State of Vermont WATER RESOURCES BOARD

Re: Town of Shoreham Wastewater Treatment Facility
Docket No. WQ-00-11 (DEC Amended Permit #3-1459)

Authority:
10 V.S.A. § 1269

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

This decision pertains to an appeal by the Conservation Law Foundation ("CLF") of a discharge permit, DEC Amended Permit #3-1459 ("Permit Amendment"). The Permit Amendment was issued by the Department of Environmental Conservation, Agency of Natural Resources ("ANR") to the Town of Shoreham ("Applicant" or "Town"). The Permit Amendment specifically approved as an addendum the Town's June 6, 2000 Guidelines for Nonpoint Source Phosphorus Reduction ("June 2000 Guidelines") in satisfaction of the Town's obligations as a pilot program under 1997 Vt. Laws 51, Sec. 5 ("Act 51"). CLF argues that the June 2000 Guidelines do not comply with the requirements of Act 51, asserting that this document falls short of describing specific measures that will reduce off-site, non-point source phosphorus in an amount equal to or greater than in-plant phosphorus controls for each year of the plant's operation. Therefore, CLF asks the Board to deny the Permit Amendment.

As explained below, the Water Resources Board ("Board") determines that the June 2000 Guidelines comply with the requirements of Act 51 and, therefore, the Permit Amendment should issue, but with modifications.

I. BACKGROUND

On December 8, 2000, CLF appealed the Permit Amendment to the Board, pursuant to 10 V.S.A. § 1269. CLF's Notice of Appeal was timely filed and docketed, and this matter was duly noticed by the Board on December 18, 2000.

On January 18, 2001, David J. Blythe, Chair of the Board, convened a prehearing conference in this matter. Pursuant to Board Rule of Procedure 28(B), a Prehearing Conference Report and Order ("Prehearing Order") memorializing his party status and other determinations was issued on January 29, 2001. The Prehearing Order was subsequently amended in part by order of the Chair on February 12, 2001. Both orders are herein incorporated by reference.

The parties of right to this appeal, pursuant to Board Procedural Rule 25(B), are: Appellant CLF, Applicant Town of Shoreham, ANR, and the Addison County Regional Planning Commission. Certain residents and property owners in the Town of Shoreham are permissive intervenors, pursuant to Board Procedural Rule 25(C). They are: Robert Growney, Joseph and Deborah Kelley, Paul and Rene Saenger, and William and Carleen Telgen. Prehearing Order at 11, XIII. Item 1.

Page 2

Following briefing by the parties on preliminary issues, the Board convened oral argument on April 3, 2001. Those parties providing argument were CLF, the Applicant and ANR. On May 2, 2001, the Board issued a Memorandum of Decision on Preliminary Issues, the outcome of which was to narrow the issues in the above case to one question: Whether, as a matter of law and fact, the Town of Shoreham's June 2000 Guidelines comply with Act 51 and, if not, why not. On that same date, the Board's Chair issued a Scheduling Order to govern the filing of prefiled evidence and various pleadings in this matter.

In accordance with the Scheduling Order, the Applicant, CLF, and ANR, each filed prefiled direct evidence during May 2001. Prior to the deadline for filing prefiled rebuttal evidence, the Applicant, on June 7, 2001, filed a Motion to Dismiss.²

Following briefing by the parties, the Board convened oral argument on the Motion to Dismiss on July 10, 2001. Those parties providing argument were the Applicant and CLF. On July 31, 2001, the Board issued a Memorandum of Decision on the Motion to Dismiss in which it denied the Applicant's request for relief and directed that a hearing on the merits be scheduled in this matter. On that same date, the Board's Chair issued a Revised Scheduling Order.

In accordance with the Revised Scheduling Order, the Applicant, CLF, and ANR, each filed prefiled rebuttal evidence in August 2001, and evidentiary objections, responses, and Proposed Findings of Fact, Conclusions of Law, and Orders in September 2001.

On September 20, 2001, the Chair convened a second prehearing conference at which he made certain preliminary rulings concerning a subpoena issued by CLF, rulings on specific evidentiary objections, and rulings on various procedural matters related to the hearing day schedule. Pursuant to Procedural Rule 28(B), these rulings were memorialized in a Second Prehearing Conference Report and Order ("Second Prehearing Order") issued on September 26, 2001. The Second Prehearing Order is herein incorporated by reference.

On October 1, 2001, CLF filed a timely general objection to the Chair's preliminary evidentiary rulings contained in the Second Prehearing Order, which was followed by a specific list of objections and supporting Memorandum of Law filed on October 4, 2001. CLF did not request oral argument before the full Board on these objections. On October 2, 2001, ANR filed a timely objection to several of the Chair's preliminary evidentiary rulings and requested oral argument before the full Board on a number of its arguments.

The Addison County Regional Planning Commission and permissive intervenors joined in this motion.

On October 9, 2001, the Board convened a <u>de novo</u> merits hearing at the Shoreham Firehouse in Shoreham, Vermont. Board members present and participating in the hearing were: Chair Blythe and members Bruce, Potvin, and Sánchez.

As a preliminary matter, the Board heard oral argument by ANR regarding certain objections to the Chair's preliminary evidentiary rulings identified in ANR's filing of October 2, 2001. CLF presented responsive oral argument. The Board then deliberated on all of the evidentiary objections preserved by CLF and ANR for full Board review. The Board delivered its rulings from the bench, affirming all of the Chair's preliminary evidentiary rulings contained in the Second Prehearing Order with the exception of one: The Board reversed the Chair's preliminary ruling in which he sustained in part CLF's objections to the prefiled rebuttal testimony of Eric Smeltzer, Exhibit ANR-15, Response A4 at page 2. Accordingly, the text in the third paragraph of Exhibit ANR-15, A4, which had previously been struck by the Chair, was allowed to be offered and admitted.

With the parties' concurrence, no site visit was held in this proceeding. The Applicant, ANR, and CLF presented oral opening statements, but waived oral closing statements in lieu of the opportunity to file written summations on or before October 18, 2001. Those parties offering witnesses at the hearing for cross-examination were the Applicant, ANR, and CLF. The Addison County Regional Planning Commission and permissive intervenors, although present at the hearing, declined to cross-examine the witnesses, deferring to examinations by the Applicant and ANR.

The Board recessed the hearing pending receipt of supplemental filings from the parties. On October 18, 2001, the Applicant filed Final Proposed Findings of Fact and Conclusions of Law, and CLF and ANR each filed Closing Statements and Supplemental Proposed Findings of Fact, Conclusions of Law, and Orders.

The Board held deliberations on October 9, 30, and November 20, 2001. On November 20, 2001, the Board declared the record complete and adjourned the hearing. This matter is now ready for final decision.

II. ISSUE

Whether, as a matter of law and fact, the June 2000 Guidelines comply with Act 51 and, if not, why not.

Docket No. WQ-00-11

Findings of Fact, Conclusions of Law, and Order

Page 4

III. FINDINGS OF FACT

To the extent that any proposed findings of fact are included within, they are granted; otherwise, they are denied. See Secretary, Agency of Natural Resources v. Upper Valley Regional Landfill Corp., 167 Vt. 228, 241-42 (1997); Petition of Village of Hardwick Electric Department, 143 Vt. 437, 445 (1983).

- 1. Cedar Swamp, in the Town of Shoreham, is a part of the Otter Creek Section of Lake Champlain. Otter Creek and Lake Champlain are phosphorus-impaired waters on the State of Vermont's 1998 List of Impaired Surface Waters under the Clean Water Act, § 303(d) ("§ 303(d) List").
- 2. On May 8, 2000, ANR issued Permit #3-1459 authorizing the discharge of treated wastewater from the Town's then proposed wastewater treatment facility to Cedar Swamp, subject to the Town electing between participation in an Act 51 pilot project or installing in-plant phosphorus removal technology to meet the requirements of 10 V.S.A. §1266a.
- 3. The Town elected to participate in an Act 51 pilot project. The Town submitted its June 2000 Guidelines to ANR for approval as an Act 51 plan in lieu of installing in-plant phosphorus removal technology at its then proposed wastewater treatment facility.
- 4. On November 9, 2000, the Wastewater Management Division of the Department of Environmental Conservation ("Department" or "DEC"), ANR, issued DEC Amended Permit #3-1459 ("Permit Amendment"), pursuant to 10 V.S.A. § 1263. The DEC approved and incorporated the June 2000 Guidelines as an addendum to the Permit Amendment.
- 5. In Section I. Special Conditions, the Permit Amendment states in relevant part:

B. <u>Phosphorus Reduction</u>

Under the 1997 Act 51, the Department [of Environmental Conservation] may allow an off-site phosphorus reduction pilot project at a municipal treatment facility with a discharge of less than 50,000 gpd in lieu of complying with the provisions of 10 V.S.A. § 1266a. The Department has determined that the Town is eligible to pursue the pilot project consistent with a Department approved plan in lieu of phosphorus removal at the wastewater treatment facility.

Docket No. WQ-00-11

Findings of Fact, Conclusions of Law, and Order

Page 5

The Town of Shoreham "Guidelines for Nonpoint Source Phosphorus Reduction", dated 6/6/00 ('Plan') as approved by the Department is hereby included as an addendum to this discharge permit.

If implementation of the elements of the approved Plan are not substantially completed as described in the Plan by June 30, 2004, the Department may require the Town to install phosphorus removal equipment, subject to available state funding, at the treatment facility. Once the phosphorus removal equipment is installed, it shall be operated in a manner that assures compliance with the provisions of 10 V.S.A. § 1266a.

The permittee [Town] shall submit an annual report, due each December 1, to the Department. The purpose of this report is to document compliance with the Plan. The report shall contain a narrative addressing compliance with the Plan including a list of tasks completed during the previous twelve months.

- 6. The June 2000 Guidelines place responsibility on the Town to actively pursue the implementation of measures to reduce phosphorus through the program elements outlined in the June 2000 Guidelines.
- 7. One of the DEC's responsibilities is to monitor implementation of the June 2000 Guidelines through the Town's annual reports and if the Town fails to implement phosphorus reduction measures, to require it to construct or install, operate, and maintain phosphorus removal equipment at the Town's wastewater facility.
- 8. The June 2000 Guidelines identify six "Best Management Practices" ("BMPs") that are designed to minimize off-site phosphorus loading: a Town Road Policy, Land Conservation, Impervious Surface Minimization, Stormwater Management, Erosion Control at Construction Sites, and Educational Outreach. The Town is expected to conduct an inventory, assess and select from this menu of BMPs, and implement selected measures according to a schedule contained in the June 2000 Guidelines. The expectation is that by undertaking selected BMPs the Town will achieve phosphorus reduction sufficient to satisfy at least the minimum phosphorus reduction requirements of Act 51.
- 9. In order to guide the discretion of the Town in implementing the BMPs, the June 2000 Guidelines reference various technical guidance documents recommended or recognized by the ANR. The Town Road Policy would incorporate procedures like those described in the *Vermont Better Backroads Manual* (Windham Regional Commission 1995). The Town's Planning Commission would consider in its review of permit applications for a variety of land uses the requirements and measures outlined in the *Vermont Handbook for*

Docket No. WQ-00-11

Findings of Fact, Conclusions of Law, and Order

Page 6

Soil Erosion and Sediment Control on Construction Sites (Vermont Geological Survey 1987).

- 10. Implementation of some of the BMPs will require voter approval of capital budgets and bylaws, including zoning bylaws, so the June 2000 Guidelines include in the schedule for implementation various key dates by which budgets and plans must be prepared and approved.
- 11. The DEC's approval of the June 2000 Guidelines was not contingent upon the Town developing calculations of phosphorus reductions that would be achieved by implementation of the BMPs contained in the plan or other practices available to the Town. Nevertheless, estimates of the savings in pounds of phosphorus per year resulting from implementation of the types of BMPs that could be selected by the Town from the menu of options in June 2000 Guidelines have been calculated using conservative assumptions. These estimates are as follows: (a) Town owned lands, employing open land practice a reduction of 134 pounds per year; (b) Educational outreach a reduction of 80 to 800 pounds per year, based upon the amount of reduction of application of fertilizer to lawns; (c) Construction of detention ponds a reduction of 223 pounds per year, based upon voluntary participation of landowners; (d) Ditching and road maintenance a reduction of 81 pounds per year; (e) Grass buffer strips a reduction of 3,219 pounds per year, assuming that the Town did in fact elect this method for all of its roads; and (f) Zoning classification changes a reduction of 71 pounds per year.
- 12. The design capacity of the wastewater treatment facility is thirty-five thousand gallons per day (35,000 gpd). The projected design flow for the intitial operation was fifteen thousand gallons per day (15,000 gpd). For the design year, 2020, the off-site measures would have to equal approximately 448 pounds of phosphorus to be comparable to the effectiveness of on-site controls.
- 13. The Town completed construction of its wastewater treatment facility during the pendancy of this appeal and the facility was operational in June 2001. Now that the plant is fully operational and all hookups from users have been completed, its current flow is nine thousand gallons per day (9,000 gpd).
- 14. Currently, the wastewater treatment facility is discharging phosphorus at a concentration of approximately 3.0 miligrams per liter ("mg/l"), which is below the assumed influent concentration of 12.0 mg/l. Therefore, even without specific phosphorus removal technology, the Town's wastewater treatment facility is reducing the discharge of phosphorus as a result of the non-phosphorus specific controls that are employed at the facility.

Docket No. WQ-00-11

Findings of Fact, Conclusions of Law, and Order

Page 7

- 15. Based upon the effluent flow of 9,000 gpd, 82 pounds of phosphorus are expected to be discharged from the treatment plant on an annual basis. Implementation of controls so as to achieve 0.80 mg/l would yield 22 pounds of phosphorus discharging from the facility's outflow. Thus, for the current year of operations, the off site measures actually have to equal 60 pounds or more of phosphorus savings to be comparable to that produced by on site control measures. This is less than the 71 pounds of phosphorus reductions contemplated by implementation of the BMPs. See Finding 11.
- 16. Currently, those wastewater flows that were identified as illegal straight pipes or failing septic systems constitute the majority of the flow into the wastewater treatment facility. It is expected that during the next year only one additional discharger, a delicatessen, will add new wastewater flows to the facility from a single bathroom facility. This discharge would add only a few hundred gallons per day.
- 17. Nonpoint sources currently represent over 80% of the total phosphorus load to Lake Champlain, and major reductions in nonpoint source loads must occur in order to attain Vermont Water Quality Standards ("VWQS") applicable to the lake. Reliance on point source control alone will not come close to doing the job in many areas of the lake. Therefore, inspite of uncertainties inherent in the management of non-point sources, the General Assembly authorized, through the passage of Act 51, two pilot projects to evaluate the viability and cost-effectiveness of certain non-point source reduction measures with the idea that the project might be extended to other municipalities. The Town is eligible for participation as one pilot project under Act 51.
- 18. Act 51 does not require a participating municipality to implement a comprehensive watershed-based trading program. The June 2000 Guidelines and Permit Amendment contemplate implementation of cost-effective, off-site nonpoint source phosphorus reduction measures within the boundaries of the Town of Shoreham alone. Toward this end, the June 2000 Guidelines and Permit Amendment provide for a simple trading scheme within the Town between the wastewater treatment facility and off-site, nonpoint phosphorus reduction practices. They contemplate at least a one-to-one trading ratio. The net reduction in phosphorus achieved through this trading scheme must be at least equal to the amount the phosphorus discharge exceeds 0.8 mg/l on a monthly average at the Town wastewater treatment facility in each year of plant operations.
- 19. In order to measure the effectiveness of a small-scale, municipal pilot project under Act_51, certain minimum inventory, baseline assessment, and monitoring requirements are necessary. In particular, the permittee, after conducting a baseline study, should be able to provide DEC with some estimate of the quantity of pollutant reductions and an estimate of

Docket No. WQ-00-11

Findings of Fact, Conclusions of Law, and Order

Page 8

the costs of implementation that can be expected to be achieved from BMPs proposed for specific locations and/or to address specific problems. The actual effectiveness of those measures can then be assessed based on the submission of implementation and compliance data filed by the Town in each annual report to the DEC.

- 20. In preparing the June 2000 Guidelines, the Town did not conduct a baseline study to determine the specific sources and locations of nonpoint source phosphorus discharge entering the Otter Creek watershed from the Town of Shoreham. Moreover, the DEC's approval of the June 2000 Guidelines was not contingent upon the Town conducting such a study.
- 21. While a baseline study for a complex watershed-based trading program can be time consuming and costly, a study for a small town-wide project could be based on existing or readily available data generated by the type of inventory work contemplated, in part, by June 2000 Guidelines.

IV. CONCLUSIONS OF LAW

The issue before the Board is whether, as a matter of law and fact, the June 2000 Guidelines comply with Act 51 and, if not, why not. This is a narrow issue arising out of a challenge to the phosphorus reduction condition, Condition I.B., of DEC Amended Permit #31459, the Permit Amendment.

What are *not* before the Board are the merits or validity of DEC Permit #3-1459 granted to the Town on May 8, 2000, or the Town's *eligibility* to participate as a pilot project under Act 51. The former issue was resolved in the Board's Memorandum of Decision on Preliminary Issues (May 2, 2001); the latter issue in Board's Memorandum of Decision on Motion to Dismiss (July 31, 2001).

A. Standard of Review and Burden of Proof

This appeal was filed pursuant to 10 V.S.A. § 1269. Appeals filed pursuant to this section are heard by the Board *de novo*.

The permit applicant, in this case the Town, has the burden of proof and persuasion in proving that the June 2000 Guidelines comply with the requirements of Act 51, thereby entitling it to the Permit Amendment.

Docket No. WQ-00-11

Findings of Fact, Conclusions of Law, and Order

Page 9

B. The Requirements of Act 51

To assess whether the June 2000 Guidelines comply with the requirements of Act 51, it is necessary to consider the text of Section 5 of that act in its entirety and determine whether the Guidelines as incorporated into the Permit Amendment will achieve the purpose and substantive requirements intended by the General Assembly.³

Act 51, by design, authorizes an experimental program, giving the ANR broad discretion in the review, approval, supervision and monitoring of pilot projects authorized by the act. The Town argues that "[t]he ANR must be given discretion for devising and implementing guidelines for this pilot project." Town of Shoreham's Findings of Fact and Conclusions of Law at 5 (Sept.

3

Section 5 of Act 51, entitled "Pilot Project on Cost-Effective Off-Site Mitigation of Phosphorus Discharges from Small, Municipally-Owned Treatment Plants," provides:

- (A) The Agency of Natural Resources may conduct a pilot project to involve no more than two municipally-owned treatment plants that each discharge less than 50,000 gallons per day, and that are initially permitted after July 1, 1991. Treatment plants selected by the agency to participate in this pilot project shall not be subject to the provisions of 10 V.S.A. section 1266a which establish for certain discharges a monthly average phosphorus concentration limit of 0.80 milligrams per liter. Instead, exempt plant permits issued subject to that section shall require implementation of a plan for a cost-effective, off-site reduction in phosphorus loadings for each year that the plant operates. The net reduction in phosphorus loading in the affected basin, as a result of the cost-effective, off-site mitigation efforts implemented under the plan, shall be equal to or exceed the extent to which the discharge from the plant exceeds the monthly average phosphorus concentration limit of 0.80 milligrams per liter.
- (B) By no later than January 15 of each of the next three odd-numbered years following commencement of each pilot project under this section, the agency shall submit to the General Assembly a report that:
 - (1) Evaluates the cost-effectiveness of the pilot project and its effectiveness in the control of phosphorus loading in the affected drainage basins;
 - (2) Describes the off-site mitigation steps required, the computation methods employed, and the methods used to identify substantial off-site sources of phosphorus loading included in the mitigation program;
 - (3) Evaluates the ability of the mitigation measures to sustain the reduction in question;
 - (4) Makes any appropriate recommendations regarding the feasibility and advisability of expanding the scope of the pilot project.

Docket No. WQ-00-11

Findings of Fact, Conclusions of Law, and Order

Page 10

17, 2001). However, the discretion afforded by Act 51 to ANR in approving, overseeing, and evaluating pilot projects, and, ultimately, in reporting to the General Assembly on the effectiveness of those projects, is not without bounds.

The parties to this proceeding have focused their arguments on the statutory requirements of part (A) of Section 5, Act 51, in assessing what is required for plan compliance with that act. As the Board has previously observed, that part of the statute contains the following substantive requirements:

- (1) the plan must be implemented (<u>i.e</u>: implementable) "for a cost-effective, off-site reduction in phosphorus loadings for each year the plant operates;" and
- (2) the plan must achieve a net reduction in phosphorus loading in the affected basin; and
- (3) the phosphorus reduction achieved through implementation of cost-effective, offsite mitigation efforts called for by the plan "shall be equal to or exceed the extent to which the discharge from the plant exceeds the monthly average phosphorus concentration limit of 0.80 milligrams per liter."

Memorandum of Decision on Motion to Dismiss at 5.

However, the inquiry does not end there. Section 5(B) of Act 51 requires ANR to report to the General Assembly every other year on the progress of each pilot project, and that report must address four specific areas, including, but not limited to, a description of "the off-site mitigation steps required, the computation methods employed, and the methods used to identify substantial off-site sources of phosphorus loading included in the mitigation program," and an evaluation of the "cost-effectiveness of the pilot project and its effectiveness in the control of phosphorus loading in the affected drainage basins" and "the ability of the mitigation measures to sustain the reduction in question." The Board concludes that such evaluation and reporting requirements presuppose that the pilot project participants have generated and reported data to the ANR from which that agency can then quantify the overall effectiveness of the pilot project in achieving the purpose and goals of Act 51.

Accordingly, the Board concludes that Act 51, while designed to encourage experimental approaches to the reduction of non-point source phosphorus loadings in the Lake Champlain Basin, does not give ANR unbridled discretion. On the other hand, the Board does not share the view that Act 51 requires a comprehensive, watershed-based trading program, with all of the elements identified by CLF's expert witness. Rather, in the Board's opinion, something in between is authorized and required.

ANR asserts that "despite the fact that precise quantification of phosphorus reduction activities contained in Shoreham's Plan is not scientifically possible, in its best professional

Docket No. WQ-00-11

Findings of Fact, Conclusions of Law, and Order

Page 11

judgment, . . . , the Plan will be able to meet the requirements of Act 51." ANR Proposed Findings of Fact, Conclusions of Law, and Order at 14. The Board agrees with ANR that *precise* quantification may be difficult and it is not expressly required by Act 51 as a *precursor* to plan approval, even if such information would be desirable in such a plan. However, ANR neither required the Town to include in the June 2000 Guidelines its best estimates of phosphorus reductions attributable to its proposed BMPs *nor* required through permit conditions that the Town prepare a baseline study and report any such estimates after it completed inventories and selected specific BMPs for implementation. Likewise, ANR did not require the Town to provide specific data and information in its annual reports to document BMP implementation and to evaluate the cost- and phosphorus reduction-effectiveness of practices selected from the BMP menu. Without such information, the Board is unable to conclude how ANR can possibly satisfy *its* reporting requirements under part (B) of Section 5 of Act 51.

While the Board agrees that there are inherent difficulties in measuring the effectiveness of certain practices in achieving non-point source phosphorus reductions, this does not negate the need to gather some data -- before and after implementation of an Act 51 pilot project - to evaluate the benefits and problems connected with the mitigation measures selected by the participating municipality. Indeed, Section 5(B) of Act 51 contemplates as much, since it directs ANR to biennially report to the General Assembly not only what off-site mitigation steps have been implemented, but the computation methods employed and methods used in identifying substantial off-site sources of phosphorus loading included in the mitigation program, with the end of offering appropriate recommendations regarding the feasibility and advisability of expanding the pilot project.

C. Assessment of June 2000 Guidelines and their Compliance with Act 51

A review of the June 2000 Guidelines reveals that they comply with the requirements of Act 51. The June 2000 Guidelines set forth the purpose of the plan. They acknowledge the obligation of the Town to meet the phosphorus reduction standard set forth in Act 51 through implementation of the proposed BMPs or achieve compliance with the requirement of the Permit Amendment and 10 V.S.A. § 1266a by employing in-plant phosphorus reduction technology at its

4

In an ideal world, a plan for a pilot project would contain the following: (1) an estimate of the amount of phosphorus from the wastewater treatment facility that needs to be off-set to achieve compliance with the relevant standard; (2) an inventory of non-point source phosphorus pollution problems within the participating municipality and some rudimentary baseline data and analysis; (3) a description of what measures will be implemented and a timeline for implementation; and (4) a plan for collecting data and evaluating the cost- and phosphorus-reduction effectiveness of the measures actually implemented.

wastewater treatment plant. The June 2000 Guidelines then set forth a menu of BMPs, referencing technical guidance documents that will be consulted in the course of refining and implementing specific mitigation measures, and contain a schedule of implementation steps and deadlines. Condition I.B. of the Permit Amendment additionally sets forth a requirement of annual compliance reports to be filed with ANR.

Clearly, the June 2000 Guidelines call for *prospective* implementation, in some instances BMPs are not expected to be adopted and put into effect until several years into the future. As the Board interprets Section 5(A) of Act 51, the plan of cost-effective phosphorus reduction measures need only be "implementable," rather than "implemented" at the time of plan approval, with the understanding that whatever measures the pilot project participant intends to put in place, in each year of operations it must achieve phosphorus reductions through off-site mitigation equal to or in excess of the extent to which the discharge from the wastewater treatment plant exceeds the monthly average phosphorus concentration limit of 0.80 mg/l. See Memorandum of Decision on Motion to Dismiss at 5.

The Town has asserted, given that the wastewater treatment plant as presently operated is discharging far less phosphorus than originally contemplated and that it has now produced general estimates of the phosphorus reductions attributable to the BMPs described in the June 2000 Guidelines, it will meet the Act 51 phosphorus reduction standard in its first year of operations. The Board believes that achieving this standard is feasible by June 30, 2002. However, whether compliance with the Act 51 standard will actually be met, is a matter that cannot be determined unless three steps are undertaken. First, the Town needs to begin implementation of at least some of its BMPs in the first year of plant operations (July 1, 2001 through June 30, 2002). Second, the Town must in the first year of plant operations develop a baseline study of the non-point source phosphorus pollution problem within its borders. Third, it needs to begin to quantify and report on the cost and estimated phosphorus reductions attributable to those BMPs that it in fact implements. Assuming that each year of plant operations ends June 30, the Town's annual report should be filed with ANR by September 1. Based on an evaluation of previous years' implementation data gathered in preparation for the Town's annual reports, the Town and ANR may agree to the addition or a change in the mix of phosphorus reduction mitigation measures contemplated by the Town's menu of BMPs.

The Board concludes that none of the above steps should require either further amendment and approval of the June 2000 Guidelines or entail considerable additional expense to the Town, as it is apparent that the Town's consultant has already begun to gather data necessary to support a baseline study and selection and implementation of specific BMPs. However, in order to assure that progress is made with regard to these steps, the Board intends to modify the Permit Amendment so as to incorporate some amended or additional requirements under Condition I.B., which are set forth in Section V.

E. Responses to Issues raised by CLF in support of denial of the Permit Amendment

In its Supplemental Findings of Fact and Conclusions of Law (Oct. 18, 2001), CLF raises two arguments which the Board feels compelled to summarily address. First, CLF argues that the Permit Amendment and June 2000 Guidelines are, together, an illegal condition subsequent. Secondly, it argues that the Town has not demonstrated by a preponderance of the evidence that the June 2000 Guidelines satisfy the requirements of Act 51.

CLF cites two Environmental Board decisions for the proposition that the Board "cannot grant a permit on the 'condition' that the requirements of Act 51 be satisfied at some future time." Supplemental Findings of Fact and Conclusions of Law at 5. In the first case cited, Re: Paul E. Blair Family Trust, LUP #4C0388-EB, Findings of Fact, Conclusions of Law, and Order (Jun. 16, 1980), the Environmental Board was faced with de novo review of an umbrella permit issued by a District Commission. What the Environmental Board actually said was that "[n]either the Commission nor the Board is authorized to grant a permit on the 'condition' that the criteria of the Act be satisfied at some *unspecified* future time." Id. at 6. In the second decision, Re: Vermont Agency of Transportation et al. (Shelburne Road Construction), LUP #4C1010-EB, Memorandum of Decision (May 5, 1998), the Environmental Board was asked to review partial findings of a District Commission and it determined that it had no jurisdiction to rule on the finality of a landscaping plan where the District Commission's decision with respect to aesthetic impacts under Criterion 8 was itself not final. While the Memorandum of Decision contained dicta to the effect that "[c]onditioning a permit on future approval of future submissions constitutes a condition subsequent which is prohibited by Act 250," the Environmental Board did not decide the matter based on this rationale since it determined that no permit had been issued in the first instance.

As stated at pages 14-15 above, the June 2000 Guidelines set forth an implementable program of BMPs and a schedule for implementation that meet the requirements of Act 51. Under the express terms of the Permit Amendment, the elements of the Guidelines must be substantially completed by June 30, 2004, and the Board has added the additional requirement that implementation of at least some of the BMPs described in the June 2000 Guidelines should begin in the first year of plant operations. Thus, the June 2000 Guidelines and Permit Amend-ment, taken together, are not so vague and reliant on unspecified future action and deadlines as to constitute an unenforceable and impermissible condition subsequent.

The record as a whole supports the Town's position that the June 2000 Guidelines as referenced and incorporated into the Permit Amendment comply with Act 51. At the same time, the Board concludes that the Town's pilot project can *better* meet its own objectives and the purpose and goals of Act 51, Section 5, through imposition of some additional requirements.

Docket No. WQ-00-11

Findings of Fact, Conclusions of Law, and Order

Page 14

Specifically, the Board shall require the Town to conduct a baseline study as part of the pilot project and include in its annual reports some data and analysis by which ANR and subsequently the General Assembly can evaluate the effectiveness of implemented BMPs in terms of cost and net phosphorus reductions. Accordingly, the Board has modified the Permit Amendment to add these additional requirements to Condition I.B.

F. Conclusion

The June 2000 Guidelines comply with the requirements of Act 51, as referenced and incorporated into the Permit Amendment, modified this day by the Board.

V. ORDER

For the forgoing reasons, the Board hereby orders:

- 1. The decision of the Secretary of ANR's designee to issue DEC Amended Permit #3-1459 is affirmed in part and modified in part;
- 2. DEC Amended Permit #3-1459 is <u>granted</u>, subject to the following amendments <u>amending or</u> adding specific conditions to Section I. Special Condition B., <u>Phosphorus Reduction</u>, at pages 3-4. These <u>changes</u> are indicated in bold text as follows: deleted text is indicated with brackets and strike through annotations; added text is indicated with underlined annotations.

B. Phosphorus Reduction

Under the the 1997 Act 51, the Department may allow an off-site phosphorus reduction pilot project at a municipal treatment facility with a discharge of less than 50,000 gpd in lieu of complying with the provisions of 10 V.S.A. §1266a. The [Department has determined that the [Town] permittee is eligible to pursue the pilot project consistent with [a] the [Department approved plan] Town of Shoreham's "Guidelines for Nonpoint Source Phosphorus Reduction," dated June 6, 2000 ("Plan"), in lieu of phosphorus removal at the wastewater treatment facility. [The Town of Shoreham "Guidelines for Nonpoint Source Phosphorus Reduction," dated 6/6/00 ("Plan") as approved by the Department] The Plan is hereby included as an addendum to this discharge permit and incorporated herein.

The permittee shall begin implementation of BMPs described in the Plan in the first year of plant operations (July 1, 2001, through June 30, 2002).

By June 30, 2002, the permittee shall develop a baseline study of the non-point source phosphorus pollution problem within the Town of Shoreham. This baseline study shall be used in evaluating the phosphorus reductions attributable on annual basis to each BMP implemented by the permittee during the life of the Plan.

[If implementation of the elements of the approved Plan are not substantially completed as described in the Plan by June 30, 2004 the Department may require the Town to install phosphorus removal equipment, subject to available state funding, at the treatment facility. Once the phosphorus removal equipment is installed, it shall be operated in a manner that assures compliance with the provisions of 10 V.S.A. § 1266a.]

The permittee shall submit an annual report, **due each <u>September</u> 1**, to the Department. The purpose of this report is to document compliance with the Plan. The report shall contain a narrative addressing compliance with the Plan including a list of tasks completed during the previous twelve months. The report shall quantify the estimated phosphorus reductions attributable to each <u>BMP implemented by the permittee during the previous twelve-month period and the estimated cost of each practice. After the first year of operations, the permittee may indicate what mix of BMPs it intends to implement in the coming year, based on an evaluation of data gathered in the previous year or years.</u>

If implementation of the elements of the approved Plan are not substantially completed as described in the Plan by June 30, 2004 the Department may require the [Town] permittee to install phosphorus removal equipment at the treatment facility. Once the phosphorus removal equipment is installed, it shall be operated in a manner that assures compliance with the provisions of 10 V.S.A. § 1266a.

3. Jurisdiction is returned to ANR.

Dated at Montpelier, Vermont, this 30th day of November, 2001.

	WATER RESOURCES BOARD
	/s/ David J. Blythe
Concurring:	David J. Blythe
Lawrence H. Bruce, Jr.	
Jane Potvin	

Recused:

John D.E. Roberts

Mardee Sánchez

Docket No. WQ-00-11

Findings of Fact, Conclusions of Law, and Order

Page 16