

STATE OF MAINE
BOARD OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF

NORDIC AQUAFARMS, INC

Belfast and Northport
Waldo County, Maine

A-1146-71-A-N

L-28319-26-A-N

L-28319-TG-B-N

L-28319-4E-C-N

L-28319-L6-D-N

L-28319-TW-E-N

W-009200-6F-A-N

) APPLICATION FOR AIR EMISSION, SITE
) LOCATION OF DEVELOPMENT,
) NATURAL RESOURCES PROTECTION
) ACT, and MAINE POLLUTANT
) DISCHARGE ELIMINATION
) SYSTEM/WASTE DISCHARGE LICENSES
)
)
)
)
)
)

PRE-FILED DIRECT TESTIMONY OF BRETT DOYON OF MAINE DRILLING &
BLASTING

1. I am Brett Doyon of Maine Drilling & Blasting with 10 years of experience in the drilling and blasting industry.
2. My role in the project is to review drilling and blasting impacts on the neighboring structures to the project, as well as to provide a blasting plan for the project that meets the Maine DEP standards.

The blasting plan was provided to Nordic Aquafarms in April of 2019 and a blast assessment of the project was also provided at that time. In our blast plan we detail the means and methods that would be used while blasting on the project to reduce impacts to neighboring structures and features. These methods include limiting the pounds of explosives per delay, using blasting mats to cover the blasts, offering pre blast surveys to neighboring structures, and monitoring all blasts with seismographs at the nearest off site structure.

3. In addition to the supplied blast plan and assessment, in October of 2019, I was asked to address ME DEP comments on the blasting plan on behalf of Nordic Aquafarms, Inc. This comment was:

2) Blasting

- a) The cover letter describing the blast plan assessment for this project is somewhat incomplete regarding the Department ground vibration standards. The standard of 1.25 in/sec applies only to certain distances and for blasts designed with a specific scaled distance value, as described in Table 1 of 38 MRS §490-Z(14)(K). The ground vibration standard of USBM RI 8507, Appendix B, Figure B-1 shows variable particle velocities depending on the frequency, and varies from 2.00 in/sec to slightly less than 0.2 in/sec at very low frequencies; the applicant has agreed in the "Blast Vibration & Air-Blast" section of the plan to comply with that standard. Note also that the language regarding air overpressure limits in this section of the proposed plan can be read to limit the developer to a total of four blasts; 38 MRS §490-Z(14)(H) reduces the air overpressure limit based on the number of blasts per day, so that the 123 dB limit applies to cases of four or more blasts per day.

4. My response addressed this question as follows:

From 38 MRS §490-Z 14. I. it states that the limits in Table 1 of Paragraph K and the "Bureau of Mines Report of Investigations 8507," Appendix B, Figure B-1 both must not be exceeded. We plan to use seismic monitoring at the nearest off site location for the project. Our plan is stating that we will use the "Bureau of Mines Report of Investigations 8507," Appendix B, Figure B-1 limits and we will not exceed the maximum peak particle velocities based on the distances listed in Table 1 of Paragraph K for blasting.

In the standard on air blast from 38 MRS §490-Z 14. G, the statute limits us to 4 blasts a day and paragraph H limits us to the decibel levels that we provided. It was not our intent to limit the total number of blasts on the project to 4. The intent of our plan was to match the statute and limit us to 4 blasts daily at the lowering decibel levels provided.

The intent of our blast plan is to comply with all Maine DEP blasting standards.

[INTENTIONALLY LEFT BLANK]

Dated December 6, 2019

By. Brett Doyon



STATE OF ME
County of Somerset ss.

12 6, 2019

Personally appeared the above-named Brett and made oath as to the truth of the foregoing pre-filed testimony.

Before me,



Notary Public / Attorney at law



Engineer Profile

Brett Doyon, P.E. – Project Engineer

Bravo

I. Work History

- Maine Drilling & Blasting
 - Project Engineer - October 2018 to Present
 - Field Engineer - January 2015 to October 2018

- Walsh Construction
 - Project Engineer - July 2013 to December 2014

- Maine Drilling & Blasting
 - Field Engineer - May 2009 to July 2013

II. Training and Education

- Maine Drilling and Blasting
 - OSHA 30 – 08/27/13
 - Driller I and II - 08/03/2016

III. Projects

- Holtwood Hydroelectric Redevelopment Project, Holtwood, PA
- Winslow Fish Elevator, Winslow, ME
- York Toll Plaza, York, ME

IV. Additional Information

- ATFE Employee Possessor Clearance
- BS in Civil Engineering from The University of Maine, May 2009
- Professional Engineer license (PE), State of Maine