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2020 VT 98

No. 2020-147

In re Diverging Diamond Interchange Act 250  
(R.L. Vallee, Inc., Appellant)

Supreme Court

On Appeal from  
Superior Court,  
Environmental Division

September Term, 2020

Thomas G. Walsh, J.

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Natural Resources Board, and Agency of Natural Resources.

PRESENT: Reiber, C.J., Robinson, Eaton, Carroll and Cohen, JJ.

¶ 1. **REIBER, C.J.** Plaintiff R.L. Vallee, Inc. appeals the Environmental Division's decision granting an Act 250 permit to the Vermont Agency of Transportation (VTrans) for a highway project involving the reconfiguration of an interstate exit. Vallee argues that the court applied the incorrect standard in analyzing phosphorus discharges under Act 250 Criterion 1 and improperly evaluated the evidence of phosphorus and chloride discharges under Criterion 1. We conclude that the Environmental Division applied the correct legal standard to evaluate discharges, and properly considered the evidence before it in determining that the project complies with Criterion 1. Accordingly, we affirm.

¶ 2. In June 2018, the Environmental Division granted VTrans’s application for an Act 250 permit for the project. Vallee and Timberlake Associates, LLP, appealed.<sup>1</sup> In August 2019, this Court reversed the issuance of the Act 250 permit and remanded the matter for the Environmental Division to consider whether the project would cause undue water pollution due to increased phosphorus and chloride discharges. In re Diverging Diamond Interchange SW Permit, 2019 VT 57, ¶ 1, \_\_\_Vt. \_\_\_, 218 A.3d 564. The Environmental Division held a three-day trial considering these questions. In April 2020, the court issued the decision on appeal, in which it concluded that the project would not cause undue water pollution and granted VTrans’s application for the Act 250 permit.

¶ 3. In its decision, the Environmental Division found the following facts, which are undisputed. The project involves a proposed diverging diamond interchange at Exit 16 off I-89 in Colchester and related construction on U.S. Route 2/7. The project will increase the impervious surface by 1.2 acres and will increase the roadway by 0.38 lane miles.<sup>2</sup> Of the 0.38 new lane miles, VTrans owns and is responsible for winter maintenance of 0.29 lane miles and the Town of Colchester owns and is responsible for maintenance of 0.09 lane miles. The project area discharges stormwater runoff to Sunnyside Brook, which ultimately flows to Lake Champlain. Stormwater runoff contains phosphorus and chloride, among other constituents. Currently, there is no permitted stormwater treatment system in the project area. The project will install a stormwater treatment system. The Vermont Department of Environmental Conservation (DEC) issued a stormwater discharge permit for the project to address new discharges.

¶ 4. Because the project increases impervious surface, it will increase the discharge of phosphorus into Sunnyside Brook and, ultimately, to Lake Champlain. VTrans plans to treat the

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<sup>1</sup> Timberlake Associates, LLP did not participate in this appeal.

<sup>2</sup> According to Vallee, a “lane mile” is a term of art. One lane mile is equal to one mile, or 5,280 feet, of roadway with a width of approximately eleven feet.

phosphorus discharges through grass channels, which it estimates will remove approximately forty percent of phosphorus from stormwater runoff.

¶ 5. Sunnyside Brook is not currently listed as impaired for phosphorus. Lake Champlain, however, is currently listed as impaired for phosphorus. In total, the main lake segment of Lake Champlain receives about 359,000 pounds of phosphorus each year. In 2016, the United States Environmental Protection Agency (EPA) adopted a Total Maximum Daily Load (TMDL) for phosphorus entering Lake Champlain. A TMDL creates a “pollution budget” that calculates how much pollution a water body can manage while maintaining appropriate water quality standards. The Lake Champlain phosphorus TMDL does not prohibit future development or discharges, but it does require “developed land” to reduce discharges in a manner that offsets future growth. The State of Vermont has adopted an Implementation Plan to comply with the phosphorus TMDL. While neither regulation binds the project, the Environmental Division acknowledged that they “provide helpful context on Vermont’s approach to phosphorus pollution, and guidance on [the Vermont Agency of Natural Resources’] current policies and priorities.”

¶ 6. The project will also cause an increased discharge of chloride into Sunnyside Brook. Both VTrans and the Town of Colchester use chloride as part of routine winter maintenance to remove snow and ice from the roadways. Once applied to the roads, chloride is discharged into waterways as a part of stormwater runoff. Chloride cannot be removed from stormwater.

¶ 7. Sunnyside Brook is currently listed as impaired for chloride. The 2011 Vermont Water Quality Standards do not specifically address chloride. There is no chloride TMDL in effect for the Sunnyside Brook watershed, although the DEC is currently preparing one. In 2014, Vermont adopted two chloride standards set by the EPA. The acute standard, at 860 mg/L, is the highest concentration of chloride to which aquatic life can be exposed for a short period—usually one hour, once every three years—without deleterious results. The chronic standard, at 230 mg/L,

is the highest concentration of chloride to which aquatic life can be exposed for an extended period—usually four days, once every three years—without deleterious effects.

¶ 8. In its analysis, the Environmental Division first considered whether the project would cause undue phosphorus pollution in Lake Champlain. It defined “undue” to mean “more than necessary—exceeding what is appropriate or normal.” The court found that the project complied with all applicable regulations, weighing in favor of compliance with Criterion 1.

¶ 9. The court next determined that the project would create an “exceedingly small amount” of additional phosphorus pollution when compared to the total amount of phosphorus discharged into Lake Champlain on a yearly basis. In making this determination, the court acknowledged conflicting testimony by VTrans’s and Vallee’s experts as to the amount of additional phosphorus discharge created by the project. Based on their different projections, VTrans’s expert calculated that the project would increase phosphorus discharge by 0.11 pounds per year, while Vallee’s expert found that the project would increase phosphorus discharge by 1.62 pounds per year. While the court “found both experts credible,” it held that Vallee’s expert failed to refute VTrans’s claim that his estimate was overinclusive or explain why VTrans’s method was inaccurate. However, it concluded that under either estimate, the likely amount of additional phosphorus pollution was extremely small. The court agreed that Criterion 1 contains no “automatic allowance for de minimis water pollution,” but noted that the “amount of the pollution” was an important factor, and here the amount of pollution was small. The court thus found this factor weighed in favor of compliance with Criterion 1.

¶ 10. The court next looked to the floodplains and their ability to support phosphorus disposal. Again, the experts presented conflicting evidence about the capacity of wetlands and floodplains to retain phosphorus, but they agreed that phosphorus could be retained in some circumstances. Based on this evidence, the court found that the floodplain had capacity to retain phosphorus on some occasions, but “afford[ed] little weight to this conclusion.”

¶ 11. The court next looked to mitigation measures that could reduce the amount of pollution discharged. VTrans’s experts testified that the grass channels could remove forty percent of the phosphorus discharge, while Vallee’s expert testified that the channels could remove around nine percent. Even accepting Vallee’s expert’s conclusion, the court found that the channels effectively reduced phosphorus pollution. Vallee’s expert also presented evidence that additional mitigation measures were available, but the court afforded little weight to this evidence for two reasons. First, Vallee’s expert testified that using a different filter material in the channels would increase mitigation, but he did not quantify the amount of additional phosphorus that could be removed through this measure. Second, Vallee introduced a memorandum that discussed additional off-site treatment practices but argued that these practices would require an amended Act 250 application and remand. Accordingly, the court determined that these measures were not “reasonably available” to VTrans. As such, the court determined that VTrans presented evidence of sufficient mitigation measures, and Vallee failed to demonstrate that additional mitigation was needed.

¶ 12. Finally, the court considered the nature of the pollution and the affected area. The court noted that while the goal of Act 250 is to protect and conserve Vermont’s environment, the statute balances environmental protection against the need for development and does not prohibit all discharges of pollutants. Even though Lake Champlain is impaired for phosphorus, the Phosphorus TMDL likewise does not prohibit all discharges. Accordingly, the court determined that Vallee’s argument that any phosphorus discharge into Lake Champlain is necessarily undue “direct[ly] contrast[ed] with the governing law and policy on the matter.” Instead, the court weighed the Criterion 1 factors and determined that “[t]he cumulative evidence . . . weighs in VTrans’[s] favor,” concluding that the project’s phosphorus discharges did not create undue water pollution.

¶ 13. The court next considered whether the project would cause undue chloride pollution in Sunnyside Brook. As with phosphorus, the project is not bound by specific chloride discharge standards. The court's analysis of chloride pollution differed from its phosphorus analysis, however, because no chloride TMDL existed and the court had "no information regarding Vermont's present or future chloride pollution plans or policies." The court thus weighed the project's chloride discharges in the context of VTrans's duty to maintain safe roads during the winter and Sunnyside Brook's status as impaired for chloride.

¶ 14. Vallee's expert studied Sunnyside Brook's chloride levels for two years. He found that chloride levels in the brook nearly always exceed the chronic standard and exceeded the acute standard on thirty-two occasions. He estimated that 360.7 tons of chloride is currently applied per year in the Sunnyside Brook watershed, and VTrans currently applies 79.4 tons. He calculated that VTrans would add an additional 3.3 tons of chloride per year in maintaining the 0.29 additional lane miles created by the project. He also calculated that the Town of Colchester would add an additional ton of chloride per year in maintaining the 0.09 additional lane miles created by the project.

¶ 15. The court found that VTrans uses chloride in winter road maintenance to fulfill its statutory duty to keep state highways safe for travel. In carrying out this duty, VTrans presented evidence showing its "history of chloride reduction and a commitment to further improvement." VTrans's Snow and Ice Control Plan contains several best management practices to reduce chloride, and implementation of the plan corresponded with a nine-percent reduction in VTrans's average salt use. The project's Chloride Management Plan was created in accordance with the statewide Snow and Ice Control Plan, and the court found that VTrans's expert testified credibly about VTrans's compliance with the plan and ongoing commitment to reduce chloride use. The court also found that the Chloride Management Plan was developed in accordance with the Town of Colchester's Snow and Ice Removal Plan.

¶ 16. Vallee argued that VTrans had additional mitigation measures available to reduce chloride discharges and had to implement these measures to show that the project would not cause undue water pollution. VTrans’s expert testified that VTrans was currently implementing or testing several of these measures. However, he also explained that some of the proposed site-specific best management practices posed safety concerns. Because VTrans’s expert was “directly responsible for VTrans’[s] winter maintenance activities,” the court gave great weight to his testimony. The court reiterated that permit applicants are not required to take all available mitigation measures to show that pollution is not undue. Further, Vallee did not present evidence quantifying the amount of chloride reduction that would result from implementing these measures. In weighing these factors, the court concluded that the project’s chloride discharges did not create undue water pollution. Accordingly, the court found that the project complied with Criterion 1 and granted VTrans’s application for an Act 250 permit for the project. This appeal followed.

¶ 17. On appeal, Vallee argues that (1) the Environmental Division improperly applied a de minimis standard in evaluating phosphorus pollution under Criterion 1 and accordingly erred in finding that the phosphorus discharge would not cause undue pollution, and (2) the Environmental Division erred in finding that the chloride discharge would not cause undue pollution.

¶ 18. “We review the Environmental Division’s legal conclusions de novo and its finding of facts for clear error.” In re N.E. Materials Grp., LLC, 2019 VT 55, ¶ 6, \_\_\_ Vt. \_\_\_, 217 A.3d 541. We give significant deference to the Environmental Division’s factual findings. In re Route 103 Quarry, 2008 VT 88, ¶ 4, 184 Vt. 283, 958 A.2d 694. We will determine that the court’s factual findings are clearly erroneous only if there is no credible evidence to support them. In re Korrow Real Estate, LLC Act 250 Permit Amendment Application, 2018 VT 39, ¶ 17, 207 Vt. 274, 187 A.3d 1125.

¶ 19. Under Criterion 1, Act 250 permit applicants must show that the development will not cause “undue water or air pollution.” 10 V.S.A. § 6086(a)(1). Criterion 1 does not define when pollution is “undue.” However, it does require consideration of “at least” the following factors:

the elevation of land above sea level; and in relation to the flood plains, the nature of soils and subsoils and their ability to adequately support waste disposal; the slope of the land and its effect on effluents; the availability of streams for disposal of effluents; and the applicable Health and Environmental Conservation Department regulations.

Id. As we have previously explained, whether pollution is undue is a highly fact-specific inquiry. Diverging Diamond Interchange SW Permit, 2019 VT 57, ¶ 44. The court can consider “any factors relevant to a determination of whether a proposed project will cause undue pollution.” Id. ¶ 45. The Environmental Division typically considers “the nature and amount of the pollution, the character of the surrounding area, whether the pollutant complies with certain standards or recommended levels, and whether effective measures will be taken to reduce the pollution.” See N.E. Materials Grp., LLC, 2019 VT 55, ¶ 28 (quotation omitted).

¶ 20. We begin with Vallee’s argument that the court erroneously applied a de minimis standard under Criterion 1. Vallee contends that because the court characterized the amount of phosphorus discharged by the project as “exceedingly small,” the court improperly created a de minimis exception to the analysis under § 6086(a)(1). We disagree. In North East Materials Group., LLC, we explained that Criterion 1 is a “highly fact specific” inquiry that depends on many factors, including “the nature and amount of the pollution.” 2019 VT 55, ¶ 28 (quotation omitted). In evaluating this factor, the Environmental Division considered testimony from both parties’ experts regarding the amount of phosphorus the project would discharge. Although the experts presented different estimates, the court found that even under Vallee’s higher estimate, the amount of phosphorus discharged was small, representing .00045 percent of the total amount of



phosphorus entering Lake Champlain annually. This factual finding is supported by the record and is entitled to substantial deference. Route 103 Quarry, 2008 VT 88, ¶ 4.

¶ 21. Thus, the court did not apply a de minimis standard, and Vallee’s argument mistakenly characterizes the court’s factual finding as a legal standard.<sup>3</sup> In fact, the court agreed with Vallee that “there is no . . . automatic allowance for de minimis water pollution under Criterion 1.” The court properly engaged in a multi-factor inquiry to determine whether the project caused undue phosphorus pollution.<sup>4</sup> See N.E. Materials Grp., LLC, 2019 VT 55, ¶ 28 (listing factors). The court’s finding that the project would cause an “exceedingly small” increase in phosphorus discharge was only one factor supporting the court’s conclusion. The court also weighed the project’s compliance with applicable regulations, the ability of the floodplains to retain phosphorus, and available mitigation measures. Based on the evidence presented by both parties’ experts, the court found that the project would discharge a small amount of phosphorus and VTrans planned to implement measures to effectively mitigate some of this discharge.

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<sup>3</sup> Vallee argues that it is improper for courts to apply a de minimis exception to pollution control regulations, citing Conservation Law Foundation v. Burke. 162 Vt. 115, 121, 645 A.2d 495, 499 (1993). We find this argument unavailing in this case, as the air pollution regulations at issue in Burke are not comparable to § 6086(a)(1). In Burke, the applicable regulations set an emissions limit for certain contaminants and prohibited emissions exceeding that limit. ANR granted an air pollution permit even though the emissions exceeded those limits because the excess was de minimis. This Court found that granting a permit in such circumstances was “inconsistent with the structure and obvious intent of the regulation.” Id. By contrast, § 6086(a)(1) does not prohibit pollution above a certain numerical level. Instead, it directs courts to consider “applicable Health and Environmental Conservation Department regulations,” among other factors. 10 V.S.A. § 6086(a)(1). Given the statutory differences, Burke does not govern here—and in any event, the court did not apply a de minimis standard.

<sup>4</sup> Under 10 V.S.A. § 6086(d), a valid permit may entitle an applicant to a rebuttable presumption of compliance with Act 250 criterion. See Diverging Diamond Interchange SW Permit, 2019 VT 57, ¶ 43. Recognizing that the project’s stormwater permit was approved in accordance with regulations that did not set specific standards for phosphorus or chloride, the Environmental Division did not rely on this presumption of compliance and instead evaluated the project’s phosphorus and chloride discharge on the merits. Accordingly, we review the court’s decision based on its determination under these factors without any presumption of compliance.

¶ 22. Vallee does not challenge these findings as erroneous. Instead, Vallee argues that any additional amount of phosphorus discharge represents “an unnecessary increase in impairment” and that all mitigation measures must be employed to find that pollution is not undue. This misstates applicable precedent. It is undisputed that Lake Champlain is impaired for phosphorus. However, the plain language of § 6086(a)(1) does not prohibit all discharges. Instead, the multi-factor analysis required by § 6086(a)(1) reflects Act 250’s policy of balancing economic development with environmental protection. See In re Village Assocs. Act 250 Land Use Permit, 2010 VT 42A, ¶ 17, 188 Vt. 113, 998 A.2d 712 (“[T]he conservation goals of Act 250 have always been balanced against the economic necessity of development . . .”). Similarly, the Phosphorus TMDL—though not binding on this project—anticipates new development and does not bar new discharges. Instead, these policies rely upon stormwater permitting to ensure compliance with the TMDL. In sum, the discharge of a pollutant into an impaired waterbody does not inevitably render that pollution undue under Criterion 1’s fact-based balancing inquiry.

¶ 23. We further disagree that the mere possibility of additional mitigation measures, without more, necessarily requires a finding that pollution is undue in this instance. Under Criterion 1, courts may consider, among other factors, “whether effective measures will be taken to reduce the pollution.” N.E. Materials Grp., LLC, 2019 VT 55, ¶ 28. In this case, VTrans provided evidence of a “carefully designed stormwater treatment system” that uses grass channels to remove phosphorus. Vallee’s expert testified that additional mitigation measures were available but could not quantify the expected reduction in phosphorus load or offer an opinion as to the effect of the reductions. The Environmental Division properly weighed this evidence and determined that VTrans’s proposal will effectively mitigate phosphorus pollution. Vallee’s argument provides no grounds to disturb this conclusion.

¶ 24. We next consider Vallee’s argument that the Environmental Division erroneously found that the project would not cause undue chloride pollution. Vallee first asserts that the court

improperly afforded VTrans a presumption of compliance based on the stormwater permit. We disagree. The project's stormwater permit vested in regulations that did not include specific standards for phosphorus or chloride discharges. Because these pollutants are at issue, the court was "concerned about the strength of a presumption arising under these circumstances." The court expressly evaluated each pollutant on the merits, rather than relying upon a presumption.

¶ 25. Vallee next argues that the court improperly shifted the burden of proof to Vallee. However, the court's decision shows that it properly assigned the burden of proof to VTrans. The court considered all the evidence presented by VTrans, including the statewide Snow and Ice Control Plan, the project's Chloride Management Plan, and "extensive expert testimony." Based on this evidence, the court concluded that VTrans satisfied its burden. The court then considered Vallee's evidence, and concluded that it was insufficient to disturb that conclusion. This reasoning did not erroneously shift the burden of proof to Vallee. In essence, Vallee seeks to revive its argument that any discharge to an impaired water body is categorically undue. For the same reason that this argument failed with phosphorus, it also fails with chloride.

¶ 26. Vallee next contends that the court lacked evidence about the Town of Colchester's chloride use and thus could not evaluate the project's chloride pollution. The town is responsible for maintaining 0.09 lane miles of the project. The court did not make specific findings about the town's chloride application. During the hearing, VTrans tried to admit the town's Snow and Ice Removal Plan, but Vallee objected because VTrans provided no witness from the Town to go through the details of the plan, and the court sustained that objection.

¶ 27. However, the court found that the project's Chloride Management Plan incorporated by reference the town's Snow and Ice Removal Plan, and that the project's plan was consistent with the town's plan. A VTrans witness testified that the town's plan was reasonable and accords with VTrans's statewide Snow and Ice Control Plan. VTrans also has a finance and maintenance agreement with the Town of Colchester, which details the town's responsibility to

perform winter maintenance on its roads. Moreover, the order granting the project's Act 250 permit provides that the project must abide by the conditions imposed by the District Commission. Condition 2 requires the project to comply with "the permit application, plans, and exhibits on file with the [DEC] and other material representations," which includes the Chloride Management Plan. In sum, we conclude that the Environmental Division had a sufficient evidentiary basis to consider the town's chloride application. Further, the above evidence belies Vallee's claim that the town's chloride use is "unregulated." Based on this evidence, the court did not clearly err in finding that the project will not cause undue water pollution.

¶ 28. Vallee's final argument is that the Environmental Division failed to join the Town of Colchester as a necessary co-applicant. Act 250 Rule 10 provides that the record owner of a tract of land shall be a co-applicant, "unless good cause is shown to support waiver of this requirement." Act 250 Rules, Rule 10(A), Code of Vt. Rules 12 004 060, <http://www.lexisnexis.com/hottopics/codeofvtrules>. Good cause can include a showing that the applicant "effectively controls" part of the land at issue through an agreement that "allow[s] the imposition of appropriate permit conditions by the District Commission to mitigate adverse impacts under [Act 250]." *Id.* If the applicant is a state agency with the power to condemn the land, no other parties need be joined. *Id.* The District Commission may also join a non-record owner if that person's property interest "is of such significance, therefore demonstrating a lack of effective control by the applicant," that the party must be joined. *Id.* This rule serves three purposes by ensuring that conditions imposed are enforceable on the record owner, that the record owner consents to the activity, and that the record owner has the opportunity to participate in the proceedings. Re: Mark and Pauline Kisiel and Thomas and Cheryl Kaminski, No. 5W1151-1-EB, Mem. of Decision at 4 (Vt. Env'tl. Bd. Feb. 3, 2005), [https://nrb.vermont.gov/sites/nrb/files/documents/5w1151-1-mod\\_0.pdf](https://nrb.vermont.gov/sites/nrb/files/documents/5w1151-1-mod_0.pdf) [<https://perma.cc/9NSR-CLDD>].

¶ 29. The District Commission has discretion to join a party as a necessary co-applicant. See In re Pilgrim P'ship, 153 Vt. 594, 597, 572 A.2d 909, 911 (1990) (finding that Board acted within its discretion to order joinder). In appeals to the Environmental Division, the court “appl[ies] the substantive standards that were applicable before the [District Commission].” 10 V.S.A. § 8504(h).<sup>5</sup> Accordingly, we review the court’s decision for abuse of discretion. In re Appeal of MDY Taxes, Inc., 2015 VT 65, ¶ 7, 199 Vt. 248, 123 A.3d 1184.

¶ 30. In its order, the Environmental Division reasoned that, as a state agency with the power to condemn, Rule 10(A) permits VTrans to proceed as the sole applicant. The court also determined that the portion of the project controlled by the town is not sufficiently significant to require joinder. The court concluded that VTrans can adequately manage water quality for the project without the Town’s involvement in the proceedings.

¶ 31. We conclude that the court did not abuse its discretion in denying Vallee’s motion to join the Town of Colchester, but for a different reason than relied upon by the court. See Caledonian-Record Pub. Co. v. Vt. State Colls., 2003 VT 78, ¶ 7, 175 Vt. 438, 833 A.2d 1273 (affirming trial court’s decision “based on different reasoning”). The record showed that VTrans effectively controlled the land such that appropriate permit conditions could be imposed on the project. The court found that the project’s Chloride Management Plan accords with VTrans’s statewide Snow and Ice Control Plan, and also incorporates the town’s Snow and Ice Removal Plan by reference. VTrans’s expert testified that the town’s plan was reasonable. The project’s Act 250 permit requires VTrans to perform winter road management in accordance with the Chloride Management Plan. In turn, the finance and management agreement requires the town to

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<sup>5</sup> Vallee appears to have raised the Town of Colchester’s party status in the first instance in the Environmental Division. For purposes of this appeal, we assume without deciding that when determining whether to order the joinder of a necessary co-applicant in the first instance, the Environmental Division applies the same standards as the District Commission under the Act 250 Rules.

abide by the Chloride Management Plan. As such, the facts demonstrate that the agreement will ensure the town's compliance with the permit conditions. The court therefore did not abuse its discretion in not joining the town.

Affirmed.

FOR THE COURT:

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Chief Justice