

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
ONE CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES PURSUANT TO THE
CLEAN WATER ACT (CWA)

NPDES PERMIT NUMBER: **ME0110485**

PUBLIC NOTICE START AND END DATES:

NAME AND MAILING ADDRESS OF APPLICANT:

**Atlantic Pelagic Seafood, LLC
#2 Portland Fish Pier S-210
Portland, ME 04101**

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

**M/V American Freedom
Floating Processor in Atlantic Ocean**

RECEIVING WATER(S): **Atlantic Ocean- Canadian Boarder to Cape Hatteras, NC**

SIC CODE: **2092 (Prepared Fresh or Frozen Fish and Seafoods)**

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I. Proposed Action, Type of Facility, and Discharge Location

The above applicant has applied to the U.S. Environmental Protection Agency (EPA) for issuance of a National Pollutant Discharge Elimination System (NPDES) permit to discharge into the designated receiving water. The marine vessel American Freedom is a floating seafood processor that engages in the processing and freezing of Atlantic Herring (*Clupea harengus*) and Atlantic Mackerel (*Scomber scombus*). The discharge from this facility consists of fish waste (known as 'offal'), process seawater, and disinfectant wash-water through Outfall 001.

II. Description of Discharge

The processing of herring and mackerel aboard the M/V American Freedom produces a waste stream that is similar in nature to that of a typical seafood processing facility. The significant wastewater parameters for this industry are biochemical oxygen demand (BOD), total suspended solids (TSS), and oil & grease (Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the ... Seafood Processing Industry Point Source Category. U.S. Environmental Protection Agency. EPA 440/1-75/041a. September 1975). In addition, the discharge will contain wash-water, including EPA-approved disinfectants added to facilitate the removal of wastes and to maintain sanitary standards during processing or to sanitize seafood processing areas.

III. Receiving Water Description

The waters of the Atlantic Ocean beyond state jurisdiction are federal waters and are not subject to state water quality standards. They are, however, subject to the federal ocean discharge criteria as provided in Section 403 of the Clean Water Act (CWA). The Ocean Discharge Criteria establish guidelines for permitting discharges into the territorial seas, the contiguous zone and the ocean. EPA conducts an Ocean Discharge Criteria Evaluation, or "ODCE," using criteria established in accordance with CWA § 403. EPA decides on the basis of available information whether or not the discharge will cause unreasonable degradation of the marine environment and subsequently whether or not a permit should be issued. 40 CFR § 125.121 states "unreasonable degradation of the marine environment" means:

1. Significant adverse changes in ecosystem diversity, productivity, and stability of the biological community within the area of discharge and surrounding biological communities;
2. Threat to human health through direct exposure to pollutants or through consumption of exposed aquatic organisms; or
3. Loss of aesthetic, recreational, scientific or economic values which is unreasonable in relation to the benefit derived from the discharge.

CWA § 403(c) guidelines require that a number of factors be considered in the determination of unreasonable degradation. These factors include the amount and nature of the pollutants, the potential transport of the pollutants, the character and uses of the receiving water and its

biological communities, the existence of special aquatic sites (including parks, refuges, etc.), any applicable requirements of an approved Coastal Zone Management plan, and potential impacts on water quality, ecological health and human health.

The discharge consists largely of conventional pollutants in manageable quantities and discharges to areas not considered sensitive or unique. After consideration of these factors in a Clean Water Act Section 403 (c) Ocean Discharge Criteria Evaluation (see Attachment C), EPA has determined that discharges authorized by the Permit and discharged in accordance with the requirements of the Permit will not cause unreasonable degradation of the receiving waters.

A. Receiving waters covered by the Permit

The Permit authorizes discharges of specified pollutants to marine federal waters past the three (3) nautical mile limit of state waters and between 35° 00.0' N and 45° 00.0' N. This does not include those areas excluded from coverage as protected, special, or at-risk water resources as described in Part III.B (see Attachment A).

B. Receiving waters not authorized by the Permit

Discharges are explicitly not authorized under the Permit to receiving waters which have been identified as protected, special, at-risk or degraded water resources. The areas excluded from coverage under the Permit include the following protected, special, or at-risk water resources and waterbodies.

1. Waters within one (1) nautical mile of the boundary of a Marine Sanctuary are excluded from coverage by the Permit. The National Ocean and Atmospheric Administration (NOAA) has identified two marine sanctuaries that are within the boundaries of the receiving water. These include:
 - a. Stellwagen Bank National Marine Sanctuary. The Sanctuary encompasses a total of 638 square nautical miles and includes all of Tillies Bank and southern portions of Jeffreys Ledge. The Sanctuary boundary is marked by the following coordinates, which indicate the northeast, southeast, southwest, west-northwest, and north-northwest points: 42°45'59.83"N x 70°13'01.77"W (NE); 42°05'35.51"N x 70°02'08.14"W (SE); 42°07'44.89"N x 70°28'15.44"W (SW); 42°32'53.52"N x 70°35'52.38"W (WNW); and 42°39'04.08"N x 70°30'11.29"W (NNW).
 - b. Monitor National Marine Sanctuary. The Sanctuary consists of a vertical water column in the Atlantic Ocean one mile in diameter extending from the surface to the seabed, the center of which is at 35°00'23" north latitude and 75°24'32" west longitude.
2. Waters within one (1) nautical mile of Critical Habitat as designated pursuant to Section 4 of the ESA are excluded from coverage by this Permit. In the receiving water, these include the following waters designated as critical habitat for the northern right whale (*Eubalaena glacialis*) (see 50CFR§226.203):

- a. Great South Channel (east of Cape Cod) 210 square nautical miles between the western part of Georges Bank and the Nantucket Shoals. This area is bounded by the following coordinates, which indicate the northwest, southwest, southeast, and northeast points: 41°00'N x 69°05'W (NW); 41°40'N x 69°45'W (SW); 41°38'N x 68°13'W (SE); and 42°10'N x 68°31'W (NE).
 - b. Cap Cod Bay as marked by the following coordinates, which indicate the east-northeast, north-northeast, northwest, and southwest points: 42°04.8'N x 70°10'W (ENE); 42°12'N x 70°15'W (NNE); 42°12'N x 70°30'W (NW); 41°46.8'N x 70°30'W (SW); and on the south and east by the interior shore line of Cape Cod, Massachusetts.
3. Waters within one (1) nautical mile of a Habitat Area of Particular Concern (HAPC) are excluded from coverage by this Permit. HAPC for juvenile Atlantic cod is marked by the following coordinates, which indicate the northwest, northeast, north-southeast, east-southeast, south-southeast, and southwest points: 42°10'12"N x 67°19'48"W (NW); 42°10'12"N x 67°9'0"W (NE); 42°0.0'N x 67°1'12"W (NSE); 42°0.0'N x 67°10'12"W (ESE); 41°51.0'N x 67°10'12"W (ESE); and 41°51.0'N x 67°19'48"W (SSE).
 4. Waters within one (1) nautical mile of a sheltered waterbody such as bays, harbors, inlets, coves, lagoons, rivers, and semi-enclosed water basins.
 5. State waters within the designated three (3) nautical mile boundary are excluded from coverage by this permit. In the event the facility plans to discharge within state waters, the permittee must obtain an NPDES permit from the appropriate NPDES delegated permitting authority.

IV. Limitations and Conditions

The effluent limitations of the draft permit, the monitoring requirements, and any implementation schedule (if required) may be found in the draft permit.

V. Permit Basis: Statutory and Regulatory Authority

The Clean Water Act (CWA) prohibits the discharge of pollutants to the territorial sea, the waters of the contiguous zone, or the oceans unless such a discharge is authorized by and in compliance with Section 402 and Section 403 of the CWA. This Draft NPDES permit was developed in accordance with various statutory and regulatory requirements established pursuant to the CWA and applicable Federal regulations. During development, EPA considered the most recent technology-based treatment requirements and water quality-based requirements. The NPDES permit is the mechanism used to implement technology and water quality-based effluent limitations and other requirements including monitoring and reporting. The regulations governing the EPA NPDES permit program are generally found at 40 CFR Parts 122, 124, 125, and 136. The general conditions of the Draft Permit are based on 40 CFR §122.41 and consist primarily of management requirements common to all permits. The effluent monitoring requirements have been established to yield data representative of the discharge under authority of Section 308(a) of the CWA in accordance with 40 CFR §122.41(j), §122.44(i) and §122.48.

A. Technology-Based Requirements

Subpart A of 40 CFR §125 establishes criteria and standards for the imposition of technology based treatment requirements in permits under Section 301(b) of the CWA, including the application of EPA promulgated effluent limitations and case-by-case determinations of effluent limitations under Section 402(a)(1) of the CWA.

Technology-based treatment requirements represent the minimum level of control that must be imposed under Sections 301(b) and 402 of the CWA (See 40 CFR §125 Subpart A) to meet best practicable control technology currently available (BPT) for conventional pollutants and some metals, best conventional control technology (BCT) for conventional pollutants, and best available technology economically achievable (BAT) for toxic and non-conventional pollutants. In general, technology-based effluent guidelines for non-POTW facilities must be complied with as expeditiously as practicable but in no case later than three years after the date such limitations are established and in no case later than March 31, 1989 [See 40 CFR §125.3(a)(2)]. Compliance schedules and deadlines not in accordance with the statutory provisions of the CWA can not be authorized by a NPDES permit.

EPA evaluated seafood processors across the nation in the early 1970s in order to establish technology-based effluent limitations guidelines (ELGs). These guidelines were promulgated in the Canned and Preserved Seafood Processing Point Source Category at 40 CFR §408. Subparts AE and AF apply to discharges resulting from the processing of herring fillets in Alaska and outside of Alaska, respectively. There are no ELGs promulgated for discharges resulting from the processing of mackerel fillets.

In consideration of the expense and logistical difficulties associated with much of Alaska, the technology-based limitations for Alaskan seafood processors in remote locations were limited to the requirement that no pollutants may be discharged which exceed 0.5 inch (1.27 cm) in any dimension. This requirement is included in the ELGs for subpart AE, Alaskan Herring Fillet Processing, at 40 CFR §408.310. These ELGs do not apply to this facility because American Freedom does not operate within the waters of Alaska. However, based on the operating range of American Freedom, the operations of this vessel can be considered comparable to those of remote Alaskan seafood processors.

Numerical ELGs for TSS, Oil and Grease, and pH are promulgated in subpart AF, Non-Alaskan Herring Fillet Processing, at 40 CFR §408.320. These guidelines apply only to “discharges resulting from the processing of herring fillets outside of Alaska”. The discharge from American Freedom results from the processing of both herring and mackerel fillets, as well as from the cleaning of factory surfaces using process disinfectants. Based on the presence of multiple waste streams in the discharge, these ELGs are not applicable to the facility. In the absence of applicable technology-based effluent guidelines, the permit writer is authorized under Section 402(a)(1)(B) of the CWA to establish effluent limitations on a case-by-case basis using Best Professional Judgement (BPJ).

B. Water Quality-Based Requirements

Water quality-based criteria are required in NPDES permits when EPA determines that effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal water-quality standards (See Section 301(b) (1)(C) of the CWA). Water quality-based criteria consist of three (3) parts: 1) beneficial designated uses for a water body or a segment of a water body; 2) numeric and/or narrative water quality criteria sufficient to protect the assigned designated use(s) of the water body; and 3) anti-degradation requirements to ensure that once a use is attained it will not be degraded.

EPA regulations pertaining to permit limits based upon water quality standards are contained in 40 CFR §122.44(d). Section 101(a)(3) of the CWA specifically prohibits the discharge of toxic pollutants in toxic amounts. The EPA “Gold Book” of Water Quality Criteria contains applicable water quality standards for marine discharges. The effluent limits established in the Draft Permit assure that the surface water quality standards of the receiving water are protected, maintained, and/or attained.

C. Anti-Backsliding

A permit may not be renewed, reissued, or modified with less stringent limitations or conditions than those contained in the previous permit unless in compliance with the anti-backsliding requirements of the CWA. The anti-backsliding provisions found in 40 CFR 122.44(l) prohibit the relaxation of permit limits, standards, and conditions. The Draft Permit is the first permitting action for this facility, thus anti-backsliding provisions do not apply.

VI. Explanation of the Permit’s Effluent Limitation(s)

A. Facility Information

American Freedom is a 400 foot long marine vessel that consists of two principal fish handling areas: the work deck and the factory deck. The work deck is used to transfer fish that have been caught by ‘catcher’ boats to the facility. Transfer of fish occurs via pumping, either directly from a catcher vessel’s hold, or from a bag (“brailer”) transferred from the catcher vessel. Any seawater that is lost during this transfer flows overboard and is not considered part of the discharge water. The fish are stored in refrigerated seawater, and are then pumped to the factory deck. The refrigerated seawater is cooled using ammonia in a non-contact closed loop. This water is recycled and not discharged into the receiving water.

The fish are sorted by size and processed into fillets through the removal of the guts, bones, scales, head, and tail. Seawater is pumped in for the purpose of lubricating this process. The finished fillets are then frozen into slabs in vertical plate freezers and put into boxes. The boxes are subsequently arranged on pallets and put into the hold for storage (see Attachment B). Cleaning of the factory deck occurs as needed, but no less often than once a week. For each cleaning two cleansers are used, an alkaline foam cleaner and a quaternary “ammonia based” sanitizer, both of which are approved by the National Sanitation Foundation (NSF). The cleansers are rinsed off the factory surfaces using fresh water (i.e. non-saltwater).

Sanitary waste is collected in a marine sanitation device in compliance with Coast Guard regulations and is not covered by this permit.

B. Permitted Outfalls

Outfall 001 is comprised of fish offal, process seawater, and disinfectant wash-water. Fish offal is comprised of the heads, tails, scales, blood, and guts of the herring and mackerel. Mackerel are mainly processed January-April while Herring are processed 3-4 months in the summer (May-August). According to the facility, there is usually some overlap of the seasons and any Herring or Mackerel caught during any portion of the year will be processed.

The fillet process generates a half pound of offal for every pound of fish used. This waste, along with seawater used to lubricate the fillet process, is sent through a trash pump that grinds the offal to dimensions no larger than 0.5 inch. The wastewater is then discharge through a four (4) inch diameter discharge pipe to the receiving water (See Attachment B).

Disinfectants are used to maintain sanitary standards during processing or to sanitize seafood processing areas. Freshwater is used to rinse the cleansers from the factory surface and the resulting wash-water is discharged through Outfall 001.

C. Derivation of Effluent Limits under the Federal CWA Water Quality Standards

Flow, Weight, and Production

The Draft Permit limits the daily maximum flow to 250 gallons per minute (gpm). This is based upon the rating of the pump used for discharge, as described by the facility. The permittee estimates that a maximum of 200 metric tons, or 440,920 pounds (200 tons* 2204.6 lbs/tons = 440,920 lbs) of fish waste will be discharged each day. Based on this estimate, the Draft Permit also contains a daily maximum discharge weight limit of 440,920 lbs/day. The monitoring of fillet production, measured in lbs/day, and the duration of filleting, measure in hours per day, are required to provide both EPA and the permittee with a quantitative description of the capabilities of the facility.

pH

The Federal “Gold Book” Quality Criteria for Water states that “For open ocean waters where the depth is substantially greater than the euphotic zone, the pH should not be changed more than 0.2 units outside of the naturally occurring variation or in any case outside the range of 6.5 to 8.5. The Draft Permit identifies a pH limit range of 6.5 to 8.5 standard units, in accordance with Gold Book Standards.

Total Ammonia

Based on the use of quaternary “ammonia based” sanitizers at the facility, the Draft Permit contains reporting requirements for the daily maximum concentration of Total Ammonia. Acute and chronic toxicity values are pH dependent and pH monitoring is also required at the time of ammonia sampling. These requirements are designed to be protective of marine water quality

and are based on similar requirements in the Pribilof General Permit (EPA Region 10. 1999). Limits are not required at this time because the discharge is not known to contain measurable quantities of ammonia. It is expected that the concentration of disinfectants will be reduced due to dilution with other wastewater prior to discharge and that these constituents will not be present at toxic concentrations following discharge.

Additional Requirements

There are no ELGs promulgated in the Canned and Preserved Seafood Processing Point Source Category at 40 CFR §408 that apply directly to American Freedom (see Part V.A. of this Fact Sheet). However, based on the operating range of American Freedom, the operations of this vessel can be considered comparable to those of remote Alaskan seafood processors. In the General Permit for Seafood Processing in Alaska (EPA Region 10. 2001), off-shore processors that operate more than one (1) nautical mile from shore are required to grind their discharge to dimensions that do not exceed 0.5 inch. This is a technology-based requirement commonly known as “grind and discharge.” M/V American Freedom operates more than three (3) nautical miles from shore at mean lower low water (MLLW) and thus is considered an off-shore processor by this definition. In addition, the general permit allows off-shore processors to discharge “seafood processing wastewater and wastes” from processing multiple types of fish and wash-water containing process disinfectants. This is similar to the discharge of American Freedom, which results from the processing of herring and mackerel fillets and cleaning of factory surfaces using process disinfectants. Based on the ELGs at 40 CFR §408.310, Alaskan Herring Fillet Processing Subcategory, and on the requirements for similar facilities, the Draft Permit contains a BPJ requirement that all process waste solids shall be ground to dimensions not exceeding one-half (0.5) inch prior to discharge.

The Draft Permit also requires all discharges to occur below the sea surface and for the vessel to be moving at least three knots during discharge. These operation procedures are based on requirements for similar facilities such as Supreme Alaska Seafoods, Inc. (State of Washington, Department of Ecology. 2002) and Point Judith Fisherman’s Company (EPA Region 1. 2003). These procedures are designed to provide adequate mixing of the effluent with the receiving water and to reduce the resurfacing of solid residues.

The following permits and documents provided the basis for the Draft Permit requirements:

EPA. 1975. Development document for effluent limitations guidelines and new source performance standards for the fish meal, salmon, bottom fish, clam, oyster, sardine, scallop, herring, and abalone segment of the canned and preserved fish and seafood processing industry point source category. U.S. Environmental Protection Agency. EPA 440/1-75/041a. September 1975.

EPA. 1975. Effluent Guidelines and Standards; Canned and Preserved Seafood Processing Point Source Category; Subparts AE, Alaskan Herring Fillet Processing, and AF, Non-Alaskan Herring Fillet Processing. Federal Registrar 40:55798-55780. December 1, 1975.

EPA. 1980a. Effluent guidelines and standards; canned and preserved seafood processing point source category; suspension of regulations. Federal Register 45(98):32675-32676, May 19, 1980.

EPA Region 10. 1998. General Permit for Seafood Processors Operating Shorebased Facilities in Kodiak, Alaska. NPDES Permit No. AK-G52-8000. Issued 1998.

EPA Region 10. 1999. Pribilof General Permit. NPDES Permit No. AK-52-7000. Effective February 8, 1999.

EPA Region 10. 2001. General Permit for Seafood Processing in Alaska. NPDES Permit No. AK-G52-0000. Effective July 27, 2001.

State of Washington, Department of Ecology. 2002. Supreme Alaska Seafoods, Inc. Permit No. WA0040720. Effective July 1, 2002.

EPA Region 1. 2003. Point Judith Fisherman's Company. Letter of Permission. Effective August 28, 2003.

The discharges of fish waste covered by the Permit will not result in a violation of the Federal Water Quality Standards in accordance with the EPA "Gold Book" ("Gold Book" Quality Criteria for Water: 1986. EPA 440/5-86-001), provided that the permittee complies with the limits and conditions proposed in the Draft Permit.

VII. Essential Fish Habitat

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. Sect. 1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Service (NMFS) if EPA's action or proposed actions that it funds, permits or undertakes, "may adversely impact any essential fish habitat." 16 U.S.C. Sect. 1855(b). The Amendments broadly define "essential fish habitat" (EFH) as "waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." 16 U.S.C. Sect. 1802(10). Adverse impact means any impact which reduces the quality and/or quantity of EFH. 50 CFR Sect. 600.910(a). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative or synergistic consequences of actions.

Essential Fish Habitat is only designated for fish species for which federal Fisheries Management Plans exist. 16 U.S.C. Sect. 1855(b)(1)(A). A review of the relevant essential fish habitat information provided by NMFS indicates that essential fish habitat has been designated for 30 managed species within the NMFS boundaries encompassing the outfall location. A copy of the managed species within the EFH is included in Attachment D of this Fact Sheet.

Proposed Action

The applicant is proposing to discharge a maximum of 200 metric tons of fish waste a day, which amounts to 440,920 pounds per day and 56 million pounds per year. The fish waste will

be comprised of the solids associated with the filleting of Atlantic Herring (*Clupea harengus*) and Atlantic Mackerel (*Scomber scombus*). All waste will be ground to dimensions that do not exceed 0.5 inch. Process wastewater, from the fillet processing, and residual process disinfectants will be discharged along with the fish waste.

EPA's Opinion of the Probable Impacts

EPA has concluded that this large volume of fish waste may reasonably be anticipated to harm the marine environment if disposed indiscriminately in areas too close to shorelines, in a limited area, or an area with poor flushing characteristics. The disposal of solid fish waste could impact EFH from the effects of accumulation or by creating a hypoxic or otherwise stressed benthic environment. The result of such impacts could vary from simply an increase in benthic organisms attracted to the waste, to a shift in the benthic community structure, to the creation of anoxic sediments and areas largely void of benthic and demersal life.

Despite the potential for adverse impacts to result from this activity, EPA has concluded that if fish waste is disposed of in compliance with the terms and conditions of the Permit, then adverse effects to the spawning, breeding, feeding, and growth of all federally managed species or their forage should be minimal. Further, adverse effects to federally protected species, their forage or habitat are unlikely. Finally, no persistent effects are expected following the termination of this activity. EPA's conclusion was based on the following factors:

- Only biodegradable fish waste originating from herring and mackerel and wash-water containing EPA-approved disinfectants will be authorized for disposal at sea.
- All seafood processing wastes must be routed through a waste conveyance and treatment system. The size of waste solids discharged from Outfall 001 shall not exceed one-half (0.5) inch, in any dimension. This reduction in size facilitates biodegradation and dispersion of the fish waste.
- The vessel must maintain a speed of at least three (3) knots during the discharge of fish waste and the outfall location must be below the sea surface. This will preclude excessive accumulation of oxygen depletion waste and formation of an anoxic zone by providing sufficient mixing between the effluent and the receiving water.
- Disposal in unique or special waters is excluded from coverage and an electronic navigation system is required to be operational and on-line at all times, and used for disposal logs. This will ensure that the discharge will not impact National Marine Sanctuaries, Habitat Areas of Particular Concern, Critical Habitats, or sheltered waterbodies and that discharge occurs only in those waters covered by the permit

Proposed Mitigation

Further mitigation of impacts associated with this activity is not warranted if the permit requirements are followed. If adverse impacts to the marine environment do occur either as a result of non-compliance or from unanticipated effects from this activity, authorization to discharge can be revoked. Additionally, authorization can be revoked for non-compliance regardless of the environmental consequences. A copy of the Draft Permit has been provided to NMFS for review and comment.

VIII. Endangered Species Act

Section 7(a) of the Endangered Species Act of 1973, as amended (ESA) grants authority to and imposes requirements upon Federal agencies regarding endangered or threatened species of fish, wildlife, or plants ("listed species") and habitat of such species that has been designated as critical (a "critical habitat"). The ESA requires every Federal agency, in consultation with and with the assistance of the Secretary of Interior, to insure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. The United States Fish and Wildlife Service (USFWS) administers Section 7 consultations for freshwater species. The National Marine Fisheries Service (NMFS) administers Section 7 consultations for marine species and anadromous fish.

EPA has reviewed the federal endangered or threatened species of fish, wildlife, or plants to see if any such listed species might potentially be impacted by the issuance of this NPDES permit. This review indicates that 12 endangered or threatened species may inhabit the receiving water in the location of the discharge. A list of these species is included in Attachment D of this Fact Sheet. EPA believes the proposed limits and management practices detailed in the Draft Permit are sufficiently stringent to assure that Federal "Gold Book" standards will be met and to ensure protection of aquatic life and maintenance of the receiving water as an aquatic habitat. Based on the provisions outlined in Part VII of this Fact Sheet, the Region finds that adoption of the proposed permit is unlikely to adversely affect any threatened or endangered species. . If adverse effects do occur as a result of this permit action, or if new information becomes available that changes the basis for this conclusion, then EPA will promptly notify both the United States Fish and Wildlife Service and National Marine Fisheries Service. A copy of the Draft Permit has been provided to both USFWS and NMFS for review and comment.

IX. Marine Mammal Protection Act

Section 2 of the Marine Mammal Protection Act finds that marine mammals are resources of great international significance, aesthetic, recreational and economic, and should be protected, conserved and encouraged to develop optimum populations. In particular, efforts should be made to protect the rookeries, mating grounds and areas of similar significance for each species of marine mammal from the adverse effect of man's actions. [16 U.S.C. § 1361 et seq.] The Permit provides for "buffer zones" around the habitat areas of particular concern for cod and critical habitats for northern right whales as designated by National Marine Fisheries Service. Discharging in these protected water resources and special habitats is prohibited.

X. Monitoring

The permittee is obligated to monitor and report sampling results to EPA within the time specified within the permit. Timely reporting is essential for the regulatory agencies to expeditiously assess compliance with permit conditions.

XI. Comment Period, Hearing Requests, and Procedures for Final Decisions

All persons, including applicants, who believe any condition of the Draft Permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to Sara Green, U.S. EPA, Office of Ecosystem Protection, Industrial Permits Branch, 1 Congress Street, Suite 1100, Boston, Massachusetts 02114-2023. Any person, prior to such date, may submit a request in writing for a public hearing to consider the Draft Permit to EPA. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public meeting may be held if the criteria stated in 40 C.F.R. § 124.12 are satisfied. In reaching a final decision on the Draft Permit, the EPA will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after any public hearings, if such hearings are held, the EPA will issue a Final Permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within 30 days following the notice of the Final Permit decision, any interested person may submit a petition for review of the permit to EPA's Environmental Appeals Board consistent with 40 C.F.R. § 124.19.

XII. EPA Contact

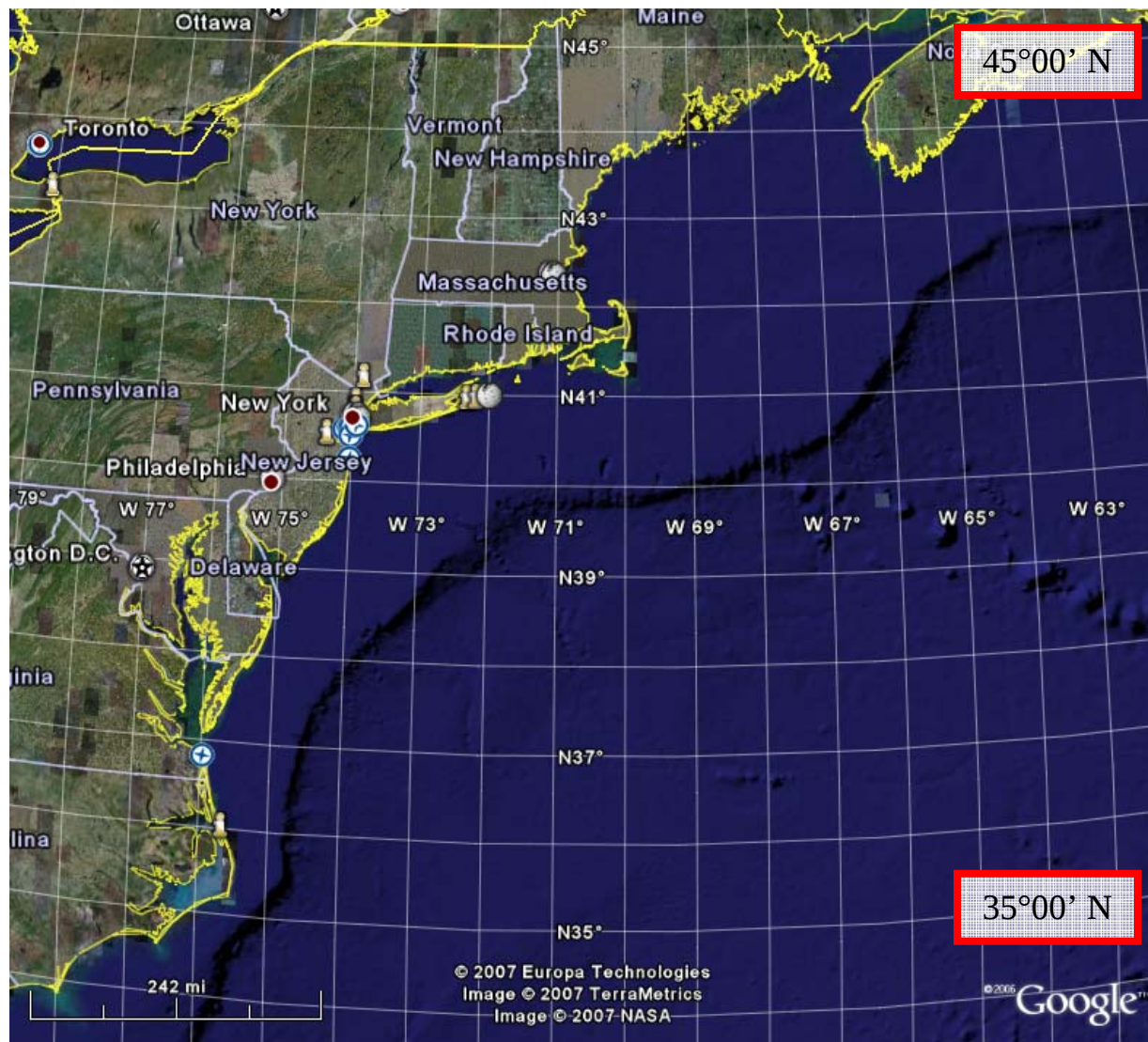
Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

Sara Green, EPA New England – Region I
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Telephone: (617) 918-1574 FAX: (617) 918-0574
Email: green.sara@epa.gov

**Stephen S. Perkins, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency**

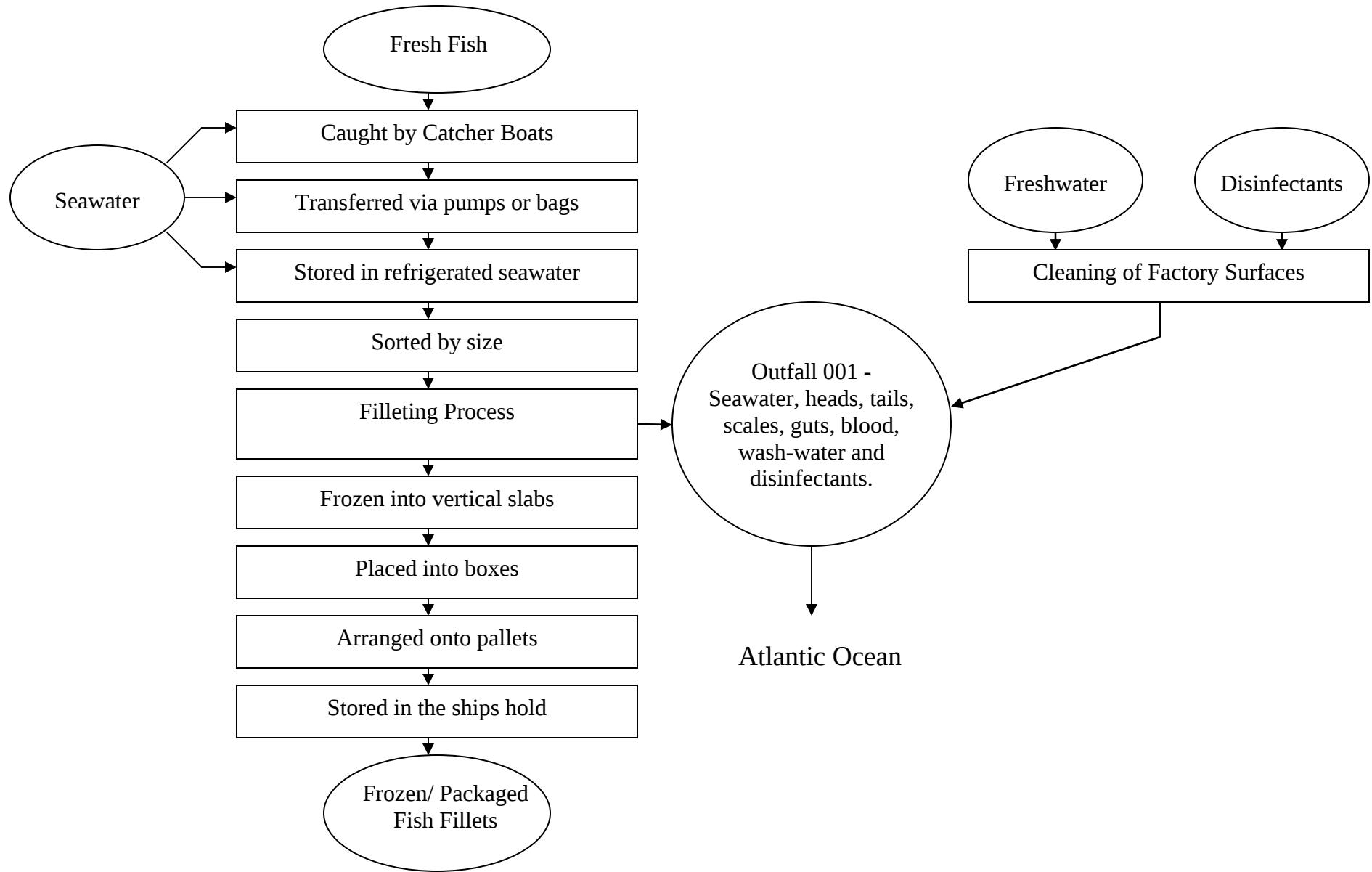
ATTACHMENT A
M/V American Freedom (ME0110485)
Map of Receiving Water

Receiving Waters Covered by the Permit



The Permit authorizes discharges of specified pollutants to marine federal waters past the three (3) nautical mile limit of state waters and between 35° 00.0' N and 45° 00.0' N.

ATTACHMENT B
M/V American Freedom (ME0110485)
Process Flow Diagram



ATTACHMENT C
M/V American Freedom (ME0110485)
Clean Water Act Section 403(c) Ocean Discharge Criteria Evaluation for the
Marine Vessel American Freedom

I. Introduction

EPA has determined that the proposed American Freedom outfall is seaward of the territorial sea baseline and, therefore, is subject to Section 403 of the Clean Water Act (CWA).

The Ocean Discharge Criteria regulations (40 CFR §125, Subpart M) establish ocean discharge guidelines from which a permit writer must make a judgment that a discharge will, or will not, cause “unreasonable degradation” of the marine environment. “Unreasonable degradation” of the marine environment is defined in the Ocean Discharge Criteria as any of the following:

1. Significant adverse changes in ecosystem diversity, productivity, and stability of the biological community within the area of discharge and surrounding biological communities;
2. Threat to human health through direct exposure to pollutants or through consumption of exposed aquatic organisms, or
3. Loss of aesthetic, recreational, scientific or economic values which is unreasonable in relation to the benefit derived from the discharge.

A determination of whether or not “unreasonable degradation” will occur is based on consideration of the 10 guidelines in 40 CFR §125.122. These criteria are:

1. Quantities, composition, and potential bioaccumulation or persistence of pollutants to be discharged.
2. Potential transport of pollutants by biological, physical, or chemical process.
3. Composition and vulnerability of potentially exposed biological communities, including: unique species or communities, endangered or threatened species, and species critical to the structure or function of the ecosystem.
4. Importance of the receiving water area to the surrounding biological community such as spawning sites, nursery/forage areas, migratory pathways, and areas necessary for critical life stages/functions of an organism.
5. The existence of special aquatic sites, including: marine sanctuaries/refuges, parks, monuments, national seashores, wilderness areas, and coral reefs.
6. Potential direct or indirect impacts on human health.
7. Existing or potential recreational and commercial fishing.
8. Any requirements of an approved Coastal Zone Management Plan (CZMP).
9. Such other factors relating to the effects of the discharge as may be appropriate

10. Marine water quality criteria.

If a determination can be made that no “unreasonable degradation” will result, a permit is issued including appropriate permit conditions to ensure that unreasonable degradation does not take place. These conditions may include a requirement for an ongoing monitoring program. If EPA determines that a discharge will cause unreasonable degradation despite the application of all possible permit conditions, it may not issue a permit authorizing the discharge of pollutants.

If, because of insufficient information, a determination cannot be made, prior to the issuance of a permit, that no unreasonable degradation will result, then additional conditions must be satisfied.

II. Criteria Evaluation

The marine vessel American Freedom is a floating seafood processor that processes fish fillets from Atlantic Herring and Atlantic Mackerel. The facility estimates a maximum of 200 metric tons (440,920 lbs) of fish waste will be discharged per day. This discharge will primarily be comprised of fish waste and include the blood, guts, bones, and scales from the filleting process. Seawater, pumped aboard the vessel with the raw fish and used in the process operations, is discharged from the vessel along with the aforementioned fish waste. The waste stream primarily contains conventional pollutants and is similar in nature to that of a typical seafood processing facility. The significant wastewater parameters for this industry are biochemical oxygen demand (BOD), total suspended solids (TSS), and oil & grease (EPA September 1975). In addition, process disinfectants contribute trace amounts of ammonia and impact the pH of the discharge. Based on the largely conventional nature of the discharge, there is little potential for bioaccumulation of pollutants.

The potential persistence and/or transport of pollutants are mitigated by the dilution of the receiving water. All fish waste must be ground to dimensions not exceeding 0.5 inch prior to discharge and the outfall must be located below the water line. The discharge rate is 250 gallons per minute, based on the pump rating, and the vessel must maintain a speed of at least three (3) knots during discharge. These discharge requirements are designed to provide adequate mixing between the effluent and the deep water of the Atlantic Ocean.

Certain portions of the receiving water are excluded from coverage under the permit, making the discharge protective of special aquatic sites and areas necessary for critical life stages/ functions of organisms. Discharge is to Federal Waters past the three (3) nautical mile state water boundary and between the boundaries of 35° 00.0' N and 44° 00.0' N. Restricted waters, which are excluded from coverage under the permit, include waters within one (1) nautical mile of Stellwagen Bank National Marine Sanctuary, Monitor National Marine Sanctuary, and Habitat Areas of Particular Concern (HAPC). HAPCs designated in the receiving water are Great South Channel, Seasonal Area Managed (SAM) areas East and West as designated for the Atlantic Large Whale Take Reduction Plan (ALWTRP), and Cap Cod Bay. In addition, sheltered waterbodies, including bays, harbors, inlets, coves, lagoons, rivers, and semi-enclosed water basins are excluded from coverage under the permit.

It is anticipated that the impact of the discharge on the local biological community will be limited. A review of the relevant essential fish habitat (EFH) information provided by NMFS indicates that EFH has been designated for 30 managed species in the receiving water. In addition, several endangered or threatened species are known to frequent the Atlantic Ocean from Canada to Cape Hatteras, NC including: the Blue Whale, Finback Whale, Sei Whale, Humpback Whale, Northern Right Whale, Sperm Whale, Green Turtle, Kemp's Ridley's Sea Turtle, Leatherback Turtle, and Bottlenose Dolphin. If there was an accumulation of waste, the discharge could create a hypoxic or otherwise stressed benthic environment. The result of such impacts could vary from simply an increase in benthic organisms attracted to the waste, to a shift in the benthic community structure, to the creation of anoxic sediments and areas largely void of benthic and demersal life. However, the dilution afforded by the receiving water and discharge requirements greatly reduces the potential risk to these species.

Potential direct or indirect impacts on human health or recreational and commercial fishing are also mitigated by the nature and anticipated dispersion of the pollutants. Fishing operations are largely unaffected because the effluent is discharged over a large area and highly diluted with the receiving water. In addition, the facility discharges primarily conventional pollutants that do not tend to bioaccumulate and the consumption of finfish or shellfish from this area should not pose a health risk. No CZM requirements exist because the outfall is not located within State Waters.

III. Determination of No Unreasonable Degradation to the Marine Environment

The marine vessel American Freedom is a floating seafood processing vessel that is designed to discharge 440,920 lbs of fish waste from the filleting of Herring and Mackerel per day. The discharge is mainly comprised of conventional pollutants that will be well mixed with the receiving water. Discharge restrictions on vessel speed and outfall location ensure dispersion over a large area and mitigate potential persistence of pollutants. The discharge is not expected to impact any special aquatic sites, endangered species, recreational or commercial fishing, or human health.

Based on available information, EPA concludes that this discharge will not cause a significant adverse change in the ecosystem or biological community, a threat to human health, or a loss of aesthetic, recreational, scientific or economic values and subsequently will not cause unreasonable degradation of the marine environment.

References

EPA. 1975. Development document for effluent limitations guidelines and new source performance standards for the fish meal, salmon, bottom fish, clam, oyster, sardine, scallop, herring, and abalone segment of the canned and preserved fish and seafood processing industry point source category. U.S. Environmental Protection Agency. EPA 440/1-75/041a. September 1975.

EPA. 1975. Effluent guidelines and standards; canned and preserved seafood processing point source category; Subpart AE- Alaskan Herring Fillet Processing Subcategory. 40 FR 55798-55799, December 1, 1975

EPA. 1975. Effluent guidelines and standards; canned and preserved seafood processing point source category; Subpart AF- Non-Alaskan Herring Fillet Processing Subcategory. 40 FR 55799-55800, December 1, 1975

EPA. 1980a. Effluent guidelines and standards; canned and preserved seafood processing point source category; suspension of regulations. Federal Register 45(98):32675-32676, May 19, 1980.

EPA. 1986. "Gold Book" Quality Criteria for Water: 1986. EPA 440/5-86-001

EPA Region 10. 1998. General Permit for Seafood Processors Operating Shorebased Facilities in Kodiak, Alaska. NPDES Permit No. AK-G52-8000. Issued 1998.

EPA Region 10. 2001. General Permit for Seafood Processors in Alaska. NPDES No. AK-G52-0000. Effective July 27, 2001.

State of Washington, Department of Ecology. 2002. Supreme Alaska Seafoods, Inc. Permit No. WA0040720. Effective July 1, 2002

ATTACHMENT D
M/V American Freedom (ME0110485)
Summary of EFH Designations and ESA Species

The following is a list of the EFH species and applicable life stage(s) for the discharge location. Habitat areas of particular concern (HAPC) are indicated by footnotes following the table.

Species	Eggs	Larvae	Juvenile	Adults	Spawning Adults
America plaice	x	x	x	x	x
Atlantic cod ¹	x	x	x	x	x
Atlantic halibut	x	x	x	x	x
Atlantic herring	x	x	x	x	x
Atlantic sea scallops	x	x	x	x	x
Haddock	x	x	x	x	x
Monkfish	x	x	x	x	x
Ocean pout	x	x	x	x	x
Offshore hake	x	x	x	x	x
Pollock	x	x	x	x	x
Red hake	x	x	x	x	x
Redfish	N/A	x	x	x	x
White hake	x	x	x	x	x
Whiting	x	x	x	x	x
Windowpane flounder	x	x	x	x	x
Winter flounder	x	x	x	x	x
Witch flounder	x	x	x	x	x
Yellowtail flounder	x	x	x	x	x
Atlantic mackerel	x	x	x	x	
Black sea bass	x	x	x	x	
Bluefish	x	x	x	x	
Butterfish	x	x	x	x	
Illex squid			x	x	
Loligo squid	***		x	x	
Ocean quahog			x	x	
Scup	x	x	x	x	
Spiny dogfish			x	x	
Summer flounder ²	x	x	x	x	
Surf clams			x	x	
Tilefish ³	x	x	x	x	

¹ An area approximate of 300 sq. nautical miles along the northern edge of George's Bank and the Hague line containing gravel cobble substrate.

² All native species of macroalgae, seagrasses and freshwater and tidal macrophytes in any size beds as well as loose aggregation, within adult and juvenile EFH.

³ Substrate between 250 - 1200ft isobath from U.S. / Canadian Boundary to the Virginia / North Carolina boundary within statistical areas 616 and 537 (intersection of isobaths east of Cape May, NJ and south of Provincetown, MA)

ESA Species

The following marine species are listed as threatened or endangered under the jurisdiction of NMFS may at times inhabit the discharge area. The Northern right whale has a critical habitat designated in great south channel (east of Cape Cod), Massachusetts Bay, and Cape Cod Bay. No other species listed as threatened or endangered by NMFS has a designated critical habitat in the discharge area.

- Kemp's ridley sea turtle (*Lepidochelys kempii*)
- Leatherback sea turtle (*Dermochelys coriacea*)
- Green sea turtle (*Chelonia mydas*)
- Loggerhead sea turtle (*Caretta caretta*)
- Northern right whale (*Eubalaena glacialis*)
- Humpback whale (*Megaptera novaeangliae*)
- Fin whale (*Balaenoptera physalus*)
- Blue whale (*Balaenoptera musculus*)
- Sei whale (*Balaenoptera borealis*)
- Sperm whale (*Physeter macrocephalus*)
- Gulf of Maine Distinct Population Segment (DPS) of Atlantic salmon (*Salmo salar*)
- Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) [Note: Atlantic sturgeon are considered by NMFS to be a candidate species. More info on the status of Atlantic sturgeon can be found at <http://www.nero.noaa.gov/nero/hotnews/atlsturgen>]