake Champlain into compliance with water quality standards. For this reason, EPA cannot set WLAs for WWTFs that contribute to violations of the state water quality standards."

c. "The draft 2015 TMDL's neglect to regulate facilities with appropriately stringent phosphorus concentration limits, as well as its delay of upgrade requirements that allows increased phosphorus discharges are contrary to plain requirements of the Clean Water Act and addressing the causes of Lake Champlain impairment."

ANR Ex. 45 at 2, 4.

**The 2016 TMDL**

11. Based on feedback from the meetings, Act 64, and the State's revised draft Phase I Plan, EPA determined the final allocations and issued the Phosphorus TMDL for Vermont Segments of Lake Champlain ("2016 TMDL") on June 17, 2016. EPA also issued its response to public comments on this date.

12. The 2016 TMDL is designed to reduce phosphorus pollution from various sources in order to bring Lake Champlain into compliance with WQS.

13. The 2016 TMDL allocates the maximum allowable phosphorus load among five categories of point sources and three categories of nonpoint sources.

14. The point source categories receiving WLAs are WWTFs, combined sewer overflows, developed lands (e.g., stormwater runoff from roads and impervious surfaces), agricultural point sources, and future growth.

15. The nonpoint source categories receiving LAs are forest lands, streambanks, and agricultural nonpoint sources.

16. The 2016 TMDL includes a five percent margin of safety to account for uncertainty, and a "Reasonable Assurance" section explaining that "numerous elements combine to provide robust assurance that the necessary load reductions will occur and will achieve sufficient phosphorus reductions to meet the specified load allocations." ANR Ex. 1 at 49.

17. In total, the 2016 TMDL requires a reduction of 213 metric tons of phosphorus per year, which represents a 34% reduction from base load discharges.

18. The agricultural sector, which contributes approximately 41% of the phosphorus load to the Vermont portion of Lake Champlain, must reduce its phosphorus load to 28% of the total Vermont load.

19. Streambank erosion, which contributes approximately 21% of the phosphorus load to the Vermont portion of Lake Champlain, must reduce its phosphorus load to only comprise 17% of the total Vermont load.

20. EPA developed WLAs for each WWTF based on the segment of the Lake the facility discharges to, its relative phosphorus contribution, and the amount of phosphorus reductions needed from developed land and nonpoint sources. Thus, the 2016 TMDL explains that the WWTF WLAs were developed by considering "both the relative contribution of the WWTFs and the degree of reduction required for developed land and nonpoint sources." ANR Ex. 1 at 28.

21. Where WWTF contributions were less than 10% of the total phosphorus load for a lake segment, and the reduction required from other sources was 30% or less, EPA used the same WLA as in the 2002 TMDL.

22. Where WWTF contributions were more significant (16%–97% of the segment's base load), EPA determined that further WWTF reductions were needed.

23. For lake segments where high reductions (above 50%) in other sources were required, even though WWTF contributions were relatively low (less than 5% of the base load), EPA determined that further WWTF reductions were needed.

24. After determining the lake segments where WWTF reductions were needed, EPA set individual WLAs for each WWTF.

25. EPA determined each facility's WLA based on that facility's design flow. The facilities with the smallest design flows (less than 0.1 million gallons per day ("MGD")) received WLAs below the 2002 TMDL. Facilities with medium design flows (between 0.1 and 0.2 MGD) received WLAs equivalent to a 0.8 milligrams per liter ("mg/L") phosphorus limit at design flow. Facilities with high design flows (over 0.2 MGD) received WLAs equivalent to 0.2 mg/L phosphorus limit at design flow.

26. The following table sets out the 2002 TMDL and 2016 TMDL WLAs for the WWTFs now under appeal:

| **Facility** | **Lake Segment** | **2002 TMDL** metric tons / year (mt/yr) | **2016 TMDL** metric tons / year (mt/yr) |
|---|---|---|---|
| Montpelier | Main Lake | 3.290 | 1.097 |
| Alburgh | Isle LaMotte | 0.108 | 0.108 |
| St. Albans (NWCF) | St. Albans Bay | 0.028 | 0.028 |
| South Burlington | Shelburne Bay | 0.878 | 0.345 |
| St. Albans City | St. Albans Bay | 2.762 | 1.105 |
| Shelburne #1 | Shelburne Bay | 0.348 | 0.122 |
| Shelburne #2 | Shelburne Bay | 0.497 | 0.182 |
| Williamstown | Main Lake | 1.036 | 0.166 |
| Hinesburg | Shelburne Bay | 0.276 | 0.069 |

27. The 2016 TMDL includes a monitoring plan which states, in part, that WWTF "phosphorus loads [will be] monitored by effluent sampling and flow measurements at all wastewater treatment facilities in the basin in order to verify compliance with the phosphorus wasteload allocation for each facility." ANR Ex. 1 at 63.

**The 2016 TMDL Implementation Plan**

28. The 2016 TMDL will be implemented in two distinct phases. The State's final Phase I Plan, revised to reflect the final 2016 TMDL and following a public comment period, was issued on September 15, 2016.

29. The Phase I Plan has a twenty-year implementation timeline to allow communities to plan and stage improvements to roads, stormwater, and wastewater infrastructure into long-term capital funding plans.

30. The Office of the State Treasurer has estimated that the Phase I implementation will cost $82.2 million per year. With $33.7 million of this annual cost to be covered by expected revenues, $48.5 million per year must be funded either by the State or by the regulated community.

31. Higher nutrient loading from agricultural runoff, large drainage areas flowing into small water basins, and a legacy of historic phosphorus loads in the sub-watersheds of Missisquoi Bay, St. Albans Bay, and South Lake require additional measures in these areas to achieve 2016 TMDL requirements.

32. AAFM has committed to assessing certain farms in the Missisquoi Bay Watershed to ensure that they are using Best Management Practices ("BMPs") as soon as practicable or feasible, but the 2016 TMDL allows for an implementation timeline out to around 2032.

**The 2016 TMDL Accountability Framework and the 2017 Report Card**

33. To help ensure that the 2016 TMDL allocations are achieved, the TMDL contains an "Accountability Framework." The framework establishes milestones for the State to accomplish in implementing the TMDL, from 2016 to 2034.

34. When a WLA is based on an assumption that nonpoint source load (i.e. LAs) reductions will occur over time, the 2016 TMDL must provide "reasonable assurances" that nonpoint source control measures will achieve expected load reductions in order for the TMDL to be approved.

35. EPA determined that the milestones in the Accountability Framework, the commitments in the Phase I Plan, and EPA's own modeling generally established "reasonable assurances" that the anticipated load reductions will occur.

36. EPA has committed to tracking the State's progress. If the state "fail[s] to make satisfactory progress" by the Accountability Framework deadlines, EPA can: (i) "[r]evise the TMDLs to reallocate additional load reductions from nonpoint to point sources, such as wastewater treatment plants"; (ii) require currently unregulated sources (e.g., certain stormwater sources) to obtain NPDES permits; and (iii) increase federal compliance and enforcement activities in the state. ANR Ex. 1 at 57.

37. Vermont completed all Accountability Framework milestones for 2016, including revising the Required Agricultural Practices ("RAPs"). The RAPs require all farms in Vermont to adopt and implement a set of minimum conservation practices to protect water quality.

38. Vermont did not complete all 2017 milestones. EPA therefore issued Vermont a "provisional pass" on an April 2, 2018 Report Card on Lake Champlain TMDL Phase I Implementation Milestones. CLF Ex. 5 at 1.

39. The Report Card states that "EPA is pleased with the overall magnitude and quality of Vermont's accomplishments" and notes that "[t]he many milestones that have been completed reflect this excellent progress." Id.

40. The Report Card notes that 25 out of 28 milestones set out in the Accountability Framework for 2016 and 2017 had been completed. The Report Card goes on to single out the three milestones that were not achieved on target: (1) updating the Municipal Separate Storm Sewer System ("MS4") General Permit; (2) issuing a Developed Lands General Permit; and (3) identifying a long-term revenue source.

**Municipal Roads General Permit**

41. In most of the Lake segment watersheds, municipal backroads are the single largest source of phosphorus in the Developed Lands category.

42. The Accountability Framework required Vermont to issue the Municipal Roads General Permit ("MRGP") in 2017. The permit was issued and became effective in January 2018. This milestone was assessed as "complete" in the Report Card.

43. The MRGP gives municipalities 18 years to bring all jurisdictional road segments into compliance with the permit.

**Municipal Separate Storm Sewer System General Permit**

44. The Accountability Framework requires Vermont to update the MS4 General Permit by the end of 2017 to require existing regulated small municipalities to control discharges consistent with the 2016 TMDL WLAs.

45. Vermont failed to issue the updated MS4 permit by the deadline.

46. The 2017 report card marks the update of the MS4 permit as "incomplete," but notes that the permit was set to be issued in April 2018, and that "the EPA is pleased that the bulk of the work has been completed and [the MS4] is expected to be issued very soon."

47. In responses to interrogatories submitted by CLF in April 2018, ANR states that the public comment period for the draft permit closed on March 24, 2018, and that a final permit would be issued soon.

**Developed Lands General Permit**

48. The 2016 TMDL calls for a 20.9% reduction in phosphorus from Developed Lands, a broad WLA category that includes stormwater-related phosphorus sources from roads, non-road impervious surfaces, and other sources.

49. The Accountability Framework required Vermont to issue a Developed Lands General Permit by December 30, 2017. A Vermont statute required the permit to be issued by January 1, 2018.

50. This permit would require coverage for all stormwater discharges on sites with impervious surface of three or more acres where the discharge did not previously obtain permit coverage, or where the discharge was permitted under standards prior to the adoption of the Vermont Stormwater Management Manual.

51. The 2016 TMDL anticipates most of the phosphorus reduction from non-road impervious surfaces in the Developed Lands category to result from the Developed Lands General Permit.

52. The Developed Lands General Permit was not finalized by December 30, 2017, and the EPA Report Card identified this milestone as "incomplete," noting that "this milestone is not anticipated to be complete until sometime in 2019. This permit is part of the State's commitment to achieving needed phosphorus reductions from developed land so it is important to keep making progress on the issuance of this permit." CLF Ex. 5, Attachment A at 3.

53. The Report Card states that "EPA urges the state to issue [the Developed Lands General Permit] before the mid-2019 report card update, based upon the jurisdictional clarity that you anticipate receiving from the legislature at the conclusion of the current session." Id. at 1.

54. On May 28, 2018, Governor Scott signed Act 181 into law. The Act chastises ANR for failing to adopt a Developed Lands General Permit, finding that "ANR's failure to adopt the three-

acre permit and its failure to comply with statutory requirements are not accepted by the General Assembly and the citizens of Vermont." 2018, No. 181, § 1(7).

55. Act 181 requires operation stormwater permits for new construction or redevelopment of one-half acre or more of impervious surface, instead of the current one acre or more of impervious surface, beginning July 1, 2022. Id. § 6(1).

56. The Act also changes the deadline for ANR to issue the Developed Lands General Permit from December 31, 2017, to 120 days after ANR adopts a new stormwater management rule. 10 V.S.A. § 1264(g)(3).

**Long-Term Revenue Source**

57. The Accountability Framework requires Vermont to establish a long-term revenue source to support water quality improvement via the Clean Water Fund by the end of 2017.

58. Vermont failed to meet this milestone.

59. Act 73 of 2017 created a working group to identify long-term revenue sources, and to submit to the General Assembly by November 15, 2017, draft legislation to establish long-term funding methods. The working group submitted a report and recommendations, but no legislation was adopted as a consequence of the report from the working group.

60. The Report Card identifies the long-term revenue milestone as "incomplete," but notes that the milestone was "partially achiev[ed]" through the creation of a clean water fund, the appropriation of additional funding to support water quality improvements, and the creation of reports on water quality funding. CLF Ex. 5, Attachment A at 4.

61. The Report Card noted, however, that these funding sources provided "near-term relief," but lacked long-term security. Id.

**Phosphorus Reductions in 2016 and 2017**

62. Vermont estimates that the total cumulative phosphorus reduction per year in state fiscal years ("SFY") 2016 and 2017 was 915 kilograms per year. This represents 0.43% of the targeted 213 metric ton annual reduction.

**WWTF Draft Permits and Fact Sheets**

63. Between May and August 2017, ANR issued draft WWTF permits for comment for the facilities that are the subject of these appeals.

64. ANR issued a Fact Sheet for each draft permit. ANR issued Fact Sheets for the identified facilities in Montpelier, Alburgh, South Burlington, St. Albans City, Shelburne #1, Shelburne #2, and Williamstown in July 2017; a Fact Sheet for St. Albans (NWCF) in September 2017; and a Fact Sheet for the Hinesburg facility. ANR issued revised Fact Sheets for the Shelburne #2 and Williamstown facilities in December 2017.

65. The Fact Sheet for each facility except St. Albans (NWCF) and Shelburne #2 explains that ANR adopts the 2016 WLA as the WQBEL "without additional analysis because th[e] WLA was set by EPA less than a year ago as the limit necessary to ensure Lake Champlain is brought into compliance with the [WQS], and undertaking further analysis to determine if more stringent effluent limitations are needed would be meaningless at this time since the State has just started to implement the" 2016 Phase I Implementation Plan.

66. Each WWTF Permit Fact Sheet has a Reasonable Potential Determination ("RPD") memorandum signed by Rick Levey from ANR's Monitoring, Assessment and Planning Program ("MAPP"). Each RPD memorandum analyzes the impact of discharges to water quality in Lake Champlain, the ultimate receiving water for all facilities.

67. The RPDs in seven of the WWTF Permit Fact Sheets note that a phosphorus-impaired segment of Lake Champlain is the ultimate receiving water, that the effluent limits in the draft permits reflect the limits in the 2016 TMDL, and that the 2016 TMDL limits are lower than the 2002 TMDL limits (on which the prior permit limits were based). The RPDs also state that the 2016 TMDL "contains a reasonable assurance analysis and accountability framework demonstrating that the [relevant lake segment] will achieve standards following implementation of the TMDL."

68. The RPD for Shelburne #2 indicates that biological and water quality monitoring, together with "allocations established by the [2016] TMDL, and provisions of Vermont Act 64, will also address instream impairments to the immediate receiving stream, provide additional assurances that the permit conditions ensure that the facility effluent is protective of water quality in McCabes Brook and Shelburne Bay." ANR Ex. 11 (RPD) Attached Memorandum at 8.

69. The RPD for Alburgh states: "The TMDL describes EPA's determination that there is reasonable assurance that reductions in this segment will be achieved." ANR Ex. 7 (RPD) Attached Memorandum at 1.

**Permit Drafting, Comments, and Review**

70. In comments on drafts of the permits appealed here, CLF wrote, among other things:

a. "To be Consistent with the Assumption that Load Reductions will not Occur for a Long Time, ANR must Translate the WLAs for WWTFs into More stringent WQBELs in the Near Term."

b. "To be Consistent with the Underlying Assumption of the TMDL, this Draft Permit must Hold Phosphorus Discharge Levels at Current Amounts or Require Offsets until there is Demonstrated Assimilative Capacity in Lake Champlain."

c. "The [] WWTF May Discharge Additional Phosphorus in the Future Once Assimilative Capacity Becomes Available."

See ANR Ex. 33 at 4, 7; ANR Ex. 37 at 4.

71. During the summer of 2017, EPA reviewed ten preliminary draft permits and fact sheets, including those for the Alburgh, Hinesburg, Montpelier, St. Albans, St. Albans (NWCF), Shelburne #1, Shelburne #2, South Burlington, and Williamstown facilities.

72. On October 5, 2017, EPA Region 1 sent a letter to the Vermont Department of Environmental Conservation stating that it had reviewed the draft permits and fact sheets with:

> [a] focus [on] how each draft permit and fact sheet addressed phosphorous discharges and whether the effluent limits developed are consistent with the assumptions and requirements of any available waste load allocations (WLAs) as is required by 40 C.F.R. 122.44(d)(1)(vii)(B). Region 1 EPA finds that the proposed phosphorus limits in the draft permits . . . were consistent with the phosphorus load reduction goals and WLAs for each facility. . . . Vermont's use of these WLAs as the basis for phosphorus limits to protect Lake Champlain is consistent with EPA's NPDES regulations.

ANR Ex. 42.

73. ANR issued Responsiveness Summaries for each permit in response to public comments, including CLF's, and explained why WQBELs are for the most part identical to corresponding WLAs.

74. The Responsiveness Summaries explain that the WLAs were established based on reasonable assurances that Vermont would implement nonpoint source load reductions through

the Phase I Implementation Plan. The Responsiveness Summaries explain that this is more economical than costly WWTF upgrades and note that the WLAs may be reduced if the State fails to make satisfactory progress in 2016 TMDL implementation.

75. The Responsiveness Summaries explain that the permits for the St. Albans (NWCF) and Shelburne #2 facilities take into account that discharges from these facilities enter impaired waters prior to entering Lake Champlain.

**Final WWTF Permits**

76. ANR issued WWTF discharge permits for the Montpelier, Alburgh, St. Albans (NWCF), South Burlington, St. Albans City, and Shelburne #1 facilities in September 2017, for the Shelburne #2 and Williamstown facilities in December 2017, and for the Hinesburg facility in January 2018.

77. The permits expire five years from the date of issue. The permittees must apply for new permits if they wish to continue discharging after that time.

78. The permits use the WLAs from the 2016 TMDL as the annual phosphorus WQBEL for all facilities except for the St. Albans (NWCF) facility.

79. The St. Albans (NWCF) facility permit has a phosphorus limit lower than its WLA because the direct receiving water, Steven's Brook, is impaired for nutrients.

80. The remaining permits require the WWTFs to implement phosphorus optimization techniques and project future loads if discharges reach or exceed 80% of its WLA within the first twelve months of the permit period. If the projection shows that a facility will exceed its WLA prior to the end of the permit period, the facility will be required to develop and submit a Phosphorus Elimination and Reduction Plan ("PERP") to ensure compliance with WLAs.

81. Because the WLAs for St. Albans City and Hinesburg require facility upgrades, the permits for those facilities contain interim permit limits and compliance schedules to bring the facilities into compliance with their WLAs at the earliest time possible and no later than July 1, 2020, (St. Albans City) and December 31, 2022 (Hinesburg).

82. ANR converted the WLAs' unit of measure (metric tons/year) to pounds/year for the permit limits.

83. Annual phosphorus WQBELs for the prior and current permits are set out in the following table.

| Facility | Prior permit limit pounds / year (lbs/yr) | New permit limit lbs/yr | Actual discharge 2017 lbs/yr |
|---|---|---|---|
| Montpelier | ~9,672 | 2,418 | 1,032.59 |
| Alburgh[4] | 238 | 238 | |
| St. Albans (NWCF) | 61 | 18 | 6.2 |
| South Burlington | 1,935 | 760 | 108.3 |
| St. Albans City | 6,089 | 2,436 | 3252 |
| Shelburne #1 | 767 | 269 | 314.77 |
| Shelburne #2 | 1,095 | 401 | 244.646 |
| Williamstown | 2,283 | 366 | 974.05 |
| Hinesburg | 608 | 152 | 237.87 |

84. Some of the permits under appeal set phosphorus WQBELs that are higher than what the facilities actually discharged in 2017 (shaded in gray in the above table).

**Administration and Enforcement**

85. ANR and AAFM work together to implement and enforce agricultural pollution control programs.

86. ANR and AAFM do not always agree on which agency should take primacy in an agricultural water quality enforcement action.

87. The two agencies have a memorandum of understanding which states that ANR "shall be the decision-maker regarding the existence of a point source, the extent of violations under the State's federally delegated program [i.e. the CWA], the appropriate form of enforcement response, and the timing and nature of requirements to achieve compliance."

[4] CLF asserts that Alburgh is one of the municipalities in which the actual 2017 discharge levels were lower than the previous and proposed permit limits. However, in its supporting exhibits, specifically Exhibit 17, a figure corresponding to Alburgh's 2017 actual discharge is missing. We include it in this table for completeness.

## Discussion

Before delving into the legal arguments presented by the parties, the Court would like to begin our discussion with an understanding of the backdrop of this case: Lake Champlain. Lake Champlain is a point of pride for Vermont and Vermonters for its scenic beauty, history, and recreational as well as economic value. However, it is uncontested that one of Vermont's most treasured resources is not healthy. It is due to this impairment that this matter is before the Court. This Court recognizes the seriousness of the water quality problems facing Lake Champlain, all of which underpin the present action. The permits presently on appeal are a part of a larger scheme meant to improve the water quality in the Lake, with the ultimate goal of a healthy Lake, as directed by the CWA. It is with this backdrop in mind that the Court considers the legal issues raised in the parties' summary judgment motions.

The central dispute in this matter is whether the permit limits related to phosphorus, the WQBELs, comply with the WQS and with the assumptions and requirements of the WLAs set out in the 2016 TMDL. CLF contends that the WQBELs are not strict enough to comply with the law, while ANR and the permitted municipalities contend that they are.

Our analysis proceeds through several legal issues presented by the parties to determine whether the undisputed facts, when viewed in the appropriate light given the pending motions, direct a conclusion as to whether the WQBELs comply with the WQS and with the underlying assumptions and requirements of the WLAs.

We first examine whether, as a general matter, WQBELs can be identical to corresponding WLAs. This involves a more specific analysis of the controlling law to determine whether WQBELs can be identical to their corresponding WLAs even where those WLAs assume future reductions in phosphorus from sources other than the permitted WWTFs.

Second, we analyze whether the assumptions underlying the WLAs have changed to a degree that would require a corresponding adjustment to the WQBELs, as well as whether ANR conducted a sufficient analysis of the assumptions in issuing the permits.

### I. Whether, as a general matter, WQBELs can be identical to corresponding WLAs

The parties disagree over whether the WQBELs can, in general, be identical to the corresponding WLAs, even when the WLAs assume future reductions from other sources under the relevant law.

#### a. Whether the controlling law anticipates that WQBELs can be identical to corresponding WLAs

Whether WQBELs can in general be identical to their corresponding WLAs falls broadly within Questions 2 and 3 of the common Statement of Questions that CLF has filed in the pending appeals.[5]

The relevant regulations explain:

> (vii) When developing [WQBELs] the permitting authority shall ensure that:
>
> (A) The level of water quality to be achieved by limits on point sources established under this paragraph is derived from, and complies with all applicable water quality standards; and
>
> (B) Effluent limits developed to protect a narrative water quality criterion [from the WQS], a numeric water quality criterion [from the WQS], or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared [as part of a TMDL].

40 C.F.R. § 122.44(d)(1)(vii).

We therefore address compliance with both subsections in turn.

**Compliance with 40 C.F.R. § 122.44(d)(1)(vii)(B)**

Subpart (B) requires WQBELs to be "consistent with the assumptions and requirements of" any corresponding WLA.

The preamble to subpart (B) explains that § 122.44(d) contains, by implication, a "requirement to use approved wasteload allocations for water quality-based permit limits."

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[5] Question 2 asks whether the phosphorus WQBEL in each permit "compl[ies] with the requirement in 40 C.F.R. § 122.44(d)(1)(vii)(B) that effluent limits developed to protect a numeric water quality criterion be 'consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA,'" given that the TMDL WLAs are "based on the assumption that nonpoint source reductions would be achieved in the future through as yet to be adopted or implemented programs" (emphasis in original).

Question 3 asks whether the WQBELs are impermissible because they rely on an assumption that nonpoint source reductions will occur in the future, resulting in an increase in the Lake's assimilative capacity, and that this is akin to an impermissible condition subsequent in violation of 40 C.F.R. §§ 122.4(a),(d), 122.44(d).

National Pollutant Discharge Elimination System; Surface Water Toxics Control Program, 54 Fed. Reg. 23868-01, 23879 (Jun. 2, 1989); see also 40 C.F.R. § 122.44(d) ("Water quality standards and State requirements: any requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards."). The preamble reasons that such a requirement is implied in § 122.44(d) "because paragraph (d) requires effluent limits to meet" WQS. 54 Fed. Reg. 23868-01, 23879. The preamble adds that "when WLAs are available, they must be used to translate water quality standards into NPDES permit limits." Id.

At the same time, the preamble goes on to note that § 122.44(d)(1)(vii) "does not prescribe detailed procedures for developing" WQBELs. Id. Instead, it "prescribes minimum requirements for developing" WQBELs while giving "the permitting authority the flexibility to determine the appropriate procedures for developing" WQBELs. Id.

In short, WLAs are to be translated into WQBELs so that the resulting WQBELs are consistent with, but not necessarily identical to, the WLAs. Id.; see also City of Moscow, Idaho, 2001 WL 988721, at *9 (noting that the "the governing regulations require *consistency*, [but that] they do not require that the permit limitations that will finally be adopted in a final NPDES permit be *identical* to any of the WLAs that may be provided in a TMDL) (emphasis in original). Within this flexible structure, nothing automatically bars WQBELs from being identical to their corresponding WLAs.

In fact, we have previously held that a permit limit that is identical to the corresponding WLA satisfies the "requirements" part of § 122.44(d)(1)(vii)(B). In re Montpelier WWTF Discharge Permit, No. 22-2-08 Vtec, slip op. at 14 (Vt. Envtl. Ct. Jun. 30, 2009) (Durkin, J.) ("[A]ny permit limitation pulled directly from the [2002] TMDL meets the 'requirements' of the TMDL (since it establishes a limit for that facility that does not exceed the wasteload allocation in the TMDL).").

We went on to explain that to satisfy the "assumptions" part of § 122.44(d)(1)(vii)(B), the permitting authority creating WQBELs must consider the assumptions that went into the TMDL, including how WLAs and LAs are allocated to different sources. Id. at 14–15. Again, nothing in this decision suggests that a WQBEL cannot be the same as a WLA.

Based on these regulations and our own case law, we conclude that WQBELs can, as a general matter, be identical to their corresponding WLAs, and, in circumstances such as those presented here, not be in conflict with 40 C.F.R. § 122.44(d)(1)(vii)(B).

**Compliance with 40 C.F.R. § 122.44(d)(1)(vii)(A)**

Subpart (A) requires WQBELs to be "derived from, and compl[y] with" applicable WQS. This requirement ties into CLF's common Question 1.[6]

The preamble of § 122.44(d)(1)(vii) explains that the CWA requires states to develop WQS, and then, for some water segments, to develop TMDLs to maintain the WQS. 54 Fed. Reg. 23868-01, 23879. WLAs for individual point sources are then derived from the TMDL, which "results in effluent limits that protect aquatic life and human health because the limits are derived from water quality standards." Id.

In brief, the WQS protect aquatic and human health. "A TMDL estimates the maximum amount of a pollutant that a water body can assimilate while still meeting [WQS]. The TMDL process works backward to allocate the amount of this total pollutant load among various sources or classes of discharges," including through WLAs. RE: Morehouse Brook, Englesby Brook, Centennial Brook, and Bartlett Brook, WQ-02-04, WQ-02-05, WQ-02-06, and WQ-02-07, at 22 (Vt. Wat. Res. Bd. June 2, 2003) available at https://anrweb.vt.gov/PubDocs /DEC/Decisions/wrp/2003/wq02-04-fco.pdf.

As a general matter, a WQBEL that is based on its corresponding WLA will therefore be consistent with the corresponding WLA and will in a sense be derived from the WQS, therefore satisfying § 122.44(d)(1)(vii)(A).

**b. Whether the WQBELs can be identical to WLAs that assume future phosphorus reductions from other sources**

CLF contends that the WQBELs cannot be set at the same level as the WLAs in this case, because the WLAs assume that phosphorus from other sources will be reduced in the future. CLF

[6] Question 1 asks whether the phosphorus WQBEL in each permit is "sufficiently stringent to meet water quality standards in Lake Champlain as required by the [CWA], 33 U.S.C. § 1311(b)(1)(C), and its implementing regulations at 40 C.F.R. §§ 122.4(a), (d), 122.44(d)(1)."

asserts that the WQBELs must be set at levels lower than the WLAs until these future reductions occur. This issue falls within CLF's common Question 2.

The former Water Resources Board[7] addressed a similar argument, also presented by CLF, after the 2002 TMDL was approved. In that instance, CLF similarly argued that, until the 2002 TMDL was fully implemented and WQS were attained in relevant waters, more stringent effluent limitations were required in the relevant permits. Re: Village of Enosburg Falls, No. WQ-03-03 at 6 (Vt. Wat. Res. Bd. Apr. 21, 2004) available at https://anrweb.vt.gov/PubDocs/DEC/Decisions/wrp/2004/wq-03-03mod.pdf. The Water Resources Board categorized CLF's argument as requiring "that a TMDL must be fully implemented and the receiving waters restored to compliance with water quality standards before discharges into those waters that are consistent with the TMDL may be permitted." Id.

The Water Resources Board declined to follow this argument raised by CLF. Id. In so ruling, the Board looked to how the TMDL relates to WQBELs, stating that a TMDL and its implementation plan, generally, provides for a means of establishing WQBELs. Id. (citations omitted). It explained that "[t]he idea that effluent limitations for discharges of pollutants of concern into impaired waters cannot be justified by a valid TMDL defies the logic of water quality based permitting and would render the TMDL process meaningless." Id.[8]

As explained above, the WLAs set the maximum amount of phosphorus that can be released while still satisfying the WQS. The parties have not directed the Court to, nor can the Court find, anywhere that the law indicates that WLAs are graduated or incremented. Likewise, nothing in the 2016 TMDL suggests that the WLAs should wait for other sectors to reduce phosphorus—for example, the WLAs do not start with small allocations, and then gradually increase if and when reductions from other sources do not occur. Therefore, and for the further

[7] The former Water Resources Board had jurisdiction over certain appeals concerning water quality. That jurisdiction was transferred to this Court under the permit Reform Act of 2004. However, that legislation also directed that this Court give "the same weight and consideration" to prior decisions of the former Water Resources Board as given to decisions of this Court. 10 V.S.A. § 8504(m).

[8] This Court addressed the conclusions reached in Village of Enosburg Falls in our 2009 Montpelier WWTF decision. Montpelier WWTF Discharge Permit, No. 22-2-08 Vtec at 8 (Jun. 30, 2009). In that matter, the Court disagreed with the Water Resources Board's analysis, in part, due to distinguishable facts. The Court's decision focused on the permitting agency's requirement to analyze permit limits at the time of issuance. Id. As that issue pertains to whether ANR performed adequate analysis at the time of issuance in this matter, a more complete discussion of Montpelier WWTF is provided below.

reasons set forth below, we reach a similar conclusion to that of the Water Resources Board in Village of Enosburg Falls.

The 2016 TMDL indicates that the WWTFs are allowed to discharge up to the amount of phosphorus designated by the WLAs. Thus, the TMDL monitoring plan states that WWTF "phosphorus loads [will be] monitored by effluent sampling and flow measurements at all wastewater treatment facilities in the basin in order to verify compliance with the phosphorus wasteload allocation for each facility." ANR Ex. 1 at 63 (emphasis added).

Furthermore, the WLAs were developed pursuant to the underlying assumption that reductions from other sources would occur over time. The TMDL explains that the WWTF WLAs were developed by considering "both the relative contribution of the WWTFs and the degree of reduction required for developed land and nonpoint sources." Id. at 28**.**

The 2016 TMDL also includes an Accountability Framework, which sets completion deadlines for certain elements of the TMDL implementation plan. Id. at 55. If the State "fail[s] to make satisfactory progress" against these deadlines, EPA can "[r]evise the TMDLs to reallocate additional load reductions from nonpoint to point sources, such as wastewater treatment plants." Id. at 57. This indicates that WLAs for WWTFs assume future reductions from other sources will occur, and that if these reductions do not occur, then WWTFs can be forced to further decrease their own phosphorus discharges by reducing their WLAs.

As set out above, WQBELs must be consistent with the assumptions and requirements of their corresponding WLAs. 40 C.F.R. § 122.44(d)(1)(vii)(B). Here, the WLAs assume that phosphorus reductions will occur over time. WQBELs that also assume phosphorus reductions will occur over time are consistent with this assumption, and therefore comply with § 122.44(d)(1)(vii)(B).

**c. Whether setting the WQBELs at the level of the WLAs creates unlawful conditions subsequent**

CLF argues that the WQBELs are based upon unlawful conditions subsequent. This issue falls within CLF's common Question 3.

A condition subsequent is a permit condition that qualifies permit approval on future proof of compliance with certain conditions after the permit takes effect or allows the permitting

authority to alter an approved permit pending some future event. See, e.g., In re Treetop Dev. Co. Act 250 Dev., 2016 VT 20, ¶ 14, 201 Vt. 532, reargument denied (Mar. 25, 2016); In re Lowe's Home Centers, Inc., No. WQ-03-15, slip op. at 14—15 (Vt. Wat. Res. Bd. Aug. 26, 2004) available at https://anrweb.vt.gov/PubDocs/DEC/Decisions/wrp/2004/wq-03-15-fco.pdf. Conditions subsequent are impermissible. See Lowe's, No. WQ-03-15, slip op. at 14–15 (authorization to discharge may not be granted on the condition that applicant submit updated plans in the future to show compliance with regulations). Instead, affirmative findings of fact must be made. Treetop, 2016 VT 20, ¶ 11 (in the context of an Act 250 permitting action) (citation omitted).

CLF argues that the phosphorus limits authorized under the WWTF permits are impermissible conditions subsequent. This is because, CLF asserts, the limits allow the permittees to discharge up to the maximum imposed WLA level at the permit's outset, relying on the occurrence of future conditions, namely future reductions of phosphorus from nonpoint sources. CLF argues that this is impermissible and unfair because it deprives CLF of notice and the opportunity to be heard on evidence showing how the wastewater treatment facilities will comply with the TMDL. Citing Lowe's, No. WQ-03-15 at 15.

We conclude that the future reductions in phosphorus from nonpoint sources that are projected by the 2016 TMDL, along with other activities expected to take place as part of the TMDL, are not impermissible conditions subsequent to the permits now under appeal. The permits on appeal here have not been conditionally approved pending some future event. Nor do they allow ANR to revise the permits if the assumptions of the TMDL do not play out as expected.[9] Instead, the permits set specific phosphorus limits for what the facilities will be allowed to discharge—even if the projected reductions from other sources fail to occur—from when the permits become effective until the permits expire. The future reductions from nonpoint sources are not a condition of the permits, instead, they are assumptions underlying the WLA upon which the permit limitations are based. Therefore, the relevant WQBELs, which are based upon the WLAs, are not subject to a condition subsequent.

[9] We note that, if the State fails to make satisfactory progress in implementing the TMDL, EPA may revise the TMDL to reallocate load reductions to point sources, including WWTFs. Ex. 1 at 57. However, the permitting agency, here ANR, does not retain the right to reopen the permits.

Because the WQBELs established in the appealed permits are based on an underlying assumption of future reductions in nonpoint source discharges, not conditioned upon the achievement of those discharges in the future, we conclude that the WQBEL permit terms are not unlawful conditions subsequent.

**d. Whether the WQBELs can be identical to WLAs that effectively authorize an increase in actual discharges**

The WLAs, and subsequently the WQBELs, for these WWTF permits limit phosphorus discharges to amounts equal to, or less than, the amounts the facilities could discharge under their most recent discharge permits. At the same time, some facilities actually discharged less phosphorus in the recent past than they were authorized to discharge under their previous permit or under the current WLAs. The current WLAs for these facilities therefore allow them to discharge more phosphorus than they actually discharged in recent years.

CLF argues that the WQBELs cannot be set at the same level as these WLAs, because this would allow the facilities to discharge more phosphorus than they actually have in the recent past. This issue falls within CLF's common Question 1.[10]

In support of this argument, CLF submits that Lake Champlain is already classified as an impaired waterway, due to excess levels of phosphorus, and therefore has no capacity to assimilate more phosphorus.[11] The actual level of point source phosphorus discharges therefore may not increase unless and until phosphorus levels in the Lake decrease to a point where the Lake once again has the capacity to assimilate more phosphorus. CLF contends that the permits here violate this requirement by effectively allowing an increase in phosphorus discharges (for these specific facilities), and that this allowance violates § 1311(b)(1)(C).[12] For the reasons stated below, we decline to adopt CLF's interpretation of the federal code and regulatory requirements.

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[10] CLF's common Question 1 asks whether the phosphorus WQBEL in each permit is "sufficiently stringent to meet water quality standards in Lake Champlain as required by the [CWA], 33 U.S.C. § 1311(b)(1)(C), and its implementing regulations at 40 C.F.R. §§ 122.4(a),(d), 122.44(d)(1)."

[11] "Assimilative capacity means a measure of the capacity of the receiving waters to assimilate wastes without lowering their quality below the applicable water quality criteria." Vermont Water Quality Standards, § 29A-102(7).

[12] CLF notes that, on appeal, this Court must determine the legality of the permits as they are issued. See Montpelier WWTF, No. 22-2-08 Vtec at n. 5. As such, "we assume that [the permitted facility] wishes to receive a permit that authorizes the maximum amounts of pollutant discharges currently listed in the permit." Id.

An implementation timeline—such as the one included in the 2016 TMDL—allows compliance with WQS to occur over time. See, e.g., Am. Farm Bureau Fed'n v. U.S. E.P.A., 792 F.3d 281, 300 (3d Cir. 2015) ("[I]t is common sense that a timeline complements the Clean Water Act's requirement that all impaired waters achieve applicable water quality standards."); In re Alexandria Lake Area Sanitary Dist. NPDES/SDS Permit No. MN0040738, 763 N.W.2d 303, 314 (Minn. 2009) (noting that the "suggestion that the effluent limits in [a] reissued permit must fully restore [an impaired lake] within the span of the five-year NPDES permit is neither realistic nor supported by the regulatory scheme"). Therefore, the WQBELs need not be set at levels that will immediately bring the waterbody into compliance with the WQS.

We next turn to whether the WQBELs may be based on future, as-yet unrealized pollutant reductions. CLF cites 40 C.F.R. § 122.44(d)(1)(ii), which requires the permitting authority to "account for existing controls on point and nonpoint sources of pollution" when determining if a discharge causes, has the potential to cause, or contributes to a WQS violation. If the discharge does cause, has the potential to cause, or contributes to a WQS violation, then WQBELs in the permit should limit that discharge as appropriate. Id. § 122.44(d)(1)(i). CLF reads "existing controls" to mean that WQBELs must be based on current water quality and pollution loading conditions in a waterbody, and not on plans for future phosphorus reductions.

This is an overly narrow reading of the regulation. We conclude that the 2016 TMDL, with its WLAs, LAs, and margin of safety, is an existing control over point and nonpoint sources of pollution. The phosphorus limits in the permits take this existing control within the authorized maximum WLAs into account. Because of this, we conclude that ANR has complied with the § 122.44(d)(1)(ii) requirement.

The 2016 TMDL expressly uses the prior permit limit for each WWTF as a baseline from which phosphorus reductions must be made. ANR Ex. 1 at 28 ("In determining any necessary

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Therefore, this Court assumes that the facilities at issue in this appeal wish to receive authorization to discharge up to the maximum amount permitted. Such an assumption would have additionally been valid during an appeal of the prior permits. Therefore, by this same logic, this Court assumes that the facilities wished to discharge up to the maximum amount listed in their prior permits. Despite this, some facilities have for whatever reason not been operated in such a manner as to reach the prior discharge levels in 2017. It would appear, under this assumption, that the actual operations under the prior permits represents a decrease in discharges from these facilities. Our note of this, however, does not undermine the importance of actual discharge reductions occurring at the faculties, we simply provide this note for clarity.

reductions [in WWTF WLAs], EPA established a baseline by looking first at the allowable discharges from each WWTF, that is, the amount of phosphorus the facility is authorized to discharge at design flow rates under the current NPDES permit. These permits reflect the wasteload allocations made in the 2002 TMDLs."). The TMDL then calculates the reductions necessary to meet WQS and translates those reductions into a new WLA for each facility, upon which the WQBELs are based. Id. at 28–30.

CLF's argument here, that the WQBEL's cannot authorize an increase in discharges, is to some extent an argument that the baseline used in the 2016 TMDL should be the "actual discharge" as opposed to the "actual authorized discharge." [13] We note that CLF's argument comes close to an impermissible collateral attack on the 2016 TMDL because the TMDL is not on appeal here.[14]

The City of South Burlington argues that basing the new WQBELs on the levels of actual discharges, rather than on prior permit limits, disincentivizes investments and WWTF improvements. As CLF points out, we do not consider economic implications when determining whether NDPES discharge permits comply with the CWA. See Montpelier WWTF, No. 22-2-08 Vtec at 21 (Jun. 30, 2009) ("[W]e are not aware of any statutory provision allowing our Court to conduct an economic analysis in these types of proceedings.") (citation omitted). Placing economic considerations aside, setting future discharge limits at or below actual current discharges, regardless of maximum discharges authorized by an existing permit, could create a perverse incentive for municipalities to increase current discharges so that they are less restricted in the future. Such an incentive would run counter to the overall purpose of the WQBELs and TMDL standards overall, which is to bring Lake Champlain into necessary compliance

[13] We note that CLF raised similar arguments in relation to the TMDL in 2015, e.g.:

> For Lake Champlain, the annual phosphorus concentrations already exceed water quality standards and impact designated uses. Therefore, the draft 2015 TMDL allocations cannot justify additional discharges of phosphorus pollution into Lake Champlain. For wastewater treatment facilities in impaired lake segments, an allocation set above the actual phosphorus load of that facility is inconsistent with the CWA.

ANR Ex. 43 at 4.

[14] The EPA has previously noted that a NPDES permit appeal is the inappropriate forum for raising challenges to the underlying determinations of the TMDL. City of Moscow, Idaho, 2001 WL 988721, at *17. However, we agree with CLF that the TMDL, and its underlying assumptions and construction, is the legal blueprint for the WQBELs at issue in this appeal. As such, we interpret their arguments within that narrow scope.

with WQS. Therefore, CLF's proposed restriction on permitting discharge amounts higher than what has recently been discharged could cause WWTFs to increase current discharges.

Again, we note that, as a general principle, the WQBELs must be consistent with the assumptions and requirements of their corresponding WLAs. 40 C.F.R. § 122.44(d)(1)(vii)(B). Here, the WLAs assume that phosphorus reductions will occur over time. WQBELs that also assume phosphorus reductions will occur over time are consistent with this assumption, and therefore comply with § 122.44(d)(1)(vii)(B). We therefore turn our analysis to whether the WQBELs were impermissibly set at a level above the actual discharges.

We are not aware of any legal authority stating that a WQBEL cannot be based on a WLA if the WLA allows an actual increase in discharges of a pollutant, while providing a reduction in the permitted discharges.[15] Therefore, the WQBELs at issue here can be set at the same level as the WLAs, even when they allow for an actual increase in discharges from the facilities.

[15] The City of Montpelier and ANR point out that the appealed permits have measures in place to prevent them from reaching their respective WLAs. St. Albans (NWCF) has a WQBEL that is lower than its WLA. The remaining permits require the WWTFs to implement phosphorus optimization techniques and project future loads if discharges reach or exceed 80% of their WLAs within the first twelve months of the permit period. If the projection shows that a facility will exceed its WLA prior to the end of the permit period, the facility will be required to develop and submit a Phosphorus Elimination and Reduction Plan ("PERP") to ensure compliance with WLAs.

Montpelier contends that these requirements incentivize facilities to stay well below the WLAs, given the duty to optimize phosphorus reduction and to avoid the time and cost associated with developing a PERP. While this may be true, the permits for all facilities but St. Albans (NWCF) ultimately still set WQBELs at the level of their corresponding WLAs. While the permits may discourage WWTFs from reaching the maximums represented by the WQBELs, they do not prohibit the WWTFs from reaching those maximums.

### e. Conclusion

For these reasons we conclude that there is no bar to setting WQBELs at the same level as corresponding WLAs, even when those WLAs allow for discharges that may exceed the actual phosphorus discharges in a prior year, under a prior permit.[16]

## II. Whether the assumptions underlying the WLAs have changed

We next turn to the issue of whether the WLAs' underlying assumptions have changed. This requires an analysis of both whether ANR conducted a specific analysis of the underlying assumptions when issuing the permits at issue in this appeal as well as an analysis of whether the assumptions remain valid. We address each issue in turn.

### a. Whether the permits are defective because ANR failed to conduct a specific analysis

CLF cites our decision in Montpelier WWTF in suggesting that the permits on appeal here are deficient because ANR failed to conduct a specific analysis of whether the WLAs are

[16] The EPA has also suggested that assigning WQBELs at issue here at the same level as WLAs is appropriate. In an October 2017 letter, the EPA found that "the proposed phosphorus limits in the draft permits . . . were consistent with the phosphorus load reduction goals and WLAs for each facility." ANR Ex. 42. Therefore, EPA stated that "Vermont's use of these WLAs as the basis for phosphorus limits to protect Lake Champlain is consistent with EPA's NPDES regulations." Id.

We note that CLF asserts that EPA's actions regarding these appealed permits are irrelevant to the present action. Further, it asserts that ANR has misrepresented the letters content. Specifically, that the letter stands for EPA's approval of the State's approach in issuing the permits rather than an affirmative determination that the WQBELs are appropriate.

Because the regulation here is promulgated by EPA, and EPA has analyzed and stated an opinion regarding whether the permits comply with § 122.44(d)(1)(vii)(B), we give some deference to that opinion. See Chevron, U.S.A. v. Nat. Res. Def. Council, 467 U.S. 837, 842-43 (1984) (affording deference to an agency's "construction of a statutory scheme it is entrusted to administer."); see also Montpelier WWTF, No. 22-2-08 Vtec at 6–7 (Jun. 30, 2009) (declining to apply Chevron deference to EPA's interpretation of CWA statutes and regulations where "EPA has not yet spoken on the specific legal issues that have risen in this appeal," and "[b]ecause EPA has yet to analyze or state a determination on" the particular issue in question). As such, we have afforded EPA's October 2017 letter the weight it deserves in these pending appeals.

sufficiently stringent to be used as WQBELs. No. 22-2-08 Vtec (Jun. 30, 2009). This issue falls within a broad reading of CLF's common Question 2.[17]

There is some tension in Montpelier WWTF. We held in that case that under the "assumptions" aspect of 40 C.F.R. § 122.44(d)(1)(vii)(B), "ANR must engage in some degree of site-specific and time-specific analysis for each [NPDES permit] application to determine whether a suggested [WLA] provides a stringent enough" limitation on the relevant pollutant to be used as a WQBEL. Id. at 14. We went on to conclude that:

> 40 C.F.R. § 122.44(d)(1)(vii)(B) directs that agencies not blindly accept such past assumptions, but rather analyze them at each permit issuance—or at least at each permit issuance that occurs more than five years after the issuance of the applicable TMDL—to determine whether those assumptions continue to have a basis of reliability.

Id. at 16.

However, we have also discussed the prior Water Resources Board precedent of Enosburg Falls. No. WQ-03-03 (Apr. 21, 2004). In that case, the Water Resources Board concluded that ANR was not required to conduct additional analysis of the assumptions underlying the WLAs when the NPDES permit was issued a year and a half after the issuance of the TMDL. Id. at 6.

Conversely, in Montpelier WWTF, the permit at issue was issued more than five years, and the appeal arose six and a half years, after the TMDL was issued. Montpelier WWTF, No. 22-2-03 Vtec at 4, 8. As a result, the Court concluded that "it would be meaningful – and is in fact required under the [CWA] and its implementing regulations – to analyze at each permit issuance whether more stringent permit limitations are required." Id. at 8. Therefore, we concluded in Montpelier WWTF that ANR must analyze the assumptions underlying the WLAs to determine

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[17] CLF's common Question 2 asks whether, given that the TMDL WLAs are "based on the assumption that nonpoint source reductions would be achieved in the future through as yet to be adopted or implemented programs," the phosphorus WQBEL in each permit "compl[ies] with the requirement in 40 C.F.R. § 122.44(d)(1)(vii)(B) that effluent limits developed to protect a numeric water quality criterion be 'consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA.'"

To the extent that ANR asserts that this issue is not within the scope of Question 2, we note that while our review is limited to the issues raised in the Statement of Questions, our review must include an analysis and determination of those matters intrinsic to the legal issues raised in the Statement of Questions. In re LaBerge NOV, 2016 VT 99, ¶ 15, 203 Vt. 98 (citing In re Jolley Assocs., 2006 VT 132, ¶ 9, 181 Vt. 190); see also In re Atwood Planned Unit Dev., 2017 VT 16, ¶ 17, 204 Vt. 301. We therefore conclude that the issue of whether ANR conducted a site-specific analysis is intrinsic Question 2.

whether the WQBELs should be identical to, or more stringent than, the WLAs. Id. at 22. We distinguished the matter from Enosburg Falls, by noting that "[a]t that time, so soon after the TMDL was developed, it probably would have been meaningless to engage in further analysis as to whether more stringent permit limitations were needed." Id. at 8.

Here, the TMDL was issued on June 17, 2016 following years of study and analysis. ANR put draft WWTF permits on public notice for comment between May and August 2017. ANR then issued fact sheets on the draft permits in July, September, and December 2017. ANR issued the permits in September and December 2017, and January 2018, which was only 15, 18, and 19 months after the TMDL was issued, respectively.

With the aforementioned precedent in mind, we conclude that some analysis of the assumptions underlying the WLAs before assigning WQBELs is always needed to satisfy 40 C.F.R. § 122.44(d)(1)(vii)(B). At the same time, given the short time that has passed from the time the TMDL was issued to the time the permits here were drafted, we conclude that this analysis need not be overly extensive or duplicative of the analysis that was completed in the TMDL establishment process.

Having addressed this threshold legal issue, we turn to the question of whether ANR conducted the appropriate analysis with respect to the permits presently on appeal.

ANR contends that it conducted the appropriate analysis. It asserts this analysis is reflected in the draft permit Fact Sheets, including the Reasonable Potential Determinations included with those Fact Sheets, and in its Responsiveness Summaries. ANR put each of the draft WWTF permits on public notice for comment between May and August 2017 and issued Fact Sheets for the draft permits in July, September, and December 2017. ANR also issued Responsiveness Summaries to respond to comments.

Seven of the nine Fact Sheets, all but St. Albans (NWCF) and Shelburne #2, explain that ANR has adopted the 2016 TMDL WLAs as the WQBELs "without additional analysis." See ANR Ex. 6, p. 8 (Montpelier Fact Sheet); ANR Ex. 7, p. 8 (Alburgh Fact Sheet); ANR Ex. 8, p. 9 (South Burlington Fact Sheet); ANR Ex. 9, p. 9 (City of St. Albans Fact Sheet); ANR Ex. 10, p. 8 (Shelburne #1 Fact Sheet); ANR Ex. 12, p. 8 (Williamstown Fact Sheet); ANR Ex. 13, p. 9 (Hinesburg Fact Sheet). Citing Montpelier WWTF, these Fact Sheets explain that because the WLAs were set less

than a year earlier and TMDL implementation was only just beginning, additional analysis "would be meaningless."

Despite this statement, it appears that ANR did conduct some analysis of the assumptions underlying the WLAs. For example, the Fact Sheets review how and why the WLAs for WWTFs were developed, and how the WLA for each facility was calculated.

The Responsiveness Summaries explain that the WLAs were established based on reasonable assurances that Vermont would implement nonpoint source load reductions through the Phase I Implementation Plan. The Responsiveness Summaries explain that this is more economical than costly WWTF upgrades and note that the WLAs may be reduced if the State fails to make satisfactory progress in implementing the 2016 TMDL.

The Reasonable Determination Analyses, attached to the Fact Sheets, review the conditions of the Lake segment receiving the discharge from each WWTF, the general capacity at which each facility has recently been operating, and an overview of phosphorus modelling.

The Fact Sheets and Responsiveness Summaries also show that ANR developed WQBELs for St. Albans (NWCF) and Shelburne #2 with additional consideration to the impaired brooks into which these facilities discharge prior to the discharge reaching the Lake.

We acknowledge that this analysis of the assumptions underlying the WLAs appears, based on the record before us, to be fairly minimal. At such an early stage of TMDL implementation, however, a minimal analysis is not inappropriate, as contemplated by Montpelier WWTF. When ANR drafted the permits and responded to public comments, the TMDL was only twelve to eighteen months into a decades-long process. Even if the TMDL had proceeded in fits and starts in that first year, it probably would have been too early to second-guess the assumptions underlying the TMDL. Therefore, we conclude that this minimal analysis is appropriate pursuant to Montpelier WWTF and Enosburg Falls.

At the same time, we note that ANR could have done more analysis, which likely would have been justified and helpful in light of the serious environmental concerns facing Lake Champlain. For example, the April 2018 Report Card lists 16 milestones that were to be completed by the end of 2016. ANR could have looked to these milestones—all of which were completed—to confirm that TMDL implementation was proceeding as planned, and that the

assumptions underlying the TMDL therefore held true. However, because these milestones were achieved, the failure to review them (or, at least, to mention them in the Fact Sheets and Responsiveness Summaries) indicates that if ANR had reviewed these milestones, the assumptions underlying the WLAs likely would not have changed.

Even construing the facts in favor of CLF, we conclude that ANR sufficiently analyzed the assumptions underlying the WLAs when it determined the appropriate WQBELs, and that this analysis was as comprehensive as was warranted at such an early stage of TMDL implementation.

**b. Whether a specific analysis demonstrates that the assumptions underlying the WLAs are faulty**

CLF next contends that further analysis shows that the assumptions underpinning the 2016 TMDL WLAs no longer hold up, and that the permits must therefore have WQBELs that are stricter than the WLAs.

CLF proposes several reasons why the assumptions underlying the 2016 TMDL are no longer valid.

First, CLF points out that the TMDL is at an early stage, and the TMDL implementation will take decades to carry out. Therefore, certain nonpoint source phosphorus controls are not yet implemented.

While this may be true, as discussed above, the WLAs were designed under the assumption that the 2016 TMDL will take decades to implement, that certain nonpoint source controls would not be immediately implemented, and that the TMDL as a whole will be implemented in phases. These are not, therefore, changes to the assumptions that went into the WLAs. Further, as noted above, challenging these underlying assumptions is a collateral attack on the TMDL and therefore outside the scope of the present permit appeals.

Next, CLF contends that the assumptions underlying the WLAs have changed because there has been some confusion between ANR and AAFM over which agency will implement and enforce certain TMDL provisions.

While CLF has identified some friction between the two agencies, the record does not indicate that this friction has led to any kind of breakdown in implementation or enforcement that would call for reassessing the assumptions underlying the WLAs.

CLF finally argues that the assumptions underlying the WLAs no longer hold true because the State has failed to meet three important milestones in the 2016 TMDL Accountability Framework: updating the MS4 general permit, issuing a Developed Lands General Permit, and identifying a long-term revenue source to support water quality improvements.

We note that the permits at issue here had been drafted and put on public notice for comment, and for the most part had already been issued, before the deadline for accomplishing the three milestones passed. The permits were all issued before the April 2018 Report Card was sent. Because these milestones were missed as the permits were being finalized or after the permits had already been issued, ANR could not have considered how the missed milestones might have changed the assumptions underlying the WLAs. If anything, the April 2018 Report Card gives an after-the-fact look at whether the assumptions that went into the WLAs, and the permits, were accurate.

EPA acknowledges in its Report Card that "the bulk of the work" required to update the MS4 permit had been completed and that the permit would be issued soon. ANR's response to CLF's interrogatories confirms this assessment. While the deadline was missed, even when we construe these facts in favor of CLF, there is no indication that this months-long delay will adversely impact the decades-long TMDL implementation. Cf. Montpelier WWTF, No. 22-2-08 Vtec at 14–20 (identifying several examples illustrating that the assumptions underlying the WLAs may no longer hold true, due to the fact that the five-year term of the appealed permit had been exceeded). Therefore, we conclude that the failure to update the MS4 permit by the required deadline does not undermine the assumptions underlying the WLAs.

With respect to the long-term funding source, EPA noted that it considered this milestone partially achieved. In doing so, EPA listed multiple near-term funding sources, but reiterated the need for a longer-term source. EPA further concluded that the Developed Lands General Permit was not completed.

Even construing the facts in favor of CLF, we conclude that the delays are not yet so significant as to undermine the assumptions of the WLAs. The Developed Lands General Permit coverage timeline remains unchanged, and therefore the impact of that permit on phosphorus reduction should also remain unchanged. While the long-term revenue question remains more

open, EPA noted that progress has been made on identifying long-term revenue sources, and no immediate funding shortages have been identified that might put TMDL implementation in jeopardy.

**c. Conclusion**

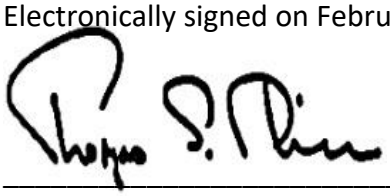
For these reasons, we conclude, even when viewing the undisputed material facts in the light most favorable to CLF, that ANR conducted a proper analysis of the underlying assumptions of the WLAs. Further, we conclude that a more specific analysis of the assumptions does not undermine them.

**Order**

For the reasons set forth above, the Court answers all three Questions presented by CLF in the affirmative. We conclude that the WQBELs can, as a general matter, be identical to the WLAs within a TMDL and, in the present appeals, the WQBELs may be identical to the WLAs set forth in the 2016 TMDL. Further, we conclude that the WQBELs are not impermissible conditions subsequent. Finally, we conclude that ANR performed an adequate site-specific analysis of the assumptions underlying the effluent limits when issuing the permits presently on appeal, and that those assumptions remain valid. Therefore, the summary judgment motions filed by ANR, Montpelier, Hinesburg, Alburgh, and Shelburne are **GRANTED**. The summary judgment motion filed by CLF is **DENIED**.

This concludes the matter before the Court. A Judgment Order accompanies this decision.

Electronically signed on February 1, 2019 at Brattleboro, Vermont, pursuant to V.R.E.F. 7(d).



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Thomas S. Durkin, Superior Judge
Environmental Division

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