



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION, AUGUSTA, MAINE 04333-0017

BOARD ORDER

IN THE MATTER OF

NORDIC AQUAFARMS, INC) APPLICATIONS FOR AIR EMISSION,
Belfast and Northport) SITE LOCATION OF DEVELOPMENT,
Waldo County, Maine) NATURAL RESOURCES PROTECTION ACT, and
) MAINE POLLUTANT DISCHARGE ELIMINATION
A-1146-71-A-N) SYSTEM (MEPDES)/WASTE DISCHARGE LICENSE
L-28319-26-A-N)
L-28319-TG-B-N)
L-28319-4E-C-N) SEVENTEENTH PROCEDURAL ORDER
L-28319-L6-D-N)
L-28319-TW-E-N)
W-009200-6F-A-N)

The Board of Environmental Protection (Board) held an adjudicatory hearing in Belfast from February 11 through February 14, 2020 on Nordic Aquafarms, Inc.'s (Nordic's) applications for permits for an Atlantic salmon land-based aquaculture facility proposed to be located in Belfast and Northport. The Board held a deliberative session by teleconference on May 20, 2020 to discuss the record and relevant licensing criteria with staff. This procedural order rules on two matters involving the deliberative session: 1) a request that the Board stay its proceedings and require Nordic to file a separate Maine Pollution Discharge Elimination System (MEPDES) application for that portion of Nordic's proposed project that involves dredging in the coastal wetland and the management and disposal of dredge spoils, and 2) Department staff's revision of the far-field dilution factor for effluent from the proposed facility and a motion to strike that revision.

1. Renewed Motion to Stay Proceedings

On May 21, 2020, Intervenors Jeffrey R. Mabee, Judith B. Grace, and Lobstering Representatives (MGL)¹ filed "Renewed Motion for Stay Pending Applicant NAF's Submission of: Amended NRPA and MEPDES Pipeline Applications; a separate MEPDES Application for Dewatering of Dredge Spoils 'at Mack Point' and/or [o]n Route to Mack Point; and Completion of Mandated Sediment Testing along the Actual Project Area Pursuant to § 480-E(3) Requirements."

In its Sixteenth Procedural Order the Board denied a previous request filed by MGL to stay these proceedings and require Nordic to file a separate MEPDES permit application for activities related to dredging and transporting dredge spoils. MGL is renewing that motion based on a comment made by Department staff during the deliberative session. In support of its renewed motion MGL attached the following documents: March 9, 2020 letter from Jackie Leclair, U.S. EPA Region 1, to Peter Tischbein, U.S. Army Corps of Engineers, commenting on Nordic's applications; Dr. Dianne Kopec's

¹ The motion states that it was also submitted on behalf of the Friends of the Harriet L. Hartley Conservation Area (HLHCA). This organization is not a party to the proceeding; its petition for intervenor status was filed on February 10, 2020 and was denied on February 11, 2020 in the Eleventh Procedural Order.

March 2, 2020 Comments to the Maine Department of Marine Resources (DMR); Excerpts from “Water Management During Mechanical Dredging of Contaminated Sediment” by Paul F. Fuglevand and Robert S. Webb; and January 30, 2019 letter from then DEP Acting Commissioner Loyzim to Kim Ervin Tucker regarding the decision to refer Nordic’s applications for Board jurisdiction. In the motion, MGL renews its arguments that the Clean Water Act and Title 38 M.R.S. § 480-E require, among other things, sampling along the pipeline route and a separate MEPDES application for dewatering of dredge spoils.

Following the deliberative session, by email dated May 22, 2020, Department staff commented that the staff’s statement during the deliberative session did not refer to Nordic’s proposed dredging or transport to land of the dredge spoils but rather to permits that may be required if Nordic were to propose a land-based dredge spoils dewatering site.

Ruling: The renewed motion for a stay of proceedings is denied. Confusion over a statement made by staff during the deliberative session does not alter the legal analysis of the requirements of the Clean Water Act and Department statutes pertaining to dredging as set forth in the Sixteenth Procedural Order.

2. Revision of the Far-Field Dilution Factor for Proposed Wastewater Discharge and Motion to Strike

Department staff prepared several briefing memoranda for distribution to Board members prior to the deliberative session to facilitate the discussion of the applications. In the briefing memorandum addressing Nordic’s MEPDES/Waste Discharge application, staff reviewed several parameters including Nordic’s determination of a near-field acute dilution factor of 10:1, near-field chronic dilution factor of 15:1, and far-field dilution factor of 300:1. As set forth in the staff memorandum, application of the far-field 300:1 dilution factor cited in the application indicates that a mass limitation based on a 12 mg/L discharge concentration for total nitrogen would be required for the proposed discharge to use no more than 20% of the remaining assimilative capacity of the waterbody for nitrogen, meaning that a potential license could contain up to a mass limitation based on a 12mg/L concentration for total nitrogen without triggering additional requirements in the state’s antidegradation laws and policy.

Following distribution of the staff memorandum on May 15, 2020, Nordic contacted Department staff and raised questions regarding the Department’s far-field analysis and application of the 300:1 dilution factor.

Department staff subsequently reexamined Nordic’s application materials and pre-filed testimony, including Figure 2. *Time series of areal dilution distribution within region containing diluted effluent with median age between 1.5 days and 2.5 days old*, in the November 3, 2019 memorandum from Nathan Dill to Nordic Aquafarms (Nordic Pre-Filed Direct Testimony, Exhibit 23, Figure 2), and determined that the far-field dilution factor of 300:1 represents the lowest value of the median time series line rather than the mean. As explained during the deliberation session, the Department’s practice is to use a more normalized condition, such as the mean, for far-field dilution factor purposes. The rationale for the Department’s use of a more normalized condition in this context is because it more accurately reflects the impact (or lack thereof) of nitrogen on the receiving water given the longer response times (3-14 days) associated with nitrogen discharges. Based on its review of the Nordic application and pre-filed materials, Department staff determined that a far-field dilution factor of approximately 530:1 is more reflective of such a mean figure and thus appropriate for assessing the impact of Nordic’s proposed discharge on the receiving waters.

At the deliberative session, Department staff reviewed the briefing memorandum with Board members and explained that, after Nordic contacted staff to point out its view that the data in the record had been misinterpreted, the data was more closely examined. Staff stated to the Board that the appropriate far-field dilution factor for use in determining the concentrations of pollutants such as nitrogen from Nordic's proposed discharge should be approximately 530:1 rather than 300:1. Staff explained that application of the 530:1 dilution factor indicates that a discharge concentration of 21 mg/L total nitrogen would use no more than 20% of the remaining assimilative capacity of the waterbody for nitrogen.

After the deliberative session, representatives of intervenors MGL and Upstream Watch inquired about Department staff's revision to its far-field dilution factor analysis and recommendations and communications that staff may have had with the applicant regarding the analysis.

On May 26, 2020, Upstream Watch (Upstream) filed "Upstream Watch's Motion to BEP/DEP to Strike Testimony of Gregg Wood Relating to Total Nitrogen at Deliberative Hearing." In its motion, Upstream argues that Department staff's communication with Nordic and/or its representatives constituted *ex parte* communications that introduced new evidence into the record, information that intervenors were not notified of and did not have an opportunity to comment on, in a manner contrary to the Maine Administrative Procedure Act, Department rules, and the Procedural Orders governing the Board's review of Nordic's applications. Upstream asserts that there is no evidence in the record that supports use of a far-field dilution factor other than 300:1, that staff's statements during the deliberative session should be stricken from the record, and staff's assessment regarding total nitrogen should remain as stated in the briefing memorandum distributed on May 15, 2020.

By electronic mail dated May 26, 2020, Intervenor MGL joined Upstream's motion.

Ruling: The staff's analysis of the application as presented in its briefing memorandum was for the purpose of Board and staff discussion, and revisions to that analysis are acceptable at this stage of the Board's process.² Nordic's alerting of Department staff to a possible misunderstanding of the data in the application is neither an unlawful nor an inappropriate *ex parte* communication as Department staff people are not the decisionmakers in this matter. Representatives of the applicant and the intervenors have communicated with the Department staff throughout this proceeding before and after the record closed. Such communications are expressly permitted in the Department's procedural regulations. See Department Rule Chapter 3, Section 5. However, to allow all parties to have an opportunity to be heard on this issue, this Order will provide for a limited re-opening of the record pursuant to Chapter 3, § 4(C)(9) and § 24.

The existing record contains the graph referenced above (Figure 2) supporting both the 300:1 and 530:1 dilution factors discussed by staff in the deliberations, but the record does not contain Nordic's pre-deliberation communications with staff regarding application of the 300:1 dilution factor. The record will be re-opened to include those communications, and the intervenors will be permitted to comment on the communications and the Department's interpretation of the far-field dilution data. To ensure the accuracy of the calculations, the Board requests that Nordic submit the technical data underlying the graph in Figure 2 that is described above for inclusion in the record. The intervenors may also comment on the underlying data provided.

² Upstream's motion characterizes DEP staff person Greg Wood's discussion with the Board during the deliberation as testimony and argues that the parties should be permitted to cross-examine Mr. Wood. DEP staff does not testify; it assists and advises the Board in a non-advocate capacity and thus cross-examination is not appropriate.

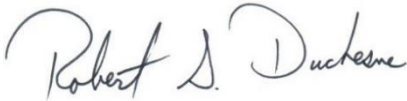
Use of the correct far-field dilution factor is central to a determination of a reasonable opportunity for dilution, diffusion, or mixture with the receiving waters pursuant to 38 M.R.S. § 451, and subsequently whether Nordic's proposed discharge would meet licensing criteria. To ensure that the record is clear and accurate with regard to the far-field dilution factor and nitrogen limit calculations, the record is therefore re-opened for the limited purpose of receiving the following information:

- a) the pre-deliberation communications from Nordic and/or its representatives with Department staff pertaining to the far-field dilution factor;
- b) the technical data underlying *Figure 2. Time series of areal dilution distribution within region containing diluted effluent with median age between 1.5 days and 2.5 days old*, in the November 3, 2019, memorandum from Nathan Dill to Nordic Aquafarms (Nordic Pre-Filed Direct Testimony, Exhibit 23, Figure 2); and
- c) comments by the intervenors on the appropriate far-field dilution factor and comments on the new underlying data submitted by Nordic.

The deadline for Nordic to provide the requested underlying data for Figure 2 is Friday, May 29, 2020 at 5:00 p.m. The deadline for intervenors to comment on that submission by Nordic and the appropriate dilution factor is Friday, June 12, 2020 at 5:00 p.m. The parties must restrict their submissions to these items. The Department will provide to the Service List the communications with Nordic and/or its representatives regarding the far-field dilution factor that occurred after distribution of the briefing memorandum on May 15, 2020.

DONE AND DATED AT AUGUSTA, MAINE THIS 28th DAY OF MAY, 2020.

BOARD OF ENVIRONMENTAL PROTECTION



BY: _____
Robert S. Duchesne, Presiding Officer