



STATE OF MAINE  
BOARD OF ENVIRONMENTAL PROTECTION  
17 STATE HOUSE STATION  
AUGUSTA, ME 04333

**DRAFT BOARD ORDER**

**IN THE MATTER OF**

NORDIC AQUAFARMS INC. BELFAST, WALDO COUNTY, MAINE LAND BASED AQUACULTURE ME0002771 W009200-6F-A-N	) ) ) ) )	MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT AND WASTE DISCHARGE LICENSE <b>NEW</b>
<b>APPROVAL</b>		

In ~~accordance~~ ~~compliance~~ with the applicable provisions of *Pollution Control*, 38 M.R.S. §§ 411 – 424-B, *Water Classification Program*, 38 M.R.S. §§ 464 – 470, and *Federal Water Pollution Control Act*, Title 33 U.S.C. § 1251, and applicable rules of the Department of Environmental Protection (Department), the Board of Environmental Protection (Board) has considered the application of NORDIC AQUAFARMS INC. (Nordic or permittee), for a new combination Maine Pollutant Discharge Elimination System (MEPDES) permit/Maine Waste Discharge License (WDL)(collectively permit) with its supportive data, agency review comments, public hearing record, intervenor and public comments and other related materials on file and FINDS THE FOLLOWING FACTS:

**APPLICATION SUMMARY**

On October 19, 2018, Nordic submitted an application to the Department for a new MEPDES permit/WDL for the monthly average discharge of 7.7 million gallons per day (MGD) of treated wastewater associated with a land based recirculating aquaculture system (RAS) to Belfast Bay, Class SB, in Belfast and Northport, Maine. Nordic also submitted and the Department accepted applications for Site Law and Natural Resources Protection Act permits and a Chapter 115 Air Emissions License. The permittee proposes to rear Atlantic salmon from the egg life stage to market size fish weighing 10-12 pounds. At full production, the facility will be able to produce 30,000 metric tons or 66 million pounds of fish per year. The permittee proposes to construct a fish processing facility (head-on, gutted) on-site.

Nordic proposes to construct the facility in two phases. Phase I will consist of infrastructure connection to the site, earth moving, construction of the smolt facility, ~~the water~~ and the waste water treatment systems, ~~three (3) grow out modules, a processing facility~~ and the intake and discharge pipes. The permittee estimates that Phase I will take 12-15 months to complete. Following the completion of Phase I construction, Phase II construction will consist of constructing ~~three (3) grow-out modules and the visitor center. and the processing facility.~~ The permittee estimates Phase II construction will take another 12 months.

**APPLICATION SUMMARY (cont'd)**

At the request of Nordic, on June 20, 2019, the Board voted to assume jurisdiction of the MEPDES permit/WDL and other applications. Between February 11 and February 14, 2020, the Board held an adjudicatory hearing in Belfast on Nordic's applications.

On May 20, 2020, the Board held a deliberative session on the MEPDES permit/WDL application and other applications.

On ~~August~~ ~~September~~ 13, 2020, the Board made the Department staff's draft recommended decision on MEPDES permit #ME0002771/Maine Waste Discharge License #W009200-6F-A-N available for a formal 30-day public comment period. On September 24, 2020, the Board of Environmental Protection, via its Twenty-First Procedural Order, granted certain commenters an extension of the comment period until October 5, 2020 to amend the relevant portion of their previous submittals, or file an additional comment, to correct or augment their comments regarding nutrient removal percentages<sup>1</sup>. All comments received on the draft recommended Board Order were reviewed and considered by staff of the Department and the Board. A response to comments section can be found in the attached Fact Sheet.

**PERMIT SUMMARY**

This permit establishes:

1. Technology-based numeric limitations for flow, biochemical oxygen demand (BOD), total suspended solids (TSS) and pH;
2. A requirement to seasonally (May – October) monitor the effluent for total phosphorus, total ammonia, total kjeldahl nitrogen, nitrate + nitrite nitrogen;
3. A monthly average water quality-based mass limitation for total nitrogen;
4. A requirement for the permittee to conduct a dye study to more accurately determine the mixing characteristics of the treated effluent discharge from the facility with the receiving water;
5. A requirement to conduct seasonal (May – October) ambient water quality monitoring at five (5) stations in Belfast Bay as well as deploy a minimum of two Acoustic Doppler Current Profilers (ADCPs) to gather more information on the currents and the behavior of tidal exchanges in the near-field and far-field;
6. A requirement for the facility to develop and maintain an Operations & Maintenance (O&M) Plan for the production facility and the wastewater treatment facility;

<sup>1</sup>These commenters were Nordic; Upstream Watch; Northport Village Corporation; Jeffrey R. Mabee, Judith B. Grace, and Lobstering Representatives, and Friends of the Harriet L. Hartley Conservation Area; and Kristina Debye.

**PERMIT SUMMARY (cont'd)**

7. A requirement to limit the use of antibiotics, fungicides, bactericides, parasiticides and other chemical compounds;
8. A requirement for the facility to develop and maintain a Containment Management System (CMS) to prevent escape of fish from the facility; and
9. Best practicable treatment (BPT) and General Reporting requirements consistent with National Effluent Guidelines (NEG) found at 40 Code of Federal Regulations (CFR), Part 451 – *Concentrated Aquatic Animal Production Point Source Category*.
10. A requirement for the permittee to meet with the Department's permitting and compliance inspection staff 90 days prior to commencement of operations, to review the permit limitations, monitoring requirements and reporting requirements.

**CONCLUSIONS AND FINDINGS**

BASED on the findings in the attached **PROPOSED DRAFT** Fact Sheet dated August 13, 2020, and revised on November 2, 2020, subject to the Conditions listed below, the BOARD makes the following CONCLUSIONS AND FINDINGS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below its classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with State law.<sup>2</sup>
3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S. § 464(4)(F), will be met, in that:
  - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;<sup>3</sup>

<sup>2</sup> The Board finds the receiving waters for this discharge are classified as SB. See 38 M.R.S. § 469; pages 10 and 11 of the Fact Sheet. The Board is not aware of any unclassified water bodies that will be affected by this discharge.

<sup>3</sup> The Board finds the receiving waters for this discharge do not constitute an outstanding national resource. See 38 M.R.S. § 465-B.

**CONCLUSIONS AND FINDINGS (cont'd)**

- (c) Where the standards of classification of the receiving waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification;<sup>4</sup>
  - (d) Where the actual quality of any classified receiving waterbody exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected;<sup>5</sup> and
  - (e) Where a discharge will result in lowering the existing water quality of any waterbody, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.<sup>6</sup>
4. The discharge will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S. § 414-A(1)(D).
  5. Pursuant to the Board's interpretation of the Department's Chapter 2 regarding title, right or interest (TRI), the Board finds that the applicant has made a sufficient showing of TRI to develop the property as proposed. As the Department found in its June 13, 2019 acceptance letter, the deeds and other submissions, including Nordic's options to purchase, and the analysis of the chain of title remain unchanged and remain a sufficient showing for the Board to take action on the application.

The basis for the above conclusions and findings is contained in the attached Fact Sheet.

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<sup>4</sup> The Board finds the receiving waters for this discharge meet the standards of classification.

<sup>5</sup> The Board finds the receiving waters for this discharge do not exceed the minimum standards of the next highest classification.

<sup>6</sup> As explained on pages 36 and 37 of the Fact Sheet, the Board finds Nordic's discharge, as conditioned, will not result in the lowering of existing water quality. The additional requirements of this subparagraph have therefore not been triggered.

**ACTION**

THEREFORE, the BOARD APPROVES the application of NORDIC AQUAFARMS INC. to discharge a monthly average flow of 7.7 MGD of treated wastewater associated with a land-based RAS to Belfast Bay, Class SB in Belfast and Northport, Maine, subject to the attached conditions and all applicable standards and regulations:

1. *“Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable to All Permits,”* revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act, 5 M.R.S. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A)* (last amended June 9, 2018)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS \_\_\_ DAY OF \_\_\_\_\_ 2020.

~~BOARD DEPARTMENT~~ OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
Robert Duchesne, Presiding Officer, Board of Environmental Protection

Date of initial receipt of application October 19, 2018

Date of application acceptance November 9, 2018

Date filed with Board of Environmental Protection \_\_\_\_\_

This Order prepared by Gregg Wood, Bureau of Water Quality  
ME0002771 2020 10/2/2020 16:00