STATE OF MAINE
SUPREME JUDICIAL COURT
SITTING AS THE LAW COURT

Law Court Docket No. BCD-2022-48

---

UPSTREAM WATCH, et al.,
Appellants

v.

BOARD OF ENVIRONMENTAL PROTECTION,
Appellee

---

On Appeal from the Business and Consumer Court
Docket No. BCD-APP-2021-00009

---

# BRIEF OF APPELLANT UPSTREAM WATCH


David B. Losee, Esq., Bar No. 6500
DAVID B. LOSEE, LLC
7 Highland Avenue
Camden, ME 04843
david@loseelaw.com

Attorney for Upstream Watch

David J. Perkins, Bar No. 3232
David P. Silk, Bar No. 3136
CURTIS THAXTER LLC
One Canal Plaza, Suite 1000
P.O. Box 7320
Portland, ME 04112-7320
dperkins@curtisthaxter.com
dsilk@curtisthaxter.com

Attorneys for Upstream Watch

# TABLE OF CONTENTS

Page No(s).

## TABLE OF AUTHORITIES

Page No(s).

CASES

Page No(s).



STATUTES

Page No(s).



RULES



OTHER AUTHORITIES

Page No(s).

## I. STATEMENT OF THE CASE

Appellant Upstream Watch ("Upstream")[1] is appealing three environmental permits issued by the Board of Environmental Protection (the "Board" or "BEP") to Nordic Aquafarms Inc. ("Nordic") on November 19, 2020. Nordic, a Norwegian corporation, proposes to construct and operate a land-based recirculating aquaculture system (RAS) salmon production facility on the shore of Penobscot Bay in the City of Belfast, Maine. The permits issued to Nordic include an Air Emissions License for 8 generators (the "Air Emission License"), a permit for a wastewater discharge of 7.7 million gallons per day into Penobscot Bay (the "Water Permit"), and a permit under the Site Location of Development Act ("SLODA" or the "Site Law"). Upstream was accepted as an intervenor in the Board's Nordic permit application proceeding and has standing to seek review by this Court. Upstream is appealing under Maine's Administrative Procedure Act (APA), Rule 80C of the Maine Rules of Civil Procedure and the applicable environmental statutes. [2]

[1] Upstream is a Maine not-for-profit corporation with a place of business at 67 Perkins Road, Belfast, Maine.

[2] 5 M.R.S. §§ 11001–11007; 38 M.R.S. § 346(1). DEP issued the Water Permit pursuant to Maine's Pollution Control Law, 38 M.R.S. §§ 414-A(1)(A)–(D) and § 464(4)(F), and Department of Environmental Protection ("DEP") regulations, 06-096 C.M.R. chs. 2, 520-525, 579, 581 and 587. These permits are part of the "Maine Pollutant Discharge Elimination System" ("MEPDES") established to comply with the federal Clean Water Act, 33 U.S.C. §§ 1251, et. seq. DEP issued the Air License pursuant to 38 M.R.S. § 590 and DEP's regulations, 06-096 C.M.R. c. 115. "SLODA" is 38 M.R.S. §§ 481–489-E. Together with the SLODA permit, the Board also issued a permit under the Natural Resources Protection Act ("NRPA"), 38 M.R.S. §§ 480-A-480-JJ. Upstream is not appealing the NRPA permit.

## II. PROCEDURAL HISTORY

On October 19, 2018, Nordic filed its application with DEP for an MEPDES permit. (Appendix ("A")) at A1025 (Agency Record ("DI") 0021). On May 17, 2019, Nordic filed its Site Law permit, and Air Emissions License applications. A1034, 1037 (DI 0148, 0174). On June 20, 2019, the Board voted to assume original jurisdiction over Nordic's consolidated applications and to hold a public hearing. A0245, A0370, A0413-A0414. The Board effectively acted as the equivalent of a hearing officer in accordance with the APA. 5 M.R.S. §§ 8001-11008, and 06-096 C.M.R. c. 3. A0572-A0594.

The Board issued all the permits in Final Decisions on the same date, November 19, 2020. Upstream appealed all three to the Superior Court on December 17, 2020. A0001, A0050-A0110. The Superior Court affirmed the BEP's issuance of the permits on February 23, 2022. A0027-A0049. Upstream appealed the Superior Court's February 23, 2022, decision on March 3, 2022. A0017.

## III. STATEMENT OF FACTS

Nordic's facility would be powered entirely by electricity provided by Central Maine Power and would consist of a back-up power plant comprised of 8 two-megawatt generators and smokestacks to provide up to 14 MW of emergency electrical power, a 20,000 sq. ft. wastewater treatment plant, two 336,000 sq. ft. salmon grow–out tanks, one 107,000 sq. ft. tank for smolt salmon, a 50,000 sq. ft.

fish processing facility and office space (all numbers approximate). At close to 900,000 sq. ft. total, the facility will be one of the largest industrial facilities in the history of the State of Maine. It is projected to produce 33,000 tons of farmed salmon per year. It would consume both fresh water at the rate of approximately 1,200 gallons per minute from 3 on-site wells, the Belfast Water District and from a local reservoir, and ocean water from two 30" water intake pipes from Penobscot Bay. It would discharge 7.7 million gallons per day of wastewater from the fish tanks and slaughterhouse via a 36" pipe into Penobscot Bay. A0028-29, A0244, A0287, A0291-A0292, A0295, A0373, A0375-376, A0409-412, A0456.

## IV. STATEMENT OF THE ISSUES

1. Did the Board fail to comply with the EPA's and DEP's air emissions requirements by not requiring Nordic's Air License application to address the cumulative effect of all air emissions units from all industrial units proposed for Nordic's facility in combination with nearby offsite existing emission units?

2. Did the Board fail to comply with Maine's requirements for the prevention of water quality degradation, 38 M.R.S. §§ 414–A(1)(A)–(D), and § 464(4)(F), by not setting an effluent limit for dissolved nitrogen sufficient to protect water quality, based on valid, current data, and without requiring that Nordic show that it is capable of meeting that limit?

3. Did the Board fail to comply with 38 M.R.S. § 414–A(1)(D), and abuse its discretion, by not considering the companies identified by Upstream and finding that their technology is the best practicable treatment, as defined in 38 M.R.S. § 414–A(1)(D), and setting an effluent limit for nitrogen based on that technology?

4. Was the Board's decision to issue the water permit based on unlawful procedure, because the Board failed to:

   a) Consider the zero-discharge technology of the companies identified by Upstream;

   b) Respond to Upstream's comments, as required by 06-096 C.M.R. c. 522 § 12;

   c) Consult with Upstream, as required by the third sentence of 38 M.R.S. § 414–A(1)(D);

   d) Reopen the hearing before allowing Nordic to submit revised dilution modelling results;

   e) Require completion of a study to produce data to validate Nordic's pollutant dispersion model before Nordic can commence discharging;

   f) Require Nordic to demonstrate it had adequate power to run its systems in the event of a power loss;

   g) Consider the normal fluctuations in performance and awarded a permit based solely on Nordic's projected "best day" data;

   h) Refrain from adding to the awarded permits conditions requiring hearings when no provision exists in Maine law for the conduct of such hearings; and/or

   i) Require that Nordic's proposed discharge of water into Penobscot Bay conform to Maine's law against thermal pollution?

5. Did the Board fail to comply with 38 M.R.S. §§ 481-489-E, Section 401 (33 U.S.C. § 1341) of the Clean Water Act ("CWA") and 06-096 C.M.R. chs. 520-525, 579, 581 and 587 ("SLODA") by improperly certifying that there would be no adverse impacts on water and air quality?

## V. STANDARD OF REVIEW

Where, as here, the Superior Court acted as the intermediate appellate court, this Court "reviews directly the Board's decision for abuse of discretion, error of law, or findings unsupported by substantial evidence in the record." *City of Old Town v. Expera Old Town, LLC*, 2021 ME 23, ¶ 13, 249 A.3d 141 (alteration and quotation marks omitted). "Substantial evidence exists when a reasonable mind would rely on that evidence as sufficient support for a conclusion." *Osprey Family Trust v. Town of Owls Head*, 2016 ME 89, ¶ 9, 141 A.3d 1114. "[I]n dealing with a determination or judgment [that] an administrative agency alone is authorized to make, a court must judge the propriety of such action solely by the grounds invoked by the agency. If those grounds are inadequate or improper, the court is powerless to affirm the administrative action by substituting what is considers to be a more adequate or proper basis." *In re Maine Motor Rate Bureau*, 357 A.2d 518, 527 (Me. 1976)(alteration omitted)(quoting *Securities & Exchange Commission v. Chenery Corp.*, 332 U.S. 194 (1947)).

## VI. SUMMARY OF THE ARGUMENT

The Clean Air Act and the State of Maine's implementation thereof require Nordic to disclose to the Board all its proposed on-site air pollution emission sources, and to demonstrate that the emission for which a permit is sought, in conjunction with all other sources at the site, will not cause the site to exceed the

relevant ambient air quality standards. Nordic disclosed only its eight (8) generators serving its plant and refused to disclose information about emissions from all its other sources. Thus, the Board failed to assess properly the project air emissions.

The Board failed to protect water quality as required by 38 M.R.S. §§ 414-A(1)(A)-(D) and 464(4)(F) by failing to establish a discharge limit that will prevent the degradation of water quality and by not setting a discharge limit based on admissible evidence. The Board violated the APA, its own procedural rules, and due process by allowing Nordic to revise its water pollution impact analysis model which demonstrated non-compliance with discharge limits *after* the close of the hearing, without allowing cross-examination or discovery, and by setting a discharge limit in the permit based on that improperly revised model.

The Board was obligated to consider and base its permit on the best practicable technology, to consider the minimal and zero discharge technologies introduced into the record by Upstream's experts, and to respond in writing to Upstream's evidence. The Board failed or refused to do so.

By not considering the technologies recommended by Upstream's experts, not consulting with Upstream, and not responding to Upstream's comments, the Board violated Section 414–A(1)(D) and 06–096 C.M.R. c. 522, § 12 and failed to develop permit limits that meet statutory requirements.

The Board's decision violated the Site Law, by failing to include an

affirmative finding that Nordic's project will not cause adverse impact to estuarine and marine life in the receiving waters, 38 M.R.S § 465-B(2)(C); A0294-0295 (MEPDES Permit, Final Fact Sheet at 10-11).

## VII. ARGUMENT

### A. The Board failed to enforce 38 M.R.S. § 590(2)(C) and 06-096 C.M.R. Chapter 115, § 7(A), which require that an applicant for an air permit demonstrate that its proposed emissions ***in conjunction with all other sources***, will not violate applicable ambient air quality standards.

Nordic failed to demonstrate that the combined air emissions from all activities on its project site will comply with the Clean Air Act.

The federal Clean Air Act, 42 U.S.C. §§ 7401, et seq. (the "CAA"), encourages states to gain and operate a permitting program under authority delegated by EPA. To qualify for delegation of permitting authority, a state must prepare and submit for approval a "State Implementation Plan" ("SIP") which, if approved by EPA, allows the delegation of permitting authority under the Clean Air Act, to the qualifying state.

Maine completed that process and received approval of its current SIP on September 30, 2016. The SIP is codified at 06-096 C.M.R. c. 115.[3] Section 7(A) of Chapter 115 provides, in pertinent part:

[3] Section 110(a)(2) of the CAA provides that states must include in their SIP programs preconstruction review of minor sources as necessary to ensure attainment and maintenance of the ambient air quality standards. Maine did this through Chapter 115 of the SLODA regulations.

> **General Requirement**: It shall be the burden of any applicant to provide an affirmative demonstration that its emissions, *in conjunction with all other sources*, will not violate applicable ambient air quality standards,…

06-096 C.M.R. c. 115, § 7(A)(emphasis added).

Maine elected to adopt the federal ambient air quality standards, so Nordic had to demonstrate that the emissions from its proposed power plant, *in combination with other sources*, would not violate those standards. Nordic did not even attempt to do so.

The CAA requires that a SIP must meet the requirements of part C of title I of the CAA requiring preconstruction review and approval of major new stationary sources of air pollution.[4]

To obtain a license for a major source, Nordic would have to disclose and analyze all its on-site emissions sources. Nordic asserted that it was not a major source, rather, it qualified as a minor source regulated not by the federal Clean Air Act but only by the state SIP's minor new source review program. Therefore, Nordic argued that it need not disclose and evaluate all air pollution emission sources on site, but only the ignition source to be permitted, for industrial emissions ("IE") from the smokestacks attached to the eight generators. Nordic's argument, which the Board accepted, is a misreading of Chapter 115, as quoted above.

[4] CAA Section 110(a)(2)(I) (a major source is one that has a potential to emit at least 250 tons per year of a regulated pollutant).

Nordic claimed its emissions to be a minor source because, although its generators have the potential to generate over 250 tons of pollution per year, Nordic agreed to restrict the amount of fuel it would purchase for use in its generators thereby reducing the amount of pollution its generators could emit. This is customarily referred to as a "synthetic minor."

The federal Clean Air Act[5] and Maine law[6] require any new facility, Major or Minor, that triggers permitting apply for a permit before emitting any regulated substance into the air AND demonstrate that emissions from the facility do not exceed the Ambient Air Quality Standards[7] facility wide. The state can exempt certain emissions from permit review based on their size or character. Nordic claimed all its non-generator air pollution emitting components were exempt. Since Nordic never supplied information on the chemical constituents discharged in those other sources or revealed whether the quantity of pollutants emitted would be greater

[5] 42 U.S.C. § 7475(a)(3) ([T]he owner or operator of such facility demonstrates, as required pursuant to section 7410(j) of this title, that emissions from construction or operation of such facility will not cause, or contribute to, air pollution in excess of any (A) maximum allowable increase or maximum allowable concentration for any pollutant in any area to which this part applies more than one time per year, (B) national ambient air quality standard in any air quality control region, or (C) any other applicable emission standard or standard of performance under this chapter).

[6] Section 591 prohibits a person from discharging contaminants into ambient air within a region that will violate ambient air quality standards. *See* 38 M.R.S. § 591.

[7] Maine adopted the National Ambient Air Quality Standard (NAAQS) established under the federal Clean Air Act as its maximum air quality standard requirement for ambient air quality. *See* 38 M.R.S. § 584-A.

than the exemption limit, there is nothing in the record to support Nordic's exemption claim.

## B. Nordic's Air License Application should have addressed all the emissions sources at its site.

Nordic applied for an emissions license for its proposed eight (8) on-site stationary source diesel operated electric generators, Nordic's "power plant." Nordic's power plant is not the intended use for the site. It is only one of many, many integrated processes proposed as part of this large, cradle to grave fish rearing and processing facility. The Nordic facility will include:

- **A wastewater treatment plant that planned to treat an average flow of 7.7 million gallon per day.** Nordic claimed that: the plant would be air-tight, even though code will require minimum ventilation in areas. Nordic further claimed there would be no exhaust from the chemicals, sludges, odor control systems, biological breakdown of wastewater, aerated processes, storage, or discharge; and that there would be no other stationary or mobile emissions or exhaust. A1035 (May 17, 2019, Nordic SLODA Application at Section 22, Odors).

- **A Water Treatment Plant that must be flexible enough to treat any combination of 2.2 million gallons per day from surface water, city water, and groundwater.** Nordic claimed that there would be no exhaust from the water treatment processes, and ancillary facility needs, and all shipping requirements, and the entire process would be "air-tight"; again, in direct conflict with code requirements. Nordic claimed that there would be no other stationary or mobile emissions or exhaust. A0469 (DI 0469, Tab 10, Test. Cathal Dinneen); A1074 (DI 0653 & 0654, Hearing Transcript of Cathal Dinneen).

- **A slaughterhouse that will harvest, slaughter, fillet, store, and ship 200,000 pounds of salmon fillet a day.** Again, Nordic claimed that the slaughterhouse operations would be air-tight, with no air movement proposed to remove the air contaminated with nitrogen and sulfur-based odorants. The Board heard no evidence on how fish and or product enters or is removed from an air-tight facility, and again there was no discussion of code ventilation requirements. Nordic claimed there would be no stationary or mobile emissions or exhaust impacts emitted from the packaging and shipping of refrigerated trucks that may idle continuously. A1074 (DI 0653 & 0654, Hearing Transcript of Steven Whipple).

Nordic never identified the "exempt certain sources," so the Board had no way to evaluate if those sources were exempt or not, and if those sources, in concert with the generators, would exceed the ambient air quality standards and under what circumstances they would do so, which is the point and goal of Chapter 115, Section 7(A).

Following the staff's guidance, the Board determined that, because the eight generators will qualify as a "synthetic minor source" and because a Chapter 115 permit could exempt certain sources from obtaining a permit demonstrating regional ambient air quality standard ("AAQS") compliance (*see* EPA approved State Implementation Plan (SIP)); any AAQS demonstration should only focus on the eight generator sources that triggered the need for the Chapter 115 permit. But exempting the sources from permitting requirements is not the same as excluding them from the cumulative evaluation required by Chapter 115, Section 7(A).

The federal Clean Air Act[8] and Maine law[9] require any new facility that triggers permitting BOTH apply for a permit before emitting any regulated substance into the air and demonstrate that the facility will not exceed the Ambient Air Quality Standards[10] ***facility wide***. EPA's definition of a source is not just a single source that may trigger a permit requirement like the power plant. It is for a site-wide permit for the entire facility if under common control and all working together for a common purpose. In this case the site-wide common purpose is fish hatching, rearing, and slaughter.[11]

Therefore, the whole facility is subject to the Ambient Air Quality Standards in 38 M.R.S. § 584-A. The whole facility is also prohibited from exceeding these standards. *See* 38 M.R.S. § 591 and 06-096 C.M.R. Chapter 110. Since Nordic did not provide any exhaust or other air emission information, the statements made in the recent briefs filed by the Board and Nordic in the Superior Court, repeated in the Board's finding, that "Substantial Evidence Supports the Board's Decisions Granting the Air Emission License" cannot be correct. There is no evidence in the record to support Nordic's assertion that *all other on-site sources will be*

---

[8] 42 U.S.C. § 7475(a)(3); *see supra* note 5.

[9] *See supra* note 6.

[10] *See supra* note 7.

[11] 40 C.F.R. § 70.2 (Definitions).

"insignificant" and thus exempt from permitting even if they must always be counted toward the NAAQS. The record contains only Nordic's unsupported assertions.

## C. The Board failed to fulfill its obligation to protect water quality under 38 M.R.S. §§ 414-A(1)(A)-(C), 464(4)(F) and the Site Law.

### 1. Maine's program for permitting water discharges is required to meet the standards of the federal Clean Water Act which include provisions to prevent degradation of water quality.

The federal Clean Water Act, 33 U.S.C. §§ 1251, et seq. (the "Act"), was enacted in 1972, with the goal of zero discharges of pollutants to the waters of the United States after 1985. As that goal proved elusive, Congress also enacted a Clean Water Act permit program, named the "National Pollutant Discharge Elimination System" program (the "NPDES" program). Under that program, any new discharge is to be constrained by the best available technology and permits issued thereunder were short in duration. Each new permit and each renewal require a new demonstration that the applicant is employing the best available technology as of the date the applicant applies.[12] Moreover, the permits must include discharge limits

[12] Section 414-A(1)(D) provides:

> The discharge will be subject to effluent limitations that require application of the best practicable treatment. "Effluent limitations" means any restriction or prohibition including, but not limited to, effluent limitations, standards of performance for new sources, toxic effluent standards and other discharge criteria regulating rates, quantities and concentrations of physical, chemical, biological and other constituents that are discharged directly or indirectly into waters of the State. "Best practicable treatment" means the methods of reduction, treatment, control and handling of pollutants, including process methods, and the application of best conventional pollutant control technology or best available technology economically achievable, for a category or class of discharge sources that the department determines are best calculated to protect and improve the quality of the receiving water and that are consistent with the requirements of the Federal Water

calculated to prevent the degradation of existing water quality. 38 M.R.S. §§ 414-A, 464(4)(F). In that manner, EPA presides over a relentless march toward zero discharge, the original goal of the Act.[13]

Permitting authority under the Act may be delegated to any qualifying state. A state qualifies by creating a body of statutory and regulatory law that implements the federal Act in a way that is no less strict than the federal Act. Maine received a delegation of permitting authority from the EPA under the Act on January 12, 2001. Maine's program is the Pollution Control Law, 38 M.R.S. §§ 414-A(1)(A)–(D), and the antidegradation policy in 38 M.R.S. § 464(4)(F).[14]

---

> Pollution Control Act, as amended, and published in 40 Code of Federal Regulations. If no applicable standards exist for a specific activity or discharge, the department must establish limits on a case-by-case basis using best professional judgment, after consultation with the applicant and other interested parties of record. In determining best practicable treatment for each category or class, the department shall consider the existing state of technology, the effectiveness of the available alternatives for control of the type of discharge and the economic feasibility of such alternatives;…

38 M.R.S. § 414-A(1)(D).

[13] Section 1251(a)(1) of the Clean Water Act provides:

> (a) Restoration and maintenance of chemical, physical and biological integrity of Nation's waters; national goals for achievement of objective
> The objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. In order to achieve this objective it is hereby declared that, consistent with the provisions of this chapter—
> (1) it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;…

33 U.S.C. § 1251(a)(1).

[14] The program is also set forth in DEP regulations. 06-096 C.M.R. chs. 2, 520-525, 579, 581 and 587.

### 2. The Board failed to comply with 38 M.R.S. § 414–A(1)(D) by not considering and utilizing pollutant discharge technology identified by Upstream in testimony and comments submitted to the Board.

In December 2019, Upstream submitted pre-filed hearing testimony identifying aquaculture companies that are successfully eliminating the discharge of pollutants.[15] This was the *best practicable treatment* and represented 20 years of improvement over Nordic's proposed technology. In subsequent proceedings, Upstream repeatedly drew the Board's attention to these technologies, which have achieved results of 100% pollutant removal, or of removal to minimal levels that allow the wastewater to be re-used, with zero discharge to surface water.[16] Nothing in the record shows that the Board considered these technologies in any way.

---

[15] The December 2019 pre-filed testimony of Upstream's John A. Krueger and Gary V. Gulezian, identified better treatment systems for the Board's consideration:

> While NAF [Nordic Aquafarms] should be applauded for its use of proven technologies such as Moving Bed Biofilm Reactor (MBBR) designs,…*Newer technologies exist and are being tested around the planet. Aquamaof, Superior Fresh, and Sustainable Blue are examples*.
>
> Some use vertical hydroponics/aquaponics that run hydraulically (a water driven system rather than a pumped vertical effluent, with low energy use). There are others which use electric driven pumps to pump water up and believe that numerous small tanks are the way to go. Another option is airlift fixed media recirculating systems to provide a minimal liquid discharge to zero liquid discharge with the use of micro-algae as the primary denitrification reactor. These micro-algae systems allow the production of algae to produce a food source for fish or generate a bio-fuel. Ozone is also used for pathogen control.

A1060, A1170-1171 (DI 0478; Pre-filed Test. John A. Krueger and Gary V. Gulezian (Dec. 13, 2019) at 13-14)(emphasis added).

[16] Upstream's testimony showed that these technologies are not merely in development, but are in use by successful companies, and could be used by Nordic. The following pre-filed testimony from Mr. William Bryden (Dec. 2019), stated:

> "In Canada, Sustainable Blue has commercialized a licensable methodology for zero effluent discharge for Atlantic Salmon in saltwater as well as other species. They recycle 100% of all water they utilize, both fresh and salt except for that water that resides in the

In its Final Decision issuing the permit, the Board approved Nordic's proposed treatment system, although the Board set a *water-quality based limit* for dissolved nitrogen at a lower concentration than Nordic claimed it could meet. A0305-A312 (MEPDES, Final Fact Sheet, at 20-27). Nordic claims that its technology can remove 85% of dissolved nitrogen, discharging nitrogen at a concentration of 23 mg/l. Nothing in the record demonstrates that either 85% removal, or 21 mg/l, could be deemed better results than 100% removal and a zero discharge. The Board should have considered the treatment identified by Upstream, and based effluent limits on that technology, leaving no need for water-quality based limits. The Board's failure to do so was a violation of Section § 414–A(1)(D).

Although it responded in writing to many different comments from the various Intervenors, as it is required to do, the Board never issued any response concerning evidence on these technologies. The Court "must judge the propriety of [the Board's] action solely by the grounds invoked by the agency." *In re Maine Motor Rate Bureau*, 357 A.2d at 527 (alteration omitted) (quoting *Securities & Exchange Commission v. Chenery Corp.*, 332 U.S. 194 (1947)). Here, as the Board conceded

---

> fish when slaughtered. This is accomplished by utilizing a combination of ozone and advanced filtration methodologies. Their fish is marketed and distributed throughout eastern Canada. *Sustainable Blue's CEO and Chief Technology Officer has reviewed the public documents describing Nordic's proposed facility in Maine and have confirmed their methodology can scale to accommodate Nordic[']s proposed volumes of fish*."

A1060, A1203-1204 (DI 0481, Pre-filed Test. Bill Bryden (Dec. 13, 2019) at 2-3)(emphasis added).

below, the Board never stated the basis for rejecting these technologies. The Board's suggestion that a reviewing court can infer that the Board did consider and had a basis for rejection (not articulated) is clear error. This Court cannot review the Board's actions without a record on the Board's consideration of the recommended technologies. Under Section 414–A(1)(D), consideration of these alternatives and a response to these comments was required for setting technology-based limits.

For Nordic's permit, the Board found in its Final Decision that it was required to act under the following third sentence of Section 414–A(1)(D):

> If no applicable standards exist for a specific activity or discharge, the department must establish limits on a case-by-case basis using best professional judgment, after consultation with the applicant and other interested parties of record.

A0304.

The Court should interpret this sentence considering Section 414–A(1)(D) as a whole. *Central Maine Power Co. v. Devereux Marine, Inc.*, 2013 ME 37, ¶ 8, 68 A.3d 1262 ("'All words in a statute are to be given meaning,' and no words are to be treated as 'surplusage if they can be reasonably construed'"); *Mallinckrodt US LLC v. Dept. Envtl. Prot.,* 2014 ME 52, ¶ 20, 90 A.3d 428. *See also United Sav. Ass'n of Texas v. Timbers of Inwood Forest Assocs., Ltd.,* 484 U.S. 365, 371 (1988)(per Scalia, J.)(statutory interpretation is a "holistic endeavor").[17]

[17] The late Justice Scalia also emphasized "holistic interpretation" in his scholarly writing. In *Reading*

Here, the limits to be adopted on a case-by-case basis must be based on *best practical treatment* as defined in the previous sentence. Maine's definition of best practical treatment incorporates the technology—based goals and standards of the federal Clean Water Act ("CWA")—but does not use the same terms as the CWA. The CWA created a time interval in which dischargers could adopt technology which met a lesser standard than the ultimate goal of Best Available Technology ("BAT"). CWA § 304(b)(2). But while Maine's statute uses "best practical treatment"—terms similar to "best practical technology"—it defines them so that they require the discharger to use whichever of the federal standards is currently applicable, i.e., the most stringent standard is always in effect. 38 M.R.S. § 414-A(1)(D). Maine's use of these terms was in no way intended to enshrine lesser standards than the federal requirements; on the contrary, it was intended to simplify the standard by using terms that would always incorporate the most stringent standard. In circumstances such as the present case which require the Department to "establish limits on case-by-case basis," the statute is not inviting a lowering of the standard by use of the term "best professional judgment." *Id.*

*Law: The Interpretation of Legal Texts* (with Brian A. Garner), Thompson/West (2012)), pp. 217–220 and 326–330. Justice Scalia argued persuasively that interpretation should begin with the original meaning of the words of the statute, as opposed to the search for "original intent."

The evidence submitted by Upstream made a *prima facie* case for identifying the zero discharge technologies as the best practical treatment. The testimony of William Bryden concerning Sustainable Blue, Inc. confirms the potential to scale up its treatment system to the size of Nordic's proposed facility.[18] The Board should have followed up on this information to establish a record, open to public scrutiny, showing whether these technologies could in fact be the basis for Nordic's permit, and explained a basis for its decision. While the Board suggests this Court can infer the Board did comply with the statute, and infer findings, the Court has no basis to so conclude given the absence in the record of actual findings. 1 M.R.S. § 407(1) ("The agency shall set forth in the record the reason or reasons for its decision and make finding of the fact, in writing, sufficient to appraise the applicant and any interested member of the public of the basis for the decision.").

Maine developed its Water Pollution Control Act and the Department's regulations to be consistent with, and no less stringent than, the requirements of the Clean Water Act, and regulations adopted by the Environmental Protection Agency ("EPA").[19] To achieve this goal, the Board should have considered the alternatives

---

[18] A1061, A1203-1204 (DI 0481 Pre-filed Test. Bill Bryden (Dec. 13, 2019) at 2-3).

[19] CWA § 303 provides for water-quality-based effluent limits and anti-degradation policies; and Section 304 provides for the development by EPA of technology-based BPT and BATEA standards, for categories of industry, to be incorporated into individual permits. Section 306(a)(1) further calls for New Source Performance Standards ("NSPS"), "which reflect the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control

identified by Upstream. By disregarding the alternatives and failing to create any record on the alternative technologies, the Board violated its statutory obligations and abused its discretion.

### D. The Board's failure to address the alternative treatment technologies identified by Upstream was both unlawful procedure and an abuse of discretion.

The Court has established that a failure by the Board to consider an available alternative to its decision is an abuse of discretion. *Friends of Maine's Mountains v. Bd. of Envtl. Prot.,* 2013 ME 25, ¶ 11, 61 A.3d 689 ("An abuse of discretion may be found where…the decisionmaker exceeded the bounds of the reasonable choices available to it, considering the facts and circumstances of the particular case and the governing law."). By the same reasoning, the Board abused its discretion here.

The Board stated in its Final Fact Sheet that the permits' effluent limits for Biological Oxygen Demand and Total Suspended Solids, were based on limits proposed by EPA for land-based aquaculture twenty years ago, in 2002, which EPA never adopted.[20]

If the Board had properly considered Upstream's comments, it would have

---

technology … *including, where practicable, a standard permitting no discharge of pollutants."* 40 C.F.R. § 401.12(e); CWA § 306(a)(1)(B) (emphasis added). The CWA also required compliance with federal requirements by state programs authorized to operate in lieu of EPA: CWA §§ 402(b)(1)(A)(compliance with all applicable federal requirements), 402(b)(3)(public participation), 402(d)(1)(notification to EPA) and 402(d)(4)(EPA's authority to object to and overrule state permits).

[20] A0294, A302, A0327 (MEPDES, Final Fact Sheet, Maine Board of Environmental Protection (BEP or Board) Order at p. 19); *see also* USEPA, Technical Development Document for the Final Effluent Limitations Guidelines and New Source Performance Standards for the Concentrated Aquatic Animal Production Point Source Category (Revised August 2004).

found that zero discharge *is* the "best practicable treatment." Although Section 414–A(1)(D) calls for "best professional judgment" in establishing permit limits, "best practicable treatment" necessarily requires that the judgment be based on current technology. This, the Board failed to do.

Based on the foregoing, the Court should find that the Maine Pollutant Discharge Elimination System Permit and Water Discharge License ("Water Discharge Permit") were issued in violation of statute, was based on unlawful procedures, and was as abuse of discretion. The Court should require that the Board give zero discharge treatment, including its most recent developments, the consideration and response required by both Section 414–A(1)(D) and the "no adverse impact on water quality" required by the Site Law. 38 M.R.S § 465-B(2)(C); A0294-0295 (MEPDES Permit, Final Fact Sheet at 10-11).

### E. Maine's clean water laws and regulations must be interpreted in light of both the requirements and the goals of the federal Clean Water Act ("CWA").

In these proceedings, the Board failed to set zero discharge as the required goal, as required by Maine law and the Clean Water Act.

The Court should base its interpretation of Section 414–A(1)(D) on the principle that statutory interpretation requires an understanding of a provision within its statutory context as a whole. *Central Maine Power Co. v. Devereux Marine, Inc.*, 2013 ME 37, 68 A.3d 1262; *United Sav. Ass'n of Texas v. Timbers of Inwood Forest*

*Assocs., Ltd.,* 484 U.S. 365. Here, the statutory context includes not only Maine's statutes and regulations, but the federal CWA which Maine's program is intended to implement.

The Court should therefore interpret the third sentence of Section 414–A(1)(D), under which the Board set the permit's conditions, in the context of both the entire section and of the statutory and regulatory schemes of the federal CWA,[21] and Maine's delegated authority.[22] The CWA's state-federal statutory scheme is intended to achieve its goals to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters," (CWA § 101(a)),[23] to "eliminate the discharge of pollutants into the navigable waters" (CWA § 101(a)(1)), and to restore "water quality which provides for the protection and propagation of fish, shellfish, and wildlife" CWA § 101(a)(2).[24] The CWA also provides, in Section 402(c), for

[21] 33 U.S.C. §§ 1251, et seq. (*also known* as the Federal Water Pollution Control Act of 1972).

[22] DEP's Water Rules 06-096 C.M.R. chs. 263-596, are available online at https://www.maine.gov/dep/water/rules/index.html. Chapters 310, 315, 335, 371, 372, 373, 375, 376, 500, 520, 521, 522, 523, 524, 525, 579, 581, 582, 587 are set forth at A0656-A0987 in their entirety.

[23] The sections of 1972 CWA had three-digit numbers, which were incorporated into the U.S. Code with 4-digit numbers. 33 U.S.C. § 1251, is thus Section 101 of the CWA. The relevant sections are hereafter cited as CWA §§ 101 and 301– 402, in lieu of 33 U.S.C. §§ 1251–1342.

[24] To achieve these goals, the CWA provides for effluent limits to be established by EPA and enforced by federal and state permits. Section 301(1)(A) calls for effluent limits, based on the "best practicable control technology" ("BPT"), originally to be achieved by July, 1977, and Section 301(1)(B), for standards based on the "best available technology economically achievable" ("BATEA") "which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants," originally to be achieved no later than March 31, 1989. The CWA also includes an "antidegradation" provision, Section 303, which is incorporated into 38 M.R.S. §§ 414–A(1)(A), (B) and (C), which require the state to impose

implementation of the federal program by the states, creating a co-operative state-federal scheme which "establishes distinct roles for the Federal and State Governments."[25]

Maine has adopted comparable goals in 38 M.R.S. § 464(1):

> **Findings; objectives; purpose.** The Legislature finds that the proper management of the State's water resources is of great public interest and concern to the State in promoting the general welfare; in preventing disease; in promoting health; in providing habitat for fish, shellfish and wildlife; as a source of recreational opportunity; and as a resource for commerce and industry. The Legislature declares that it is the State's objective *to restore and maintain the chemical, physical and biological integrity of the State's waters and to preserve certain pristine state waters.* The Legislature further declares that in order to achieve this objective the State's goals are:
>
> A. *That the discharge of pollutants into the waters of the State be eliminated where appropriate*; . . .

38 M.R.S. § 464(1)(A) (emphasis added).

Section 414–(A)(1)(D) must be read to require that the Board use its "best professional judgment" to determine the "best practicable treatment," which must mean the best of "existing technology." This reading puts the section in accord with the whole history of the federal CWA. But nothing in the record shows that the Board made such a determination.

---

limits more stringent than those based on treatment technology, if necessary to prevent degradation of water quality.

[25] The Department's regulations, 06-096 C.M.R. chs. 514–526, issued in November, 1999, cite parallel EPA regulations in 40 C.F.R. Part 120, Subpart A. EPA approved Maine's program on February 28, 2001. Both the Maine and federal programs require the DEP to comply with EPA requirements.

In implementing Section 414-A(1)(D), Maine is exercising the permitting authority delegated to the state by the EPA. Compliance with federal requirements is the Board's necessary obligation. Permitting authority under the federal CWA, as well as the federal Clean Air Act (42 U.S.C. §§ 7401, et seq.), once delegated to a state, requires the delegate state to comply with the acts under which permitting authority is delegated. *PUD No. 1 of Jefferson County v. Washington Dept. of Ecology,* 511 U.S. 700 (1994). Therefore, the definition of "best practical treatment" in Section 414-A(1)(D) requires compliance with federal discharge standards.

The interpretation of the CWA as a whole must begin with its Section 101. Although the CWA's goal of elimination of the discharge of pollutants by 1985 was not met, and was frequently postponed, we cannot treat it as "implicitly repealed" (an approach to interpretation that Justice Scalia has rejected in his writing on statutory interpretation).[26] The zero-discharge goal is incorporated into Sections 301, 304 and 306 of the CWA, which in turn are incorporated into the requirements for state programs by CWA. CWA § 402(b)(1)(A). These sections define the requirements for the setting of discharge standards—by EPA and the states—for the

[26] *Reading Law: The Interpretation of Legal Texts* at 327-330. Justice Scalia and his co-author Bryan Garner identified several "Canons of Interpretation" that are relevant to the interpretation of the zero-discharge goal of the Clean Water Act. including the "Prefatory-Materials" Canon ("A preamble, purpose clause, or recital is a permissible indicator of meaning."), at 217– 220; the "Presumption Against Implied Repeal," at 327–330; and "the Desuetude Canon" ("A statute is not repealed by nonuse or desuetude."), at 326– 339. These Canons, as applied to the Clean Water Act, tell us that the original words of the Act still *mean what they say.*

NPDES ("National Pollution Discharge *Elimination* System."). The same requirements for effluent standards were adopted by the Department in Chapter 525 of its regulations.

The zero-discharge goal has been cited with approval in federal Circuit Court decisions. A 2006 decision by the Sixth Circuit refers to the goal of restoring the nation's waters as the "guiding star" of the Clean Water Act. *Citizens Coal Council v. U.S. E.P.A.,* 447 F.3d 879, 907 (6th Cir. 2006).[27] *See also Kennecott v. U.S. E.P.A.*, 780 F.2d 445, 448 (4th Cir. 1985) (The Act's Best Available Technology standards are intended to "push[] industries *toward the goal of zero discharge as quickly as possible.*")(emphasis added); *Weyerhauser Co. v. Costle,* 590 F.2d 1011, 1061 (D.C. Cir. 1978)($50,000 a year is not an unreasonable expense to eliminate 600,000 gallons of wastewater discharge a year). *See also* the late Justice Ginsburg's dissent in *Coeur Alaska, Inc. v. Southeast Alaska Conservation Council,* 557 U.S. 261 (2009), citing EPA regulations under CWA § 306 (in a case where EPA had found that zero discharge technology was being profitably used by the class of industries at issue, and EPA had therefore adopted zero discharge as a New Source Performance Standard under § 306 of the Act), Justice Ginsburg in her dissent wrote that "adhering to § 306 … honors the overriding statutory goal of eliminating water pollution, and Congress' particular rejection of the use of navigable waters as waste

[27] *See also Chemical Manufacturers Association v. E.P.A.,* 870 F.2d 177 (5th Cir. 1989).

disposal sites…." *Coeur Alaska,* 557 U.S. at 296. The Court should apply Justice Ginsburg's wisdom to this case.

The Court should find that Section 414–A(1)(D) requires DEP to use its "best professional judgment" to identify the "best practicable treatment," and in doing so the Board should have consulted with and considered the technology identified by Upstream. The Court should reverse the Board's acceptance of Nordic's proposed design for treatment at this facility without considering any of the factors that establish the best practicable treatment, without consulting with Upstream, and without responding to Upstream in any way.

In summary, because of the Board's failure to set technology–based discharge limits based on the evidence presented to it, its failure to consult with Upstream as required by Section 414–A(1)(D), its failure to properly set water-quality based limits, the Court should reverse the MEPDES permit and remand it to Board for further proceedings.

### F. The Board's failure to respond to Upstream's comments violated 06-096 C.M.R. c. 522, § 12, an EPA requirement for responses to comments.

DEP's regulation incorporates EPA's requirement in 40 C.F.R. § 124.17, which requires a response to significant public comments, including comments

received in a hearing.[28] The Board violated this requirement by failing to respond the Upstream's comments on technologies available to achieve zero discharge.

In its December 2019 pre-filed testimony (A1158-1193), Upstream recommended that the Board fully consider companies that were successfully and profitably operating zero-discharge wastewater treatment systems, but the record does not show that the Board ever did so. Upstream subsequently restated the comment, as recently as September 2020, in its comments on the Site Law permit, but the Board never addressed Upstream's comments. In fact, in its response to comments in the Site Law permit, the Board did nothing more than refer to its issuance of the MEPDES permit as evidence that there would be no adverse impact on water quality, a finding with absolutely no support. A0427-428 (SLODA Permit (Nov. 19, 2020) at 20).

As the Board acknowledged in its Final Decision, excessive dissolved nitrogen threatens to damage ecosystems and water quality, A0299, A0342-A0343

---

[28] **Section 12. Response to comments**.

> (a) At the time that any final permit decision is issued, the Department shall issue a response to comments. States are only required to issue a response to comments when a final permit is issued. This response shall:
>
> (1) Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and
>
> (2) *Briefly describe and respond to all significant comments on the draft permit raised during the public comment period, or during any hearing.*

A0889; 06-096 C.M.R. c. 522, §§ 12(a)(1) & (2) (emphasis added).

(MEPDES, Final Fact Sheet, at 14, 57-58), a risk which would be eliminated by the technology recommended by Upstream. A1167, A1171, A1183 (DI 0478, Pre-filed Test. John A. Krueger and Gary V. Gulezian (Dec. 13, 2019) at 110, 14, 26). Because the Board failed to respond to Upstream's comments, the public and this Court will never know whether the Board considered the alternative technologies to achieve zero discharge.

### G. The Board did not fulfill its obligation under Maine's statutes to assure that Nordic's discharge will not harm the water quality of Penobscot Bay in Belfast.

In this case, the water pollutant of greatest concern is dissolved nitrogen.[29] Nordic's proposed treatment technology is designed to remove 85% of the nitrogen in 7.7 million gallons of wastewater discharged daily. That results in Nordic's project discharging over 1,300 pounds of dissolved nitrogen daily into Penobscot Bay, assuming Nordic operates under ideal conditions. The Board's staff found initially that Nordic's project would violate state discharge standards for nitrogen. Rather than enforce the standards, the Board allowed Nordic to submit revised

[29] In its Final Decision, the Board described the effects of excess nitrogen:

> Nitrogen is generally the limiting nutrient for primary productivity in marine waters. Discharges of excess quantities of immediately bioavailable nitrogen can cause algal blooms in the receiving waters, which can lead to negative impacts to dissolved oxygen levels. A0306 (MEPDES, Final Fact Sheet, at 21).
>
> The permit would allow the daily discharge of over 1,300 pounds of dissolved nitrogen into Penobscot Bay, year-round. A0345 (MEPDES, Final Fact Sheet, Comment #30 (NVC) at 60).

findings. Even with a second opportunity at meeting standards, Nordic failed to demonstrate that it could meet discharge standards for nitrogen.

Both the federal Clean Water Act and Maine's statute, 38 M.R.S. § 414–A(1)(A)–(D), call for a two-step process for setting effluent limits for water permits (i.e., limits on the pollutants in discharged wastewater). The first step is the setting of "technology-based" limits, under the terms of Section 414–A(1)(D). DEP must base effluent limits on the "best practical treatment," as those terms are defined in that section. Secondly, DEP must consider the potential impacts of the discharge on water quality in the receiving water, in this case Penobscot Bay, as required by 38 M.R.S. §§ 414-A(1)(A)–(C) and § 464(4)(F) (the "antidegradation" policy). If necessary to protect water quality, DEP must set limits lower than the technology-based limits. 38 M.R.S. § 414-A(1)(D).

The Board found that Nordic's proposed effluent limit for dissolved nitrogen of 23 mg/l would endanger water quality. A0310-A0311 (MEPDES, Final Fact Sheet, at 26-27)[30]. The Board therefore imposed a dissolved nitrogen limit of 21 mg/l, a lower limit than the limit sought by Nordic. A0311.

Upstream challenges this decision for the following reasons.

[30] *See also* A1258-A1305 (DEP Staff Memorandum (for May 20 & 21, 2020 Board Meeting); DEP Staff Corrected Memorandum (July 27, 2020)).

First, the Board could have required better treatment technology, that would have eliminated all the dissolved nitrogen, rendering moot the whole problem of setting a water–quality-based limit.

Second, the Board improperly admitted a revision of Nordic's dilution model after the close of the hearing. The Board conducted a public hearing from February 11 to 14, 2020. A1074. More than two months later, on May 20, 2020, the Board held a "deliberative session" via Zoom to discuss the permits. A1088, A1091, A1141 (DI 0821, May 6, 2020 notice; DI 0858, Seventeenth Procedural Order (May 28, 2020)). On May 15, 2020, DEP staff submitted Memoranda and recommendations to the Board with those same dates. A1091, A1258-A1284 (DI 0858, Seventeenth Procedural Order (May 28, 2020)). The Memorandum for the Water Permit discussed proposed permit limits, with detailed calculations, discussions between staff and Nordic and recommendations.

Of particular significance is the Water Memorandum's discussion of nitrogen in its Attachment E. A1278-A1284. This includes an exhaustive analysis of the water quality impacts of Nordic's proposed discharge at Nordic's proposed nitrogen limit of 23 mg/l. The staff concluded that Nordic's discharge would have to be limited to only *12 mg/l.* A0311. The staff found that at Nordic's proposed discharge value of 23 mg/L, the discharge would consume 38% of the remaining assimilative capacity of the receiving water. A1283. "According to…the staff's historical

practice and best professional experience and judgment, this would be considered a lowering of water quality. . . .” A1283.[31]

Rather than accept the staff’s recommendations, the Board, over Upstream’s Objections,[32] allowed Nordic to submit revised findings on May 20, 2020, two months after the closure of the hearing record. A1141-A1144 (DI 0858, Seventeenth Procedural Order (May 28, 2020)). The revisions changed the dilution factor to be used in calculating the impact of Nordic’s discharge. Immediately that day, Upstream requested a copy of the staff’s revised computations on which the revised recommendation was made. To date, Upstream has never been able to obtain the underlying calculations on which this change was based, nor was a witness to these revisions ever presented for cross-examination. The result was a Water Permit that was a product of unlawful procedure, and an indefensible failure to protect Maine’s water quality.

However, even with the revised model, the Board was compelled to find that a discharge at the concentration sought by Nordic, 23 mg/l, would have an unacceptable impact on water quality under DEP’s antidegradation policy, because it would consume more than 20% of the receiving water’s assimilative capacity for

---

[31] *Id.* (Attachment E) at 6.

[32] Upstream’s Motion To BEP/DEP to Strike Testimony of Gregg Wood Relating to Total Nitrogen at Deliberative Hearing (May 26, 2020). A1091 (DI 0856).

nitrogen.[33] A0311, A0312 (MEPDES permit at 26-27); A1291 (Staff Report (Corrected copy July 27, 2020) at 4)); A1304-A1305 (Staff report (Corrected copy July 27, 2020), Attachment E (Total Nitrogen) at 6-7). The Board therefore set the limit at 21 mg/l. Nordic had claimed that it could not meet a limit of less than 23 mg/l, but the Board did not require that Nordic revise its treatment plans. Nordic's best-case discharge will result in lowering the water quality in Penobscot Bay from SB to a lower designation. There is no guarantee or evidence that Nordic can always sustain its optimum level of efficiency.

Third, the Board improperly accepted Nordic's pollutant dispersion model that was developed with insufficient field data by requiring a "Dye Study" after Nordic commences its final discharge. Upstream objected to the lack of field data, i.e., real measurements of tides and currents, to support Nordic's model of pollutant dispersion in the Bay.[34] It is important to know where Nordic's pollution would go. The Board purported to address this concern by creating a Special Condition of the

[33] A0311, A0312, 0001 (MEPDES, Final Fact Sheet (Nov. 19, 2020) at 26) ("Based on the Department staff's review and analysis and the record information as described in this Fact Sheet, the Board finds that Nordic's proposed discharge concentration of 23 mg/L would not meet the default antidegradation licensing criteria threshold of 21 mg/L at full flow. This is because, in the Department staff's view based on its review and analysis, the proposed discharge value of 23 mg/L would consume 22% of the remaining assimilative capacity of the receiving water. According to the State's antidegradation policy, and the staff's historical practice and best professional experience and judgment, this would be considered a lowering of water quality and the applicant would only be able to meet the standard if it established and the Department made the findings required by 38 M.R.S. § 464(4)(F)(5). This permit therefore limits Nordic's discharge to the default antidegradation licensing criteria threshold on 21 mg/L as explained below.").

[34] A1060, A1088 (DI 0480, Pre-filed Test. Neal Pettigrew/Upstream; DI 0479, Pre-filed Test. Aveni-Deforge/Upstream; DI 0652, Hearing Test. Neal Pettigrew (Feb. 12, 2020); DI 0813, Upstream post-hearing brief (May 4, 2020)).

Permit requiring Nordic to perform a Dye Study, to be commenced no sooner than the time Nordic achieves its full production and discharge volume. A0245-A0364 (*generally* MEPDES Final Board Order). It is indisputable that this study will be conducted, if at all, after it is too late to prevent harm.

In *Atlantic Salmon Federation v. Bd. of Envtl. Prot.*, 662 A.2d 206, 210 (Me. 1995), the Court ruled that Board may issue a permit contingent on studies to be conducted and future actions to be taken. However, in *Atlantic Salmon Federation*, the permit required the study to be completed *before* the permittee could begin work and reserved the right to amend the permit if warranted by the results of the study. Here, Nordic's permit calls for a dye study that will not be *begun* until the facility has commenced full operations. A0245 (MEPDES Final Board Order at 2 ¶ 4). *Atlantic Salmon Federation* does not support the Board's approval of Nordic's permit considering the lack of data on the conditions in Penobscot Bay. On the contrary, it stands for the principle that the Board should require a study of the consequences of a discharge before allowing the discharge to commence. *Atlantic Salmon Federation*, 662 A.2d at 210.

Fourth, Nordic's witnesses testified that Nordic could not achieve the 21 mg/l thereby assuring a degradation of the water quality in Penobscot Bay. A0311-A0312.[35]

Fifth, both the regulations and the permit itself require Nordic to demonstrate it has sufficient power to run its facility in the event of a power outage. There is a concern that if there is an outage the wastewater treatment will fail causing untreated water to be discharged into the Bay or a huge fish kill will result. Nordic refused to provide that information or plan. As a result, the Board had no basis to conclude that Nordic had sufficient power.

Sixth, rules for the DEP, Chapter 582, § 5, requires any discharge to maintain a temperature within 4 degrees Fahrenheit ("1.5-degree Fahrenheit from June 1 to September 1") in the receiving water body. 06-096 C.M.R. c. 582, § 5; A0977. Nordic asserts that its discharge water temperature is .01 degrees within the (summer) limit. Nordic assumed the accuracy of a record temperature reading that was taken at the top ½ inch of water in June. Nordic's discharge will occur 34 feet below the surface. The Court can take judicial notice that water in the ocean is colder below the surface than it is at the surface. Nordic failed to demonstrate that it will discharge within the state mandated thermal limits in the summer months and

[35] A0311-A0312 (MEPDES, Final Fact Sheet, at 26-27); A1194-A1201 (Pre-Filed Test. Nathan Dill (Dec. 13, 2019), Memo Nathan Dill to Nordic Aquafarms, "Far Field Dilution of Proposed Discharge – Supplemental Information," (Nov. 3, 2019) at 3-5).

ignored the other 9 months of the year entirely. Use of the permit should be stayed until actual thermal measurements are taken at appropriate times of the year and at appropriate depth.

Considering this record, the Court should reverse the permit as failing to meet the requirements of the antidegradation policy, and the requirement in Section 414–A(1)(D) for limits based on "best practicable treatment."

## H. Nordic's project fails to comply with the Site Location of Development ("SLODA") requirements.

SLODA requires that Nordic's development occur with "no adverse effect on the natural environment".[36]

Nordic claims the license for its generators acts as a bar to further inquiry regarding other emissions at the Nordic site. SLODA, however, requires analysis of all air emission impacts from the Nordic project.[37] Without evidence on all air

---

[36] SLODA's preamble states:

> **SUMMARY**: These regulations describe the scope of review of the Department in determining a developer's compliance with the "no adverse effect on the natural environment" standard of the Site Location Law (38 M.R.S.A. Section 484(3)); the information which shall be submitted, when appropriate, within an application for approval; and, the terms and conditions which the Department may impose on the approval of an application to ensure compliance with the standard.

06-096 C.M.R. c. 375 (Summary); A0711.

[37] For air pollution, SLODA provides:

> **1. No Unreasonable Adverse Effect On Air Quality**
>
> **A. Preamble**. The Department recognizes that point source emissions from certain types of commercial and industrial developments and solid waste disposal facilities and non-point source emissions deriving from industrial, commercial, and governmental developments can have an unreasonable adverse effect on air quality.

emissions from the Nordic site, it was impossible for the Board to ascertain whether or not the requirement of "no unreasonable adverse effect" was met.

Nordic's project also fails to meet SLODA's requirements on climate alteration. SLODA requires:

> **2. No Unreasonable Alteration of Climate**
>
> **A. Preamble**. The Department recognizes the potential of large-scale, heavy industrial facilities, such as power generating plants, to affect the climate in the vicinity of their location by causing changes in climatic characteristics such as rainfall, fog, and relative humidity patterns.
>
> **B. Scope of Review**. In determining whether the proposed development will cause an unreasonable alteration of climate, the Department shall consider all relevant evidence to that effect.
>
> **C. Submissions**. Applications for approval of large-scale, heavy industrial developments, such as power generating plants, shall include evidence that affirmatively demonstrates that there will be no unreasonable alteration of climate, including information such as the following, when appropriate:
>
> (1) Evidence that the proposed development will not unreasonably alter the existing cloud cover, fog, or rainfall characteristics of the area.

06-096 C.M.R. c. 375, § 2(A)-(C); A0712.

---

> **B. Scope of Review**. In determining whether the proposed development will have an unreasonable adverse effect on ambient air quality, through point or non-point sources of chemical pollutants or particulate matter, the Department shall consider all relevant evidence to that effect, such as evidence that:
>
> (1) The best practicable treatment of point sources of air pollution will be utilized and that point source emissions meet state ambient air quality standards and state emissions standards.
>
> (2) The amount of air pollution produced from either point or non-point sources of air emissions will be consistent with the Board's "Policy on Air Quality Use," adopted March 28, 1979.
>
> **C. Submissions**. Applications for approval of proposed industrial, commercial and governmental developments and solid waste disposal facilities shall include evidence that affirmatively demonstrates that there will be no unreasonable adverse effect on air quality, including information such as the following, when appropriate:
>
> (1) Evidence that an Air Emission License has been or will be obtained.

06-096 C.M.R. c. 375, § 1(A)-(C); A0711.

Despite these requirements of addressing climate impacts, the Board did not allow anyone to speak on climate impacts at the hearing. Upstream requested that climate be a hearing topic based on an offer of proof that the Governor's newly-minted climate goals would be set back a decade by the Nordic project alone, but the Hearing Officer denied Upstream's request. A0426 (Air Emission License at 18); A1050 (DI 0335, Email from Ms. Colson to Ms. Burke transmitting Upstream's preliminary issues list and suggests for site visit (Sept. 30, 2019)); A1053, A1126-A1127 (DI 0389, Third Procedural Order (Nov. 1, 2019)). The record contains no basis for the Board make any finding regarding climate under SLODA.

SLODA also requires a finding of no unreasonable adverse impact on surface water quality. SLODA requires:

> **6. No Unreasonable Adverse Effect on Surface Water Quality**
> **A. Preamble**. The Department recognizes that developments have the potential to cause the pollution of surface waters through both point and non-point sources of pollution.
> **B. Scope of Review**. In determining whether the proposed development will have an unreasonable adverse effect on surface water quality, the Department shall consider all relevant evidence to that effect, such as evidence that:
> (1) The development or reasonably foreseeable consequences of the development will not discharge any water pollutants which affect the state classification of a surface water body (38 M.R.S.A. Section 363 *et seq*.).
> (2) The best practicable treatment of point sources of water pollutants will be utilized.
> (3) Any effect on surface water temperature will be in compliance with all appropriate standards established in Department Regulations 582.1 - 582.8.

> **C. Submissions**. Applications for approval of proposed developments shall include evidence that affirmatively demonstrates that there will be no unreasonable adverse effect on surface water quality, including information such as the following, when appropriate:…

06-096 C.M.R. c. 375, § 6(A)-(C); A0716.

The Nordic proposal admits it cannot reduce nitrogen to a level established by DEP as enough to preserve the SC water quality designation in Penobscot Bay. Nordic's own data about its discharge demonstrates the discharge water will be too warm to meet the statutory requirement of remaining within 1.5 degrees Fahrenheit of the temperature of the receiving water during summer months, as required by Chapter 582, § 5. This would exacerbate the warming problem in an Ocean region reported to be already warming faster than any water body on earth.

Clearly subsections 1 and 4 of SLODA were violated by Nordic's application. The water quality in Penobscot Bay will be lowered because of Nordic's nitrogen discharge. The temperature restriction of section 4 will be violated. The water permit should not have been awarded.

Nordic failed to demonstrate compliance with Sections 1, 2, and 6 of SLODA. The record either lacks any attempt to comply with SLODA at all, or, where SLODA is addressed at all, even indirectly, the evidence is that Nordic's application fails to comply.

Nordic failed or refused to provide to the Board any demonstration that its Water and Air discharges would not present an unreasonable adverse effect" on the

air, water and other natural resources of the State of Maine without which the award of any permit is unlawful.

## VIII. CONCLUSION

For these reasons, Upstream requests that the Court find that all the permits were improperly issued and remand this matter to the DEP for further proceedings.

Dated: June 1, 2022

David B. Losee, Bar No. 6500
DAVID B. LOSEE, LLC
7 Highland Avenue
Camden, Maine 04843
(860) 707-3215
david@loseelaw.com

Attorneys for Petitioner
Upstream Watch

Dated: June 1, 2022

David J. Perkins, Bar No. 3232
David P. Silk, Bar No. 3136
CURTIS THAXTER LLC
One Canal Plaza, Suite 1000
P.O. Box 7320
Portland, ME 0412-7320
(207) 774-9000
dperkins@curtisthaxter.com
dsilk@curtisthaxter.com

Attorneys for Petitioner
Upstream Watch

## CERTIFICATE OF SERVICE

I, David J. Perkins, certify that on June 1, 2022, I caused two copies of the foregoing BRIEF OF APPELLANT UPSTREAM WATCH to be served on counsel for each of the parties listed below, by depositing the same in the United States Mail, first-class, postage prepaid, addressed as follows:

Kimberly J. Tucker, Esq.
48 Harbour Pointe Drive
Lincolnville, ME 04849
k.ervintucker@gmail.com

Ronald Schneider, Esq.
Bernstein Shur
100 MiddleStreet
P.O. Box 9729
Portland, ME 04104-5029
rschneider@bernsteinshur.com

David M. Kallin, Esq.
Melissa Hewey, Esq.
Drummond Woodsum
84 Marginal Way, Suite 600
Portland, ME 04101-2480
dkallin@dwmlaw.com
mhewey@dwmlaw.com

Laura E. Jensen, AAG
Margaret A. Bensinger, AAG
Aaron M. Frey, Attorney General
State of Maine
6 State House Station
Augusta, ME 04333-0006
Laura.jensen@maine.gov
Peggy.bensinger@maine.gov

Dated: June 1, 2022

David J. Perkins, Bar No. 3232

James Merkel
Belfast
LD 586

Please see the appellants brief before the Maine Supreme Court regarding:

The Board failed to enforce 38 M.R.S. § 590(2)(C) and 06-096 C.M.R. Chapter 115, § 7(A), which require that an applicant for an air permit demonstrate that its proposed emissions in conjunction with all other
sources, will not violate applicable ambient air quality standards

Nordic's Air License Application should have addressed all the
emissions sources at its site

The Board failed to fulfill its obligation to protect water quality under 38 M.R.S. §§ 414-A(1)(A)-(C), 464(4)(F) and the Site Law