

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

National Marine Fisheries Service P.O. Box 21668 Juneau, Alaska 99802-1668

November 7, 2008

Michael F. Gearheard, Director Office of Water and Watersheds U.S. EPA, Region 10 1200 Sixth Avenue Seattle, WA 98101

Attn: Lindsay Guzzo

Dear Mr. Gearheard:

Re: Draft Biological Evaluation for the General NPDES Permit for Offshore Seafood Processors in Alaska Permit No. AK-G52-4000

The U.S. Environmental Protection Agency (EPA) is proposing to issue the National Pollutant Discharge Elimination System (NPDES) general permit (Permit No. AK-G52-4000) for the discharge of seafood processing wastes by offshore seafood processors in Alaska pursuant to the provisions of the Clean Water Act (CWA), 33 U.S.C. 1251. Currently there are approximately 98 offshore processing facilities administratively extended under the general NPDES permit for seafood processors in Alaska (EPA facility list provided January 2007). EPA proposes to reissue the GP with the modification that offshore seafood processors will be covered in a separate permit from onshore seafood processors. This letter constitutes our review under the Magnuson-Stevens Fishery Conservation and Management Act. Any comments we have on threatened or endangered species will be provided in a separate letter.

EPA has provided NMFS with the draft Permit, Fact Sheet, Ocean Discharge Criteria Evaluation and a draft Biological Evaluation (BE) containing an Essential Fish Habitat (EFH) Assessment. As a result of that EFH assessment EPA has determined that the proposed approval of the GP for offshore seafood processors in Alaska may adversely affect EFH. EPA has requested that NMFS develop a General Concurrence to cover the required EFH consultative requirements for actions to be authorized under this GP. NMFS may grant a General Concurrence for specific types of actions that are similar in nature, similar in their impact on EFH, and will not cause greater than minimal adverse effects on EFH individually or cumulatively. Categories of Federal actions may also qualify for General Concurrence if they are modified by appropriate conditions that ensure the actions will meet the criteria in 50 CFR 600.920 (g)(2). A discussion of the qualifying criteria is contained in Enclosure 1.

Proposed Action

The GP will authorize discharges of seafood processing waste from facilities, discharging at least 0.5 nautical miles (NM) from the Alaska shore as delineated by mean lower low water (MLLW), which engage in the processing of fresh, frozen, canned, smoked, salted or pickled seafood, the processing of unwashed mince, or the processing of meal and other secondary by-products. In addition, operators of vessels that are discharging greater than 1 NM from the shore are also authorized to discharge wastes associated with processing of washed mince or paste. Moreover, the GP authorizes at-sea discharges that occur at least 1 NM from the shore. At-sea discharges

are discharges from shore-based processors who use a vessel to discharge their waste at sea (*i.e.*, at least 1 NM from the shore). These vessels do not process seafood on the vessel; the vessel is only used to discharge seafood waste collected from shore-based processors.

Proposed Mitigation

As described in Section 9.3.1-9.3.5 of the BE, EPA's proposed action may adversely affect EFH for BSAI groundfish, BSAI crab, GOA groundfish, Alaska scallop and Alaska stocks of Pacific salmon. These adverse effects relate to physical, chemical, and biological changes to EFH within areas of offshore seafood processor discharge. However, as a result of technology based, water quality based and effluent based limitations in the draft GP, EPA has determined issuing the GP will cause minimal effects upon EFH and associated species in the vicinity of seafood processor discharges of processing wastewater and waste solids. In addition, EPA has included the following list of conservation measures in the BE that could identify, prevent, and/or mitigate any site-specific adverse effects of offshore seafood processor discharge authorized under the draft GP.

EPA's proposed conservation measures are as follows:

- 1) To the maximum extent practicable, base effluent limitations on site-specific water quality parameters including water depth, current velocity, tidal exchange, salinity, temperature, pH, etc.
- 2) To the maximum extent practicable, avoid the practice of discharging untreated solid and liquid waste directly into the environment. Encourage the use of secondary or wastewater treatment systems where possible.
- 3) Minimization of new Zones of Deposit (ZODs) and reduction of footprints of existing ZODs. The proposed permit does not allow for generic ZODs, however, ADEC may authorize site specific ZODs after a public comment period. The current proposed permit is for mobile offshore facilities that may not stay in a specific location more than seven days. According to the requirements of the permit, these processor vessels are expected to be in high tidal areas with good flushing so accumulation of seafood deposits on the seafloor is expected to be minimal.
- 4) Control stickwater by physical or chemical methods. Often, stickwater is collected and evaporated to produce condensed fish solubles which can be used as an attractant for fish meal rather than eliminating stickwater through processor effluent.
- 5) Promote sound fish waste management through a combination of fish-cleaning restrictions, public education and proper disposal of fish waste.
- 6) Encourage the alternative use of fish processing wastes (e.g. fertilizer for agriculture and animal feed).
- 7) Explore options for additional research to minimize effects from seafood processor effluent. Look at potential to update technology-based effluent guidelines.
- 8) Locate new plants outside rearing and nursery habitat. As the majority of offshore processors are moving vessels 1 nm or more from shore it is expected that some of the vessels will discharge outside rearing and nursery habitat. Biological and chemical changes to the sites

should be minimal as the offshore processor vessels are in areas of high tidal activity which allow for dispersion and dilution of the discharges from the vessels.

9) Consider cumulative impacts of the discharges as well as other discharges into receiving waters and assure that the permittee is using state-of-the-art technology for collecting monitoring data for analyses.

NMFS EFH Conservation Measures

We agree with EPA's conservation recommendation to explore options for additional research to minimize effects from seafood processor effluent with the potential to update technology-based effluent guidelines. A recent study (Thorne et al. 2006) indicates that the requirement that processors grind wastes to 1.27 cm (1/2") in any dimension initiates significant changes in near shore fish and seabird assemblages. Therefore, NMFS agrees with EPA's conservation measures except for the revisions and addition recommended below.

- 1. (EPA's Conservation Measure # 3) NMFS recommends that a course of action and timeline be developed by which new processors eliminate the need for a ZOD, and existing processors reduce the footprint of the ZOD.
- 2. (EPA's Conservation Measure #9) Consider cumulative impacts of the discharges as well as other discharges into receiving waters and assure that the permittee is using state-of-the-art technology for collecting monitoring data for analyses. As part of their annual reporting requirements, each processor should be required to demonstrate that is the case for their particular operation.
- 3. In addition to the measures already discussed to avoid or minimize impacts to living marine resources, including EFH, EPA also identifies areas excluded from coverage under the GP. In order to protect EFH we recommend that the following areas also be excluded from coverage by the GP (as described below and depicted in the figure and coordinates table –Enclosure 2).

NOAA Fisheries and the North Pacific Fishery Management Council have identified six Aleutian Islands Coral Habitat Protection Areas. These sites are referred to as: Great Sitkin Island, Cape Moffet Island, Adak Canyon, Bobrof Island, Ulak Island, and Semisopochnoi Island. These areas contain high densities of sensitive coral and sponge species as compared to adjacent areas. Living habitat structure within these areas support juvenile and adult commercial groundfish and prey resources. Federal Regulations [71 FR 36694, June 28, 2006; 50 CFR Part 679] protect these six areas from all bottom contact fishing gear, including pots, long lines, and bottom trawling. In conjunction with these Federal Regulations, the Alaska State Board of Fisheries adopted parallel protections measures.

Conclusion

NMFS agrees that a General Concurrence is applicable (as outlined in Enclosure 1) and further consultation is not required, provided our EFH conservation recommendations are adopted. NMFS will periodically review its finding of this General Concurrence and may revise or revoke it if new information indicates that the actions covered by the GP are having more than minimal adverse effects on EFH. In addition, EPA has recently approved the Alaska Department of

Environmental Conservation's (ADEC) application to run the NPDES permitting program and we look forward to coordinating with ADEC on these issues. Towards that goal we recommend that EPA convene a meeting to discuss how ADEC will meet the tracking requirements [50CFR 600.920(g)(ii)] committed to by EPA in Enclosure 1.

Under section 305(b)(4)(B) of the Magnuson-Stevens Act, EPA is required to respond to NMFS EFH Conservation Recommendations in writing within 30 days. If EPA will not make a decision within 30 days, EPA should provide NMFS with a letter within 30 days to that effect and indicate when a full response will be provided.

If you have any questions regarding our recommendations for this project, please contact Jeanne Hanson at (907) 271-3029 or jeanne.hanson@noaa.gov.

Sincerely,

Robert D. Mecum

Acting Administrator, Alaska Region

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Enclosures (2)

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REFERENCES

ADEC, EPA, and Tetra Tech. 2008. Ocean Discharge Criteria Evaluation for Offshore Seafood Processing in Alaska NPDES General Permit. June 2008.

EPA, Draft Biological Evaluation for the General NPDES Permit for Offshore Seafood Processors in Alaska. Permit No. AK-G52-4000. Sept., 2008.

Thorne, R.E., G.L. Thomas, and M.A.Bishop. Alternative Seafood Waste Disposal Procedures for Alaskan Waters. Sept., 2006. Prince William Sound Science Center. P.O. Box 705, Cordova, Alaska 99574. In Oceans pp 1-4

G:EPA Offshore seafood processors jh JK11-6-08

Enclosure 1

50 CFR 600.920(g)(2)(i)(A) - The actions must be similar in nature and similar in their impact on EFH.

Authorized Facilities

Subject to the restrictions in the GP, the following categories of dischargers would be authorized to discharge the pollutants set out in Part II of the GP once a Notice of Intent was been filed by the applicant and written authorization was received from EPA:

- 1. Operators of off-shore vessels, operating and discharging "seafood processing waste" greater than 1 nautical mile (NM) from shore, engaged in the processing of fresh, frozen, canned, smoked, salted or pickled seafood or the processing of seafood mince, or meal;
- 2. Operators of near-shore vessels, operating and discharging "seafood processing waste" 0.5 -1 nautical mile (NM) from shore, engaged in the processing of fresh, frozen, canned, smoked, salted or pickled seafood, the processing of unwashed mince, or the processing of meal and other secondary by-products; and
- 3. At-sea discharges. Shore-based processors engaged in the processing of fresh, frozen, canned, smoked, salted or pickled seafood or the processing of seafood mince, or meal, and discharging "seafood processing waste" at-sea to receiving waters that are at least 1 nautical mile (NM) from shore as delineated by MLLW.

Covered Pollutants

The permit would cover the following effluents:

- 1. Seafood process wastes are authorized for discharge under the current permit. The major pollutants of concern are residues, biochemical oxygen demand (BOD), non-petroleum oil and grease, and nutrients. These pollutants come from waste solids (shell, bones, skin, scales, flesh, and organs), blood, body fluids, slime, oils and fats from cooking and rendering operations. Ammonia may be present intermittently in negligible amounts. The color, turbidity, pH, and temperature of process waste effluents may also differ from that of the receiving water.
- 2. Process disinfectants are authorized for discharge under the current permit. Sodium hypochlorite and ammonium chlorides are the primary disinfectants used in the control of microbial contamination of seafood processing equipment and containers. As a result of the periodic use of these disinfectants to sanitize equipment, free chlorine may be present in residual amounts. In addition, iodine disinfectants may be applied alternately.
- 3. Sanitary and domestic wastes and gray wastewater are authorized for discharge under the current permit. The kitchen, shower, sink, and toilet effluents include TSS, BOD, fecal coliform bacteria, and non-petroleum oil and grease. The temperature and pH of sanitary and domestic wastes may also differ from that of the receiving water.
- 4. Other wastewaters, including cooling water, boiler water, freshwater pressure relief water, refrigeration condensate, water used to transfer seafood to the facility, and live

tank water, are authorized for discharge under the current permit. These other wastewater effluents include TSS, BOD, and non-petroleum oil and grease. The temperature and pH of these effluents may also differ from that of the receiving water.

The current permit does not authorize any pollutants, which are not expressly authorized in the permit. These pollutants include, but are not limited to, petroleum hydrocarbons and toxic pollutants listed in 40 CFR 401.15 (EPA 2001a).

50 CFR 600.920(g)(2)(i)(B) The actions must not cause greater than minimal adverse effects on EFH when implemented individually.

There are several mechanisms by which offshore seafood processors could impact EFH as described in Section 9.1 of the BE. For example, various fish and crab species have a diet composed mainly of small benthic invertebrates. Impacts from accumulated processing wastes can alter benthic habitat, reduce locally associated invertebrate populations and lower dissolved oxygen levels in overlying waters. This could result in reduced prey availability or loss of habitat for some of the EFH managed species. A number of important species including, walleye pollock, Pacific cod, rock sole, and sand lance release demersal eggs. Seafood waste discharges resulting in waste piles are typically anoxic due to decay and decomposition of the waste which could affect the viability of the demersal eggs. In addition, demersal eggs could be smothered if located beneath a discharge.

EPA expects that these effects, while possible, are likely to be limited in extent for several reasons. First, the spatial scale of impacts to EFH would be limited given the large geographic ranges of EFH species' habitat and the limited aggregate size of offshore seafood processor discharges relative to other available coastal water. In addition, some EFH species may have the ability to avoid areas where seafood processing discharges are located. Secondly, in areas with strong currents and high tidal ranges, waste materials disperse rapidly. It is expected that since the majority of offshore seafood processors will be at least 1 NM from shore, the seafood processing discharge would be in areas with strong currents and high tidal ranges and would dissipate rapidly preventing accumulation of the seafood discharge in waste piles. Therefore, EPA has determined that in conjunction with the technology based, water quality based and effluent based limitations proposed, the issuance of the GP will cause minimal effects upon EFH species and habitat in the vicinity of individual seafood processor discharges of processing wastewater and waste solids.

<u>50 CFR 600.920(g)(2)(i)(C)</u> The actions must not cause greater than minimal cumulative adverse effects on EFH

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 (ODCE) using criteria established in accordance with CWA Section 403. The Ocean Discharge Criteria establish guidelines for permitting discharges into the

territorial seas, the contiguous zone and the ocean. Based on the available information EPA determines whether the discharge will cause unreasonable degradation of the marine environment. CWA Section 403(c) guidelines require that a number of factors be considered in the determination of unreasonable degradation or irreparable harm. 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 (40 CFR 125.122). Discharges to water resources which are protected, special, at-risk or impaired would not be authorized under the GP.

In general, degradation occurs in processing areas where poor or minimal flushing exists or the cumulative discharges of seafood processors exceed the assimilative capacity of the receiving water. In order to protect water quality, many of the large processors and significant processing areas have been covered under individual permits that contain requirements more stringent than those in the general NPDES permit. These facilities will continue to be regulated under individual NPDES permits.

After consideration of these factors, EPA has determined that discharges authorized by the proposed GP and discharged in accordance with the requirements of the Proposed Permit will not cause unreasonable degradation of the receiving waters and that the processing operations covered under the GP will not cause greater than minimal cumulative adverse effects on EFH.

<u>50 CFR 600.920(g)(2)(ii)</u> Actions qualifying for General Concurrence must be tracked to ensure that their cumulative effects are no more than minimal.

The draft GP requires that during the term of the GP all permittees must prepare and submit a complete, accurate and timely annual report of incidents of noncompliance, production, discharges, and process changes to EPA and ADEC. This serves to inform the regulatory agencies of the use and potential degradation of public natural resources by facilities discharging pollutants to these receiving waters under this Permit. The specific information required to be submitted by the permittee in the annual report can be found in Part VI.B of the draft GP.

NMFS concurs with EPA that this information contained in the annual reports will ensure that the cumulative effects are no more than minimal. We request that on an annual basis EPA provide us with an analysis of the information you collect to confirm that cumulative impacts are not occurring.

Figure.1 Aleutian Island Habitat Protection Areas.

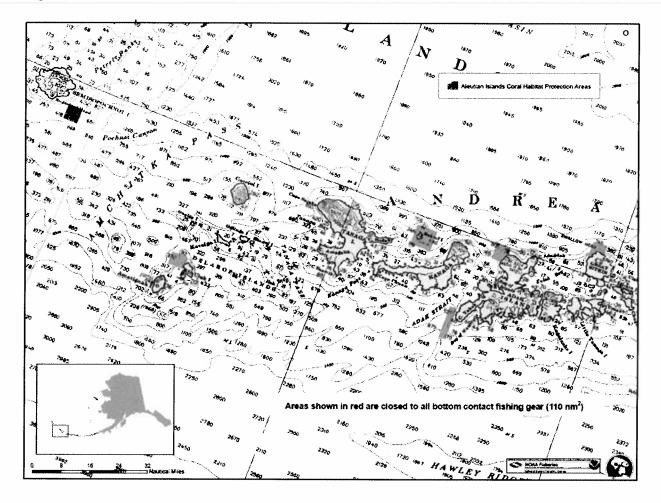


Table. 1 Aleutian Island Habitat Protection Area Names and Coordinates.

Area No.	Name	Latitude	Longitude
1	Great Sitkin I	52 9.56 N 52 9.56 N 52 4.69 N 52 6.59 N	176 6.14 W 176 12.44 W 176 12.44 W 176 6.12 W
2	Cape Moffett I	52 0.11 N 52 0.10 N 51 55.69 N 51 55.69 N 51 57.96 N	176 46.65 W 176 53.00 W 176 53.00 W 176 48.59 W 176 46.52 W
3	Adak Canyon	51 39.00 N 51 39.00 N 51 30.00 N	177 0.00 W 177 3.00 W 177 3.00 W

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Area No.	Name	Latitude	Longitude
		51 30.00 N	177 0.00 W
	Bobrof I	51 57.35 N 51 57.36 N 51 51.65 N 51 51.71 N	177 19.94 177 29.11 177 29.11 177 19.93
	Ułak I	51 25.85 N 51 25.69 N 51 22.28 N 51 22.28 N	178 59.00 179 6.00 W 179 6.00 W 178 58.95
	Sernisopochnoi I	51 53.10 N 51 53.10 N 51 48.84 N 51 48.89 N	179 53.11 179 46.55 179 46.55 179 53.11

Note: Each area is delineated by connecting the coordinates in the order listed by straight lines. The last set of coordinates for each area is connected to the first set of coordinates for the area by a straight line. Projected coordinate system is North American Datum 1983, Albers.