



STATE OF DELAWARE

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF CLIMATE, COASTAL AND ENERGY

STATE STREET COMMONS

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**COASTAL
PROGRAMS**

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TECHNICAL RESPONSE MEMORANDUM

TO: Lisa A. Vest, Hearing Officer, Office of the Secretary

THRU: Kim Cole, Division Director
Jesse Hayden, Administrator

FROM: Eddie Meade, Environmental Scientist IV

DATE: October 6, 2025

SUBJECT: Technical Response Memorandum
North Fish USA Inc. Coastal Zone Act Standard Permit (Docket #2025-P-CCE-0012)

This technical response memorandum (TRM) was prepared at the request of the presiding Hearing Officer to assist in the completion of the Hearing Officer's Report and recommendations to the Secretary of the Delaware Department of Natural Resources and Environmental Control (DNREC). The TRM provides the information necessary to inform the final decision on the Coastal Zone Act (CZA) Standard Permit application submitted by North Fish USA, Inc. ("North Fish").

North Fish proposes to manufacture up to 3,096 tons/year of smoked fish in an existing building at 200 Centerpoint Boulevard, New Castle, Delaware. Deliveries to North Fish would include fresh and frozen fish, which would then be cleaned, gutted, and stored in brine tanks. After brining, the fish would be allowed to dry and then would be smoked at either 90°F for "cold smoking" or 165°F for "hot smoking". A public comment period was initiated for this matter on July 30, 2025, through September 5, 2025, with a public hearing on August 21, 2025.

On Tuesday, September 9, 2025, Hearing Officer Lisa A. Vest requested a formal response to public comment made during the open public comment period. Specifically, Hearing Officer Vest requested a thorough investigation of issues raised by the public comments and development of a hearing record of decision to assist and support the Secretary's final decision. This memorandum provides the requested information and a recommendation from staff regarding permit issuance.

A total of sixteen (16) comments were received during the public hearing and public commenting period. The comments received are summarized below with Department responses:

1. Commentors expressed concerns about potential strains to the local municipal water supply and sewer system. This includes concerns about the volume of water being used in the manufacturing of the smoked fish and the salt in the water used in the brining process being discharged into the New Castle County's sewer system.

North fish has received a permit from the New Castle County allowing them to draw approximately 14,000 gallons of water per day from the municipal water supply to be used in the manufacturing of the smoked fish. Additionally, page 123 of the permit application submitted by North Fish includes correspondence with the acting Pretreatment Coordinator from New Castle County. In this correspondence, the Pretreatment Coordinator states that there will be no issues associated with the saltwater discharge into the municipal sewer system and has granted North Fish permission to do so.

2. Multiple comments expressed concerns about the potential impacts of noxious odors generated by the processing of the fish products.

North Fish submitted an odor control plan as a component of the CZA application. This odor control plan was based on previous odor control plans that North Fish has utilized at other facilities and includes the following:

- All organic waste, including fish byproducts, will be disposed of in durable, 2-cubic-yard plastic containers.
- Layers of baking soda will be applied to the bottom of the waste container and between each layer of organic waste.
- The organic waste containers will be washed out and sanitized at least once every three days.
- The organic waste will be picked up and removed twice per day.
- Absolutely no organic waste will be left in the 2-cubic-yard plastic containers overnight.

Data from a study included in the submission material states that the application of an ounce of baking soda for every pound of waste can significantly reduce odor emissions.¹ This equates to 125 pounds of baking soda per ton of waste and will be the minimum application rate that North Fish will be required to utilize in the dumpsters. The EPA's

¹ [Preliminary observation on the effect of baking soda volume on controlling odour from discarded organic waste - ScienceDirect](#)

Biosolids and Residuals Management Fact Sheet claims that wet scrubbers can reduce odor emissions by approximately 50%.² This reduction corresponds to the level of odor reduction described in the manufacturer specifications for the wet scrubber that North Fish will be installing to mitigate pollutants. Additional supporting documentation recommends minimizing the time that doors, windows, and other points of ingress and egress are allowed to remain open.³

To further address odor concerns, DNREC is considering the following permit conditions in addition to the odor control plan that was provide in the application:

- Only fully functional and intact durable plastic waste containers shall be utilized at all times.
- Baking soda shall be applied to the bottom of the waste container and on top of each layer of organic waste at a minimum rate of 125 lbs of baking soda for every ton of waste such that no organic waste is directly exposed to the atmosphere while the container lid is open
- Dumpster lids must be closed and locked when not in use to prevent wildlife from accessing the fish waste and to minimize open air exposure.
- Doors, windows, and delivery truck bays must remain closed when not in use.

Odor concerns can be reported to DNREC by calling 1-800-662-8802.

3. Commentors expressed concerns that the manufacturing of smoked fish would bring about potential environmental and health impacts associated with a degradation in air quality.

As part of the CZA application process, North Fish was required to identify the specific components of the proposed manufacturing process that could result in any negative environmental impacts. Applicants are required to more than offset the negative environmental impacts that cannot be entirely mitigated. The proposed activity will result in the emission of particulate matter (PM) and volatile organic compounds (VOCs). Emissions were calculated utilizing EPA Publication AP-42 for smokehouses. EPA Publication AP-42 also states that using a wet scrubber can result in a reduction of PM emissions by 69% and a reduction of VOCs by 85%.⁴ These reductions correspond to the manufacturing specifications of the wet scrubber that North Fish is proposing to utilize.

² [EPA 832-F-00-067 - September 2000](#)

³ [Final - General EHS Guidelines APRIL 29.doc](#)

⁴ [AP-42, Vol. 1, Final Background Document for Meat Smokehouses, Section 9.5.2](#)

To offset the remaining PM and VOC emissions, North Fish has proposed to plant trees in the surrounding business park as outlined in the offset proposal. These trees will be a mix of 4 to 5-year-old (approximately 5-6 feet tall) native black cherry (*Prunus serotina*), loblolly pine (*Pinus taeda*), and scarlet oak (*Quercus coccinea*). All of the pine trees and three of the deciduous trees will be planted along the perimeter of the parking lot abutting the closest residential area. Data from several studies demonstrate that trees have the potential to physically trap PM on their leaves and bark.^{5,6} These studies also detail how the trees allow for the growth of beneficial microorganisms which remove VOCs from the atmosphere.⁷ Additionally, the planting of trees would result in the removal of up to 0.48 tons per year of CO₂ offsetting the emissions from the proposed manufacturing process at a ratio of 1.33:1.

To ensure that the potentially negative environmental impacts on the environment and human health are mitigated and offset, DNREC is considering the following permit conditions:

- North Fish shall maintain a functional wet scrubber for the manufacturing process including implementing the appropriate cleaning protocols recommended by the manufacturer.
- North Fish will be required to monitor tree health annually and provide a report to the Department every 5 years.
- The trees planted for the offset shall be maintained for optimal health. North Fish shall replace any tree that does not survive to the same specifications as noted in the offset plan (i.e., size, age, class, species, etc.). Any replacement trees shall be planted during the next viable planting season.

4. Commentors expressed concerns about potential impacts to local water bodies, including the nearby stormwater retention pond and local estuaries.

No wastewater from the fish smoking process will be directly discharged from the building where North Fish is proposing to conduct activities to the retention ponds or local estuaries. The water used in processing of the fish would be drained into the local sewer system after passing through a grease trap on the inside of the building. These grease traps will be cleaned out once per month. Additionally, the washing of the dumpsters would also occur inside the existing building in a designated washroom which drains into the New Castle

⁵ Nowak et al. (2013): Modeled PM_{2.5} removal by trees in ten U.S. cities and associated health effects.

⁶ Nowak et al. (2014): Tree and forest effects on air quality and human health in the United States.

⁷ Tian, H., et al. (2016): The terrestrial biosphere as a net source of greenhouse gases to the atmosphere.

County sewer system. North Fish has provided documentation from New Castle County that grants permission to the applicant to discharge this wastewater into the sewer system.

5. Commenters expressed concerns about the applicant moving equipment into the building without having a permit.

A CZA permit is required for the manufacturing of the smoked fish. No manufacturing of smoked fish by North Fish can take place prior to obtaining a CZA permit. The equipment and/or machinery's presence at the facility has no bearing on the merit of the permit's approval or denial. If North Fish is denied a CZA permit, no equipment or machinery involved in the manufacturing process may be utilized.

6. Multiple commentors stated that notifications regarding the proposed activities were insufficient, and that there was not enough time given to the local community to provide comments.

Public notice for the North Fish hearing was posted in The News Journal, the Daily State News, and the DNREC public notices website on August 1, 2025, twenty days prior to the hearing pursuant to 7 DE Admin Code 101 Section 15. Versions were made available in both English and Spanish on the DNREC public notices website, and the notices were posted in the New Castle and Route 9 public libraries. A direct email was also sent out to subscribers on the CZA listserv. Additionally, the hearing was added to the Delaware Public Meeting Calendar on July 29, 2025. Through these actions, the Department has met the public notice requirements dictated by the Coastal Zone Act and the Regulations Governing Delaware's Coastal Zone.

7. Several comments were received in support of North Fish's application.

Recommendation:

Based upon the Department's review of the application for the proposed project, the offset proposal, coordination with subject matter experts within the Department, and the testimony provided at the public hearing, the Coastal Zone Act program finds that the proposed activity by North Fish at 200 Centerpoint Boulevard in New Castle, Delaware meets the criteria and standards set forth in the *Regulations Governing Delaware's Coastal Zone* and recommends issuance of the permit.