



FACT SHEET

NPDES Permit Number: AKG524000
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The U.S. Environmental Protection Agency (EPA) Proposes to Issue General Wastewater Discharge Permits to:

Offshore Seafood Processors in Alaska

and the State of Alaska Proposes to Certify

**and the State of Alaska Proposes a
Determination of Consistency with
the Alaska Coastal Management Program**

EPA Proposes NPDES Permit Issuance

The EPA proposes to issue a National Pollutant Discharge Elimination System (NPDES) general permit to Seafood Processors in Alaska discharging at least 0.5 nautical miles from the shore (Proposed Permit). The Proposed Permit authorizes and sets conditions on the discharge of pollutants from these processors to waters of the United States. In order to ensure protection of water quality and human health, the Proposed Permit places limits on the types and amounts of pollutants that can be discharged.

This fact sheet includes:

- information on public comment, public hearing, and appeal procedures;
- a description of the types of facilities, proposed discharges, and receiving waters covered by the Proposed Permit;
- a description of the proposed effluent limits and other conditions; and
- monitoring requirements required by the Proposed Permit.

Alaska State Certification

The Alaska Department of Environmental Conservation (ADEC) proposes to certify the Proposed Permit pursuant to section 401 of the Clean Water Act (CWA), 33 U.S.C. 1341. A draft 401 certification was provided by ADEC dated 9/2/2008. As required by Section 401 of the CWA, the conditions of the certification have been incorporated in the Proposed Permit. The draft 401 certification is available. ADEC will accept public comment on the draft certification as set forth below.

Alaska Coastal Management Program (ACMP) Review

EPA is working with the Alaska Department of Natural Resources (ADNR), Office of Project Management and Permitting (OPMP) to assure the Proposed Permit is consistent with the Coastal Zone Management Act, 16 U.S.C. 1451 *et seq.*

Public Comment on the Draft Permits

Persons wishing to comment on the Proposed Permit may do so in writing by the expiration date of the public notice. All comments must be in writing and must include the commenter's name, address, telephone number, the permit name, and the permit number. Comments must include a concise statement of their basis and any relevant facts the commenter believes EPA should consider in making its decision regarding the conditions and limitations in the final permit. All written comments and requests must be submitted to the attention of the Director, Office of Water and Watersheds at the following address: U.S. EPA, Region 10, 1200 6th Avenue, Suite 900, OWW-130, Seattle, WA 98101. Alternatively, comments may be submitted by facsimile to (206) 553-1280; or submitted via e-mail to Guzzo.Lindsay@epa.gov by the end date of the public comment period.

Two public informational meetings will be held to discuss the Proposed Permit, clarify changes and to answer general questions. One meeting will be held in Anchorage on October 15, 2008 at Westmark Hotel Anchorage, and one in Seattle on October 28, 2008 at the Red Lion Hotel. These informational meetings will not serve as a formal public hearing on the permit.

Persons wishing to request that a public hearing be held may do so, in writing, by the end date of this public comment period. A public hearing is a formal meeting wherein EPA officials hear the public's views and concerns about an EPA action or proposal. A request for a public hearing must state the nature of the issues to be raised, reference the permit name and NPDES permit number, and include the requester's name, address, and telephone number.

After the comment period closes, and all significant comments have been considered, EPA will review and address all submitted comments. EPA's Regional Director for the Office of Water and Watersheds will then make a final decision regarding permit issuance. If no comments are received, the tentative conditions in the Proposed Permit will become final. The permit will become effective 30 days after it is issued, unless it is stayed by the court in response to an appeal. Pursuant to Section 509(b)(1) of the Clean Water Act, 33 U.S.C. 1369(b)(1), any

interested person may appeal the permit in the Ninth Circuit Court of Appeals within 120 days following notice of EPA's final decision for the permit.

Documents are Available for Review

The Proposed Permit and related documents can be reviewed or obtained by visiting or contacting EPA's Regional Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday (see address below). Copies and other information may be requested by writing to EPA at the above address to the attention of the NPDES Permits Unit, or by calling (800) 424-4EPA.

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, Suite 900, OWW-130
Seattle, Washington 98101
206-553-0523 or
1-800-424-4372 (within Alaska, Idaho, Oregon, and Washington)

The fact sheet and Proposed Permit are also available at:

U.S. Environmental Protection Agency Region 10
Alaska Operations Office
222 West 7th Avenue, #19
Anchorage, Alaska 99513
907-271-6561

Alaska Department of Environmental Quality
Anchorage Office
555 Cordova
Anchorage, Alaska 99501
907-269-7500

Alaska Department of Environmental Quality
Fairbanks Office
610 University Avenue
Fairbanks, AK 99709
907-451-2360

Alaska Department of Environmental Quality
Juneau Office
410 Willoughby Avenue, Suite 105
Juneau, AK 99801-1795
907-465-5010

The draft permit and fact sheet can also be found by visiting the Region 10 website at:
www.epa.gov/r10earth/water.htm.

For technical questions regarding the Proposed Permit or fact sheet, contact Lindsay Guzzo at the phone numbers or email addresses at the top of this fact sheet. Additional services can be made available to person with disabilities by contacting Audrey Washington at 206-553-0523.

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I. INTRODUCTION

Section 301(a) of the Clean Water Act (CWA) provides that the discharge of pollutants to surface waters of the United States is unlawful except in accordance with a National Pollutant Discharge Elimination System (NPDES) permit. 40 CFR 122.28 authorizes EPA to issue general NPDES permits to categories of discharges when a number of point sources:

- are located within a geographic area;
- involve the same or substantially similar types of operations;
- discharge the same types of wastes;
- require the same effluent limitations or operating conditions;
- require the same or similar monitoring requirements; and
- in the opinion of EPA, are more appropriately controlled under a general permit than under individual permits.

EPA has determined that it is appropriate to issue a NPDES general permit in this case. The owners and operators of the seafood processing facilities covered by this Proposed Permit operate within waters of the United States around the State of Alaska. These waterbodies are governed by the same water quality standards and ocean discharge criteria. In addition, these facilities are all similar in the way that they operate and in what they discharge. Moreover, the facilities are subject to the same effluent limitations, operating conditions, and monitoring requirements.

In the past, EPA has issued one permit for the State of Alaska that authorized discharges from on-shore as well as offshore seafood processors. In order to clarify the requirements specifically applicable to offshore seafood processors, EPA has decided to issue a general permit that applies only to offshore seafood processors in this permitting action.

This fact sheet briefly describes the facilities, discharges and receiving waters covered by the Proposed Permit. It also sets forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the Proposed Permit and its requirements.

The technical support documents cited in this Fact Sheet provide the technical/scientific basis for the Proposed Permit limits and conditions. Coverage under the Proposed Permit

will expire 5 years from the date of issuance.

II. WHAT FACILITIES, POLLUTANT DISCHARGES AND RECEIVING WATERS ARE COVERED BY THE GENERAL PERMIT

A. Facilities covered by the Permit

The Proposed Permit 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 Proposed Permit 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.

Currently, there are approximately 98 permitted seafood processing facilities that discharge effluent into waters of the U.S. that operate more than 0.5 NM from the shore. These facilities were previously permitted under the NPDES general permit for seafood processors in Alaska, AKG520000. Seafood processors are generally differentiated from other food processing industries in the Standard Industrial Classification Manual (OMB1987) as "canned and cured fish and seafoods" (SIC no. 2091), "prepared fresh and frozen fish and seafoods" (SIC no. 2092), "animal and marine fats and oils" (SIC no. 2077) and "food preparations, not elsewhere classified" (SIC no. 2099). These facilities may process any of a large number of species of fish and marine invertebrates. Several benthic species are harvested commercially: Tanner crab, Dungeness crab, weathervane scallop, and shrimps (ADEC, EPA, and Tetra Tech 2008). In addition, five anadromous species (pink, sockeye, chum, coho, and Chinook salmon), three groundfish species (Pacific cod, sablefish, walleye Pollock), and one pelagic species (Pacific herring) constitute the bulk of the fish harvested commercially (ADEC, EPA, and Tetra Tech 2008). In 2006, offshore seafood processors authorized under the NPDES general permit for seafood processors in Alaska individually discharged from 153,000 to over 100 million pounds of waste solids, with the median discharge at about 3.2 million pounds of seafood waste,.

Detailed information on the nature of the seafood processing industry and the fisheries which supply it with raw product is provided in the "Seafood ODCE" (ADEC, EPA and Tetra Tech 2008) and documents referenced therein.

B. Facilities not authorized by the Permit

No shorebased plant may receive coverage under this Proposed Permit, unless discharge of wastes occurs through an at-sea discharge as described above.

C. Discharges covered by the Permit

The following types of discharges are proposed to be covered by the Proposed Permit. Detailed information on the nature of the seafood processor effluents is provided in the "Seafood ODCE" (ADEC, EPA, and Tetra Tech, 2008).

1. Seafood process wastes are authorized for discharge under the Proposed Permit. The major pollutants of concern include residues, biochemical oxygen demand (BOD), total suspended solids (TSS), non-petroleum oil and grease, and nutrients. These pollutants come from the 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 Proposed 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. Other disinfectants that may be discharged under the Proposed Permit are iodine disinfectants which may also be used for sanitation and may be found in trace amounts.
3. Other wastewaters, including cooling water, boiler water, freshwater pressure relief water, refrigeration condensate, refrigerated seawater, cooking water, scrubber water, water used to transfer seafood to the facility, and live tank water, are authorized for discharge under the Proposed Permit. Pollutants in these miscellaneous waste water streams may include TSS, BOD, non-petroleum oil and grease, pH and temperature.

D. Discharges not authorized by the Permit

The Proposed Permit does not authorize any pollutants which are not expressly authorized in the Permit. This includes, but is not limited to, petroleum hydrocarbons and toxic pollutants listed in 40 CFR 401.15.

The Proposed Permit does not authorize discharges resulting from seafood processors producing seafood paste, or washed mince, as well as discharges from associated process wastes to receiving waters between 0.5-1 NM of the Alaskan shore at MLLW. The basis

for the prohibition of the discharge of effluents from washed mince is that the high levels of biochemical oxygen demand (BOD) that characterizes this wastewater can depress dissolved oxygen in the water column. Applications for individual NPDES permits will be accepted from these facilities.

E. Receiving waters covered by the Permit

The Proposed Permit authorizes discharges of specified effluent to the waters of the United States except those excluded from coverage as protected, special, at-risk or degraded water resources as described in Part II.F below. In general, the Proposed Permit authorizes seafood processing discharges to marine waters at least 0.5 NM from the Alaskan shore at MLLW. In its CWA Section 401 draft certification, ADEC has authorized mixing zones of a 100 foot radius for discharges of dissolved gas, residues, color, turbidity, non-hydrocarbon oil and grease, temperature, pH, fecal coliform bacteria, and total residual chlorine. Mixing zones only apply in State waters which are defined as those waters from the shore extending out three miles. Mixing zones are not authorized outside of State waters. ADEC's draft cert has also allowed for zones of deposits (ZOD) on a case by case basis. Each ZOD will be site specific and will be public noticed prior to authorization.

The Proposed Permit authorizes discharges to State waters, Territorial waters, the Contiguous Zone, and the oceans. State waters include those waters located from shore to 3 NM at MLLW as well as defined inland waters. Territorial waters or Territorial seas include those waters measured from the line of ordinary low water along the portion of the coast that is in direct contact with the open sea and/or the line marking the seaward limit of inland waters, extending seaward for 3 miles. The Contiguous Zone includes waters extending out 12 NM from the territorial seas. The oceans include any portion of the high seas that extends beyond the boundary of the contiguous zone.

F. Receiving waters not authorized by the Permit

Discharges are explicitly not authorized under the Proposed Permit to receiving waters that have been identified as protected, special, at-risk or degraded water resources. A detailed discussion of what constitutes protected, special, at-risk or degraded water resources is contained below.

A seafood processor who wants to obtain authorization to discharge in the "excluded areas" must apply for an individual NPDES permit. The areas excluded from coverage under the Proposed Permit include the following protected, special, at-risk or degraded water resources and waterbodies.

1. Protected water resources and special habitats.

- a. Waters within 1 NM of the boundary of a State Game Sanctuary, State Game Refuge, State Park, State Marine Park, or State Critical Habitat are excluded from coverage by the Proposed Permit.

The Alaska State Legislature has classified certain areas, designated as a sanctuary, refuge or critical habitat, as being essential to the protection of fish and wildlife habitat [5 AAC Part 95].

There are currently twelve state game refuges and sanctuaries: Anchorage Coastal, Cape Newenham, Goose Bay, Mendenhall Wetlands, Palmer Hay Flats, McNeil River, Susitna Flats, Trading Bay, Yakataga, McNeil River, Stan Price, and Walrus Islands, which exist in the vicinity of potential seafood processing activities.

There are currently twelve state designated Critical Habitat Areas that exist in the vicinity of potential seafood processing wastes discharges: Cinder River, Clam Gulch, Copper River Delta, Egegik, Fox River Flats, Kachemak Bay, Kalgin Island, Pilot Point, Port Heiden, Port Moller, Redoubt Bay, and Tugidak.

There are currently 9 State Parks and they include: Afognak Island State Park, Chilkat State Park, Denali State Park, Kachemak Bay State Park, Kachemak Bay State Wilderness Park, Point Bridget State Park, Shuyak Island State Park, and Wood/Tikchik State Park.

There are currently 33 State Marine parks and they include: Bettles Bay, Beecher Pass, Big Bear/Baby Bear Bays, Boswell Bay Beaches, Canoe Passage, Chilkat Islands, Dall Bay, Decision Point, Driftwood Bay, Entry Cove, Funter Bay, Granite Bay, Horseshoe Bay, Jack Bay, Joe Mace Island, Kayak Island, Magoun Islands, Oliver Inlet, Safety Cove, Saint James Bay, Sandspit Point, Sawmill Bay, Security Bay, Shelter Island, Shoup Bay, South Ester Island, Sullivan Island, Sunny Cove, Surprise Cove, Taku Harbor, Thoms Place, Thumb Cove, and Ziegler Cove.

Lists and maps of these areas can be found in Appendicies A and B of the Proposed Permit.

- b. Waters within 1 NM of the boundary of a National Park, Monument or Preserve or within any bay, fjord or harbor enclosed by a National Park, Monument or Preserve are excluded from coverage by the Proposed Permit.

Congressional mandates and Presidential proclamations have provided that federal parks, monuments and preserves be maintained to provide the scenic beauty and quality of landscapes in their natural state, to protect environmental integrity and habitat for and populations of fish and wildlife, including marine mammals, seabirds and waterfowl, and to provide continued opportunities for wilderness recreational activities [16 U.S.C. 1 et seq.].

There are currently six national parks and preserves: Bering Land Bridge, Katmai, Kenai Fjords, Lake Clark, Wrangell-St. Elias, and Glacier Bay, and two national monuments: Aniakchak and Cape Krusenstern, which exist in the vicinity of potential seafood processing activities. Lists and maps of these areas can be found in Appendices A and B of the Proposed Permit.

- c. Waters within 1 NM of the boundary of a National Wildlife Refuge are excluded from coverage by the Proposed Permit.

National Wildlife Refuges are maintained to protect environmental integrity and populations of fish and wildlife and their habitats, as well as to provide the scenic beauty and quality of landscapes in their natural state and opportunities for wilderness recreational activities [16 U.S.C. 661 et seq.].

There are currently eight national wildlife refuges: Alaska Maritime, Alaska Peninsula, Becharof, Izembek, Kenai, Kodiak, Togiak, and Yukon Delta, which exist in the vicinity of potential seafood processing activities. Lists and maps of these areas can be found in appendices A and B of the Proposed Permit.

- d. Waters within 3 NM of a rookery or major haulout of the Steller sea lion are excluded from coverage by the Proposed Permit. These areas are designated as critical habitat for the Steller sea lion. The Steller sea lion population west of longitude 144°W is classified as endangered, and the Steller sea lion population to the east of 144°W is classified as threatened. They are listed and depicted in 50 CFR Part 226 and 227.12, the "Seafood ODCE" (ADEC, EPA, and Tetra Tech 2008) and "Biological evaluation" (EPA 2008a).

Pinniped rookeries and haulouts are vulnerable to disturbance and degradation by seafood processor discharges and should be protected [Marine Mammal Protection Act, 16 U.S.C. 1361 *et seq.*; 50 CFR 226]. Rookeries are unique habitats where pinnipeds mate, birth and raise their progeny on a consistent annual basis. Haulouts are areas used for rest and refuge by pinnipeds of all ages and both sexes during the non-breeding season and non-breeding adults and subadults during the breeding season (NMFS 1993; NOAA 1993; 58 Fed. Reg. 45269-45285).

For regulatory purposes, the waterward boundary of rookeries and haulouts has been defined as MLLW. However, biologically, the boundaries are not easily delineated, for the surrounding nearshore waters are an integral component of these habitats, especially for foraging by post-parturient females and by young animals which are developing swimming and hunting behaviors. Conservation of rookeries, haulouts and foraging areas appears essential to the maintenance of pinniped populations in general, and to the recovery of the "endangered" population of Steller sea lions in particular. Rookeries and major haulouts and adjacent marine waters to a minimum of 3 NM offshore have been designated as critical habitat for Steller sea lions [58 Fed. Reg. 45269-45285; 50 CFR Part 226 and 50 CFR 227.12]. Lists and maps of these areas can be found in Appendices A and B of the Proposed Permit.

- e. Waters within 1 NM of designated critical habitat for the Steller's eider or spectacled eider, including nesting, molting and wintering units. During breeding season (May through August) Steller's and spectacled eider nesting critical habitat units are located on the Yukon-Kuskokwim Delta and North Slope. Molting habitat (July through October) for Steller's eiders includes Izembek Lagoon, Nelson Lagoon and Seal Islands. Molting habitat for spectacled eider includes Ledyard Bay and Norton Sound. Wintering habitat (October through March) for Steller's eider includes Nelson Lagoon, Izembek Lagoon, Cold Bay, Chignik Lagoon and several other locations along the Aleutian Islands. Wintering habitat for spectacled eider is in the Bering sea between St. Lawrence and St. Matthews Islands. For complete lists and maps of Steller's eider and spectacled eider critical habitat see Appendices A and B.
2. At-risk resources and waterbodies.
 - a. Areas with water depth of less than 10 fathoms (60 feet) at MLLW that have poor flushing, including but not limited to sheltered waterbodies such as bays, harbors, inlets, coves and lagoons and semi-enclosed water basins bordered by sills of less than 10 fathom depths are excluded from coverage under the Proposed Permit. For the purposes of this section, "poor flushing" means average water currents of less than one third of a knot within 300 feet of the outfall. Currents of one third knot and greater offer significant dispersion and re-suspension of seafood process waste residues (ADEC, EPA and Tetra Tech 2008). It is the responsibility of the permittee to prove adequate flushing at the time of NOI submittal. If EPA and/or ADEC disagree with the flushing analysis, the permittee may be required to submit an application for an individual permit.
 - b. Lost Harbor, Akun Island is excluded from coverage under the Proposed Permit. This harbor has a sill of twelve fathoms which restricts circulation in the enclosed

basin of 28 fathoms. EPA has found that this waterbody has been degraded by seafood waste discharges and closed it to further discharges.

3. Degraded waterbodies.

Any waterbody included in Alaska Department of Environmental Conservation's (ADEC) CWA 305(b) report or CWA 303(d) list of waters which are "impaired" or "water quality-limited" are excluded from coverage under the Proposed Permit.

4. Orca Inlet.

No discharge of uncooked fish processing waste residues may occur during the months of November, December, January, February and March in of Orca Inlet where sea otters, which are protected under the Marine Mammal Protection Act, are attracted to the discharge and waste deposit as a food source.

5. Waters covered by other general NPDES permits.

The Permit does not authorize the discharge of pollutants in areas covered by general NPDES permits AKG527000 (Pribilof Islands), AKG528000 (Kodiak Island), and AKG520000 (Shorebased).

III. APPLYING FOR COVERAGE UNDER THE PROPOSED PERMIT

A. How to apply for coverage under the Proposed Permit

A Notice of Intent (NOI) to be covered under the Permit, or an equivalent form containing all necessary information is required to be submitted in order for a facility to obtain coverage under this permit, 40 CFR 122.28(b)(2)(i). The specific requirements for the NOI are outlined in Part IV of the Proposed Permit. A permittee seeking authorization to discharge under the Proposed Permit should submit a timely and complete NOI and all supplementary documents to EPA and ADEC at least 90 days prior to the desired date of coverage. This time period will allow EPA and ADEC adequate time to review the application, and inform the applicant of its permit determination. An NOI shall include information on the facility, its owners and operators, its process and discharges, and the receiving water in accordance with Part IV.C of the Proposed Permit.

B. What are the requirements of an individual permit

1. How will an individual permit differ from the general permit?

EPA has determined that the general NPDES permit for Offshore Alaskan seafood processing facilities will contain the minimum limitations and requirements for

authorization to discharge pollutants from these types of operations. These minimum requirements include best management practices, technology-based effluent limits, water quality-based limits, monitoring of the effluent, receiving water, and seafloor where feasible and appropriate, and reporting of production, discharges and monitoring. Individual NPDES permits for Alaskan seafood processing facilities will require at least these minimum permit requirements. In addition, EPA may impose site-specific limits and conditions in an individual NPDES permit.

2. When will a general permittee be required to apply for an individual permit [40 CFR 122.28(b)(3)]

Pursuant to 40 CFR 122.28(b)(3), EPA may require any discharger applying for or covered by a general permit to apply for and obtain an individual permit. In addition, any interested person may petition EPA to take this action. EPA may consider the issuance of individual permits when:

- a. The single discharge or the cumulative number of discharges is/are a significant contributor of pollution;
- b. The discharger is not in compliance with the terms and conditions of the general permit;
- c. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
- d. Effluent limitations guidelines are subsequently promulgated for the point sources covered by the general permit;
- e. A Water Quality Management Plan containing requirements applicable to such point sources is approved; or
- f. Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.

These provisions are incorporated into the Proposed Permit at Part IV.A.2.

3. How to apply for authorization to discharge under an individual permit [40 CFR 122.28(b)(3)(G)(iii)]

Pursuant to 40 CFR 122.28(b)(3)(G)(iii), any operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for

an individual permit. The operator shall submit an application, with reasons supporting the request, to EPA no later than 90 days after the publication by EPA of the general permit in the Federal Register. This application shall include NPDES permit application Forms 1 and 2C, together with the same information as in Part IV.C of this Proposed Permit.

IV. WHAT CONDITIONS ARE REQUIRED BY THE GENERAL PERMIT

A. General approach to determining effluent limitations

Section 301(a) of the CWA, 33 U.S.C. 1311(a), prohibits the discharge of pollutants to waters of the U.S. unless authorized pursuant to a NPDES permit. CWA Section 402, 33 U.S.C. 1342, authorizes EPA to issue NPDES permits authorizing discharges subject to limitations and requirements imposed pursuant to Sections 101, 301(b), 304, 308, 401 and 403 of the Act, 33 U.S.C. 1251, 1311(b), 1314, 1318, 1341, and 1343. EPA evaluates discharges with respect to these sections of the Act and the relevant NPDES regulations in determining which conditions to include in the permit. Pursuant to these statutory provisions, EPA is required to include effluent limitations that (1) meet standards reflecting levels of technological capability, (2) comply with EPA-approved State water quality standards, (3) comply with other State requirements adopted pursuant to CWA Section 510, 33 U.S.C. 1370, and (4) cause no unreasonable degradation to the territorial seas, contiguous zone, or oceans. Moreover, many NPDES permits impose reporting/information gathering requirements pursuant to CWA Section 308, 33 U.S.C. 1318.

In general, EPA first determines which technology-based limits apply to the subject discharges in accordance with the national effluent limitation guidelines and standards which, for seafood, are found at 40 CFR 408. EPA then determines which water quality-based limits may apply to the discharges. EPA is required to impose the limit that is most stringent in the permit.

EPA must also include monitoring requirements in the permit to monitor compliance with effluent limitations pursuant to 40 CFR 122.44(i). Ambient monitoring may also be required to gather data for future effluent limitations or monitor effluent impacts on receiving water quality and the integrity of the water resource.

The basis for each permit condition is described in more detail below.

B. Technology-based limitations

The Act requires particular categories of industrial dischargers to meet technology-based effluent limitations established by EPA. The CWA initially focused on the control of traditional pollutants (*i.e.*, conventional pollutants and some metals) through the use of

best practicable control technology currently available (BPT). For conventional pollutants (*i.e.*, pH, BOD, TSS, oil and grease, and fecal coliform), CWA Section 301(b)(1)(E), 33 U.S.C. 1311(b)(1)(E), requires the imposition of effluent limitations based on best conventional pollutant control technology (BCT). For nonconventional and toxic pollutants, CWA Section 301(b)(2)(A), (C), and (D), 33 U.S.C. 1311(b)(2)(A), (C), and (D), require the imposition of effluent limitations based on best available technology economically achievable (BAT). CWA Section 301(b), 33 U.S.C. 1311(b), requires compliance with BCT and BAT no later than March 31, 1989. Where EPA has not yet developed guidelines for a particular industry, permit conditions must be established using Best Professional Judgment (BPJ) procedures (40 CFR 122.43, 122.44 and 125.3).

For New Sources, as that term is defined in 40 CFR 122.2, CWA Section 306, 33 U.S.C. 1316, requires the imposition of effluent limitations for conventional and toxic pollutants based on new source performance standards (NSPS). CWA Section 306 requires compliance with NSPS no later than the effective date of such standards.

EPA has promulgated final ELGs specifying BCT, BPT, and NSPS for specific categories of Alaska seafood processing. These ELGs are codified at 40 CFR 408. The ELGs are applicable to the following seafood processing industries: crab meat processing, whole crab and crab section processing, shrimp processing, hand-butchered salmon processing, mechanized salmon processing, bottom fish processing, scallop processing, and herring fillet processing.

1. Process and process-associated wastes

Offshore Alaskan seafood processors of fresh, frozen, canned and cured fish and shellfish are covered by the effluent guidelines and described in 40 CFR 408 for "remote" Alaskan locations. Offshore Alaskan seafood processors are considered remote because they are not located in "population or processing centers" according to 40 CFR 408. EPA evaluated seafood processors across the nation in the early 1970s in order to establish technology-based effluent limitations guidelines (EPA 1975). 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 seafood waste may be discharged which exceed 0.5 inch (1.27 cm) in any dimension. New source performance limitations for remote Alaskan seafood processors are limited to the same requirement that no seafood waste may be discharged which exceed 1.27 cm (0.5 inch) in any dimension.

2. Sanitary wastewaters.

Sanitary wastewater must be discharged in accordance to U.S. Coast Guard regulations [33 CFR 159] through a certified and operable Type I or Type II Marine Sanitation Device prior to discharge.

C. Water quality-based limitations

Section 301(b)(1)(C) of the Act requires the establishment of limitations in permits necessary to meet state water quality standards by July 1, 1977. All discharges to state waters must comply with state and local coastal management plans as well as with state water quality standards, including the state's antidegradation policy. Discharges to state waters must also comply with limitations imposed by the state as part of its coastal management program consistency determination and its CWA Section 401 certification of the NPDES permit. State water quality standards apply to coastal waters and territorial seas out to 3 NM from shore at MLLW, they do not apply to waters beyond the territorial seas (*i.e.*, the contiguous zone and oceans).

40 CFR 122.44(d)(1) require that permits include limits on all pollutants or parameters which "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality".

Toxicity limits are required whenever toxicity is at a level of concern relative to either a numeric or narrative standard for toxicity. A chemical-specific limit is required whenever an individual pollutant is at a level of concern relative to the numeric standard for that pollutant (40 C.F.R. 122.44(d)).

Alaska State Water Quality Standards (18 AAC 70) designate marine and estuarine receiving waters as Classes (II)(A)(i-iii), (II)(B)(i-ii), (II)(C) and (II)(D) for use in aquaculture, seafood processing, water recreation, the growth and propagation of fish, shellfish, aquatic life and wildlife, and the harvesting for consumption of raw mollusks and other raw aquatic life. Marine and estuarine waters are designated for all beneficial uses and the most stringent of the water quality standards for these uses must be met.

Alaska State Water Quality Standards provide for the authorization of a mixing zone volume of dilution for an effluent which must be as small as practicable [18 AAC 70.032]. The water quality criteria of 18 AAC 70.020(b) and the antidegradation requirements of 18 AAC 70.015 may be exceeded in an authorized mixing zone. However, the standards must be met at every point outside a mixing zone. In their draft 401 certification, ADEC is proposing to authorize a circular mixing zone of 100 feet radius for discharges of dissolved gas, residues, non-hydrocarbon oil and grease,

color, turbidity, temperature, pH, fecal coliform bacteria, and total residual chlorine. Mixing zones only apply in State waters which are defined as those waters from the shore extending out three miles. Mixing zones are not authorized outside of State waters.

In accordance with 18 AAC 70.210, the Department may certify a permit that allows deposit of substances on the bottom of marine waters. In deciding whether to authorize a zone of deposit, the department will require an applicant to provide information necessary to adequately assess:

- If there are alternatives that would eliminate, or reduce, and adverse effects of the deposit
- The potential direct and indirect impacts on human health
- The potential impacts on aquatic life and other wildlife
- The potential impacts on other users of the waterbody
- The expected duration of the deposit and any adverse effects
- The potential transport of pollutants by biological, physical, and chemical processes.

In all cases, the burden of proof for providing the required information is the responsibility of the applicant. Limits of deposit will be defined in a permit certified under 18 AAC 15 which requires public notice of the proposed limit of the authorized zone of deposit in accordance with AS 46.03.110.

D. Ocean Discharge Criteria

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 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. 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 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).

After consideration of these factors, EPA has determined that discharges authorized by the Proposed Permit and discharged in accordance with the requirements of the Proposed Permit will not cause unreasonable degradation of the receiving waters.

Discharges to water resources which are protected, special, at-risk or impaired are not authorized under the Proposed Permit. EPA guidance (EPA 1994) finds that in areas that do not contain sensitive species or unusual biological communities, it may be concluded that discharges containing primarily conventional pollutants and in compliance with permit conditions will not cause unreasonable degradation. The guidance further finds this is especially appropriate where the data indicate that there will be significant mixing with the receiving waters based on the flow of the discharge (i.e. water depth, turbulence). The processing operations covered under the Proposed Permit will continue to have little environmental effect, providing appropriate grinding and dispersing is implemented.

Moreover, since the discharge consists largely of conventional pollutants in manageable quantities and the areas covered under the Proposed Permit are not considered sensitive or unique, unreasonable degradation is not anticipated.

The ODCE guidelines further establish a presumption that discharges in compliance with State Water Quality Standards (WQS) will not cause unreasonable degradation with respect to the pollutants subject to these sections. 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.

EPA has reviewed the draft 401 certification and believes that the draft certification will ensure that state WQS are met. Therefore, based on this review, EPA has concluded in

the ODCE that there will not be unreasonable degradation in the area where both state WQS and ocean discharge criteria would be applicable. Further, the ODCE has concluded that in the area where only ocean discharge criteria is applicable, the Proposed Permit conditions as established will ensure that there is not unreasonable degradation.

E. Specific Effluent Limitations and Requirements

The following discussions are also presented and expanded in the "Seafood ODCE" (ADEC, EPA, and Tetra Tech 2008). One criteria in the ODCE is to evaluate marine water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA). Section 304(a)(1) states: The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after the date of enactment of this title (and from time to time thereafter revise) criteria for water quality accurately reflecting the latest scientific knowledge (A) on the kind and extent of all identifiable effects on health and welfare including, but not limited to, plankton, fish, shellfish, wildlife, plant life, shorelines, beaches, esthetics, and recreation which may be expected from the presence of pollutants in any body of water, including ground water; (B) on the concentration and dispersal of pollutants, or their byproducts, through biological, physical, and chemical processes; and (C) on the effects of pollutants on biological community diversity, productivity, and stability, including information on the factors affecting rates of eutrophication and rates of organic and inorganic sedimentation for varying types of receiving waters. Since Alaska used EPA's 304(a)(1) criteria when developing their water quality standards (WQS), EPA has assumed that Alaska WQS are the same as those standards that should be used to protect the marine environment outside of state waters.

1. Biochemical oxygen demand (BOD). BOD affects the dissolved gases in the receiving water and may be limited by the applicable State WQS. Dissolved oxygen (DO) shall be greater than or equal to 6 mg/l (coastal) or 5 mg/l (estuarine) for a depth of one meter, except when natural conditions cause this value to be depressed, and shall be greater than or equal to 5 mg/l at any point beneath the surface (18 AAC 70.020(b)(15)). The Proposed Permit contains provisions that permittees will discharge effluents into hydrodynamically energetic waters with a high capacity of dilution and dispersion. In addition, to ensure that this WQS is met, the Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone." Should a discharge contribute to a violation of the State's criteria for dissolved oxygen in the receiving water, EPA has the authority to require a permittee to apply for and obtain an individual permit with site-specific requirements and conditions which would protect water quality.
2. Total suspended solids (TSS). TSS affects the residues in the receiving water and may be limited by the applicable State WQS. Residues of floating solids, debris, sludge, deposits, foam, scum, or other residues shall not alone or in combination with

other substances or wastes cause the water to be unfit or unsafe for the use, cause a film, sheen, or discoloration on the surface of the water or adjoining shorelines, or cause leaching of toxic or deleterious substances, or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines (18 AAC 70.020(b)(20)). ADEC finds that the residue standard requires the authorization of a mixing zone, and has proposed a mixing zone in their draft 401 certification. The discharge should not cause a violation of the residue standard under the terms and conditions of the Proposed Permit. The Proposed Permit contains provisions that permittees will discharge effluents into hydrodynamically energetic waters with a high capacity for dilution and dispersion and will monitor the sea surface daily and seafloor when applicable. The Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone."

3. Residues. As above, discharges of settleable solid seafood processing waste residues are limited by the applicable State WQS. Residues of scum, solids, debris, sludge or deposits shall not alone or in combination with other substances or wastes cause the water to be unfit or unsafe for the use, cause a film, sheen, or discoloration on the surface of the water or adjoining shorelines, or cause leaching of toxic or deleterious substances, or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines(18 AAC 70.020(b)(20)). ADEC finds that the residue standard requires the authorization of a mixing zone, and has proposed a mixing zone in their draft 401 certification. The discharge should not cause a violation of the residue standard under the terms and conditions of the Proposed Permit, as stated in Part V of the Proposed Permit. The Proposed Permit contains provisions that permittees will discharge effluents into hydrodynamically energetic waters with a high capacity for dilution and dispersion and will monitor the sea surface daily and seafloor when applicable. The Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone."

The Proposed Permit limits the discharge, from vessels located between 0.5-1 NM at MLLW, of offal to no more than 3.3 million pounds of settleable solid seafood processing waste residues per year, at a single location. A single location refers to the anchorage of a vessel within a circular area with a radius equal to 0.5 NM. This effluent limit is based upon WASP modeling of the discharge, dispersion, settlement, accumulation and decomposition of fish offal on the seafloor beneath and surrounding a discharge year, with a margin of safety equal to one-sixth of the estimated loading capacity. The WASP simulation of settleable solid seafood processing waste residues predicts that the continuing annual discharge of 4 million pounds of offal will produce as steady state waste pile of decomposing seafood that is one acre in area; the Surfer contouring model predicts that the waste pile will be just over 2.1 feet thick at its cone and will extend to an area of 1 acre (ADEC, EPA, Tetra

Tech, 2008). Based upon the contouring model's predicted "spreading" at the periphery of the waste pile, EPA has determined that a one-sixth margin of safety is appropriate to protect water quality. The Proposed Permit provides that the effluent limit for discharged settleable solids seafood processing wastes (a.k.a. offal) is equal to $5/6 \times 4,000,000 = 3.33$ million pounds per year within 1 NM of shore, at a single location.

No limits on waste loads are proposed for discharges of settleable solid processing residues by seafood processors discharging more than one nautical mile off shore.

4. Fecal coliform bacteria (FC). Median concentration shall not exceed 14 FC per 100 ml in marine water (18 AAC 70.020(b)(14)). To ensure that this WQS is met the Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone."
5. Oil and grease. The applicable State WQS for oil and grease states that the discharge shall not cause a film, sheen, or discoloration on the surface or floor of the waterbody or adjoining shorelines. Surface waters shall be virtually free from floating oils. There may be no concentrations of animal fats in shoreline or bottom sediments that cause deleterious effects to aquatic life. Substances shall not be exceed concentrations that individually or in combination impart undesirable odor or taste to organisms as determined by either bioassay or organoleptic tests (18 AAC 70.020(b)(17)). The discharge should not cause a violation of the residue standard under the terms and conditions of the Proposed Permit. The Permit further proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone."
6. pH. The State WQS for marine waters requires that pH shall be no less than 6.5 or greater than 8.5, and shall not vary more than 0.2 pH unit from the natural conditions (18 AAC 70.020(b)(18)). Some of the wastewater associated with seafood processing wastes can be slightly alkaline or acidic but should generally be within the range of the water quality criteria. This is evidence by monitoring data from individual permits, which show most values within the 6.5-8.5 range between 2002 and 2005 (ADEC, EPA, and Tetra Tech 2008). To ensure that this WQS is met, the Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone."
7. Temperature. The State WQS for marine water requires that temperature shall not exceed 15° C and shall not cause the weekly average temperature to increase more than 1 ° C (18 AAC 70.020(b)(22)). Normal daily temperature cycles shall not be altered in amplitude or frequency. To ensure that this WQS is met, the Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone."

8. Color. The State WQS for marine waters requires that surface waters must be free of substances that produce objectionable color, and that the water not exceed 15 color units (18 AAC 70.020(b)(13)). To ensure that this WQS is met, the Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone."
9. Turbidity. The State WQS for marine water limits turbidity to no more than 25 NTU; it shall not reduce the depth of the compensation point for photosynthetic activity by more than 10%, and may not cause detrimental effects on established levels of water supply treatment (18 AAC 70.020(b)(24)). To ensure that this WQS is met, the Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone."
10. Total residual chlorine (TRC). The State WQS requires that TRC shall be no more than 7.5 ug/l (18 AAC 70.020(b)(23)). To ensure that this WQS is met, the Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone."

F. Summary of effluent limitations and requirements

The discharges of Alaskan seafood processors covered by the Proposed Permit will not result in a violation of the Alaska WQS or marine water quality criteria, provided that the permittee complies with the limits and conditions proposed in the draft general NPDES permit. The Proposed Permit requires that:

- the permittee ensure that seafood waste discharges do not exceed 0.5 inch (1.27 cm) in any dimension, a technology-based requirement commonly known as "grind and discharge."
- the permittee comply with State WQS for discharges of dissolved oxygen, floating and suspended waste residues, color, turbidity, temperature, pH, fecal coliform bacteria, and total residual chlorine at the edge of a 100 ft mixing zone.
- discharges of settleable solid seafood processing waste residues not exceed 3.3 million pounds per year, within 0.5-1 NM from the Alaska shore at MLLW at a single location. A single location refers to the anchorage of a vessel within a circular area with a radius equal to 0.5 NM.

V. BEST MANAGEMENT PRACTICES - WHAT, WHY, HOW AND WHEN

Best Management Practices (BMPs), in addition to numerical effluent limitations, may be required to control or abate the discharge of pollutants in accordance with 40 CFR 122.44(k).

It is the national policy that, whenever feasible, pollution should be prevented or reduced at the source, that pollution which cannot be prevented should be recycled in an environmentally safe manner, that pollution which cannot be prevented or recycled should be treated in an environmentally safe manner, and that disposal or release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner [Pollution Prevention Act of 1990, 42 U.S.C. 13101 et seq.].

The permittee will discharge in accordance with best management practices which address the provisions of the Pollution Prevention Act.

In EPA's reassessment of the ELGs for seafood processors (Jordan 1979; EPA 1980b), in-plant management directed towards total utilization of the raw materials and by-product recovery was recommended as a fundamental and central element of waste reduction. Materials accounting, audits of in-plant utilization of water and materials, and best management practices were repeatedly recommended as the profitable approach to waste management in seafood processing plants at the "Wastewater Technology Conference and Exhibition for Seafood Processors" convened by the Fisheries Council of British Columbia in Vancouver, Canada in February 1994 (Ismond 1994).

The Proposed Permit requires the development and implementation of BMPs that prevent or minimize the generation and release of pollutants to receiving waters. Seafood processors operating and discharging more than 1 NM from shore are required to implement BMPs which minimize process waste solids and disperse process wastes through mobility. Seafood processors operating and discharging 0.5-1 NM from shore are required to develop a BMP Plan which focuses upon the minimization of process waste solids.

A new permittee shall develop and implement a BMP Plan within 60 days of the date of that permittee's authorization to discharge under this Proposed Permit. A continuing permittee shall review and update the BMP Plan and resubmit certification with the NOI that the BMP Plan has been reviewed and revised as needed.

EPA has developed a general handbook to assist industry in identifying and utilizing BMPs and in developing and implementing materials accounting and BMP Plans (EPA 1993). EPA has developed an industry-specific handbook to assist seafood processors in identifying and utilizing BMPs and in developing and implementing materials accounting and BMP Plans (EPA and Bottomline Performance 1994).

The BMP Plan must be amended whenever there is a change in the facility or in the operation of the facility which materially increases the potential for an increased discharge of pollutants.

VI. MONITORING REQUIREMENTS

A. Basis for Influent and Effluent Monitoring

Section 308 of the CWA and federal regulation 40 CFR 122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather effluent, surface water, and biological data to determine if additional effluent limitations are required in the future, and/or to monitor effluent impacts on the receiving water. Therefore, influent and effluent monitoring have been incorporated into the draft permit.

B. Proposed Monitoring Requirements

Monitoring frequencies are based on the nature and effect of the pollutant, as well as a determination of the minimum sampling necessary to adequately monitor the facility's performance. Permittees have the option of taking more frequent samples than are required under the permit. These samples can be used for averaging if they are conducted using EPA-approved test methods (40 CFR 136), with minimum Method Detection Limits shown in Table 1. Quarterly is defined as a calendar quarter (Jan.-Mar., Apr.-Jun., Jul.-Sep., and Oct.-Dec.). If no discharge occurs in one or more quarters the permittee must write "No Discharge" on the annual report for those quarters.

1. Monitoring Requirements for Outfall 001

Table 1 presents the proposed monitoring requirements for seafood waste outfall 001. Samples must be collected while seafood processing is occurring.

Table 1. Outfall 001: Monitoring Requirements During Processing Periods

Parameter	Units	Sample Frequency	Sample Type	Method Detection Limit
Total Ammonia	mg/L	1/Quarter	Grab	N/A
Arsenic, total recoverable	µg/L	1/Quarter	Grab	10
Copper, total recoverable	µg/L	1/Quarter	Grab	1
Cadmium, total recoverable	µg/L	1/Quarter	Grab	0.1
Lead, total recoverable	µg/L	1/Quarter	Grab	0.1

Mercury, total	µg/L	1/Quarter	Grab	0.005
Nickel, total recoverable	µg/L	1/Quarter	Grab	5
Selenium, total recoverable	µg/L	1/Quarter	Grab	2
Silver, total recoverable	µg/L	1/Quarter	Grab	0.2
Zinc, total recoverable	µg/L	1/Quarter	Grab	10

Because the aquatic life, and human health criteria for metals are very low it is important to use analytical methods with low method detection limits. This will ensure that the data can be used to determine if the effluent has the potential to cause or contribute to an exceedance of a water quality standard or marine water quality criteria. Analytical test methods with method detection limits below the aquatic life and human health criteria must be used to analyze samples. The draft permit requires the permittee to use test methods that achieve the method detection limits in Table 1.

2. Monitoring Requirements for Refrigerator Condenser Water

If any refrigerator condenser water is discharged through an outfall other than Outfall 001, than Table 2, below, presents the proposed effluent monitoring requirements for that outfall. This monitoring is in addition to the monitoring required in Table 1.

Table 2. Outfall 002: Refrigerator Condenser Effluent Monitoring Requirements

Parameter	Units	Sample Frequency	Sample Type	Method Detection Limit
Total Ammonia	mg/L	1/ Quarter	Grab	N/A

The above monitoring requirements are needed to ensure that the non-contact cooling water discharge is not being contaminated.

3. Monitoring Requirements for influent water

Table 3 below presents the proposed monitoring requirements for the influent water used to process seafood.

Table 3. Monitoring Requirements for influent water

Parameter	Units	Sample Frequency	Sample Type	Method Detection Limit
Arsenic, total recoverable	µg/L	1/Quarter	Grab	10
Copper, total recoverable	µg/L	1/Quarter	Grab	1
Cadmium, total recoverable	µg/L	1/Quarter	Grab	0.1
Lead, total recoverable	µg/L	1/Quarter	Grab	0.1
Mercury, total	µg/L	1/Quarter	Grab	0.005
Nickel, total recoverable	µg/L	1/Quarter	Grab	5
Selenium, total recoverable	µg/L	1/Quarter	Grab	2
Silver, total recoverable	µg/L	1/Quarter	Grab	0.2
Zinc, total recoverable	µg/L	1/Quarter	Grab	10

The above monitoring is required to help determine the source of metal contamination, if any.

C. Additional Monitoring Requirements

The following monitoring is required to ensure that the facility's systems are working properly and to ensure that effluent limitations and conditions are met.

1. Waste Conveyance system:

The waste conveyance and waste treatment system must be inspected daily whenever seafood processing occurs. This inspection is necessary to ensure that miscellaneous items (e.g., earplugs, rubber bands, etc.) are not entrained within the conveyance system and discharged through the outfall. A daily log must be maintained on site, and the results of the inspection must be submitted at the request of EPA or ADEC.

2. Grinder System:

The grinder system must be inspected daily whenever seafood processing occurs. This inspection is necessary to confirm that the grinder(s) is (are): (1) operating, and (2) reducing the size of the seafood residues to one-half inch or smaller in any dimension. This will require inspecting the size of the ground residues reduced in grinding. A daily log must be maintained on site, and submitted at the request of EPA or ADEC.

3. Outfall:

The structural integrity of the outfall line 001 must be inspected every year prior to the processing season. The inspection must confirm that the outfall line is structurally sound. Logs of this check must be kept on-board the vessel and submitted at the request of EPA or ADEC.

4. Sea Surface monitoring:

To ensure that Alaska's residue water quality standard and marine water quality criteria are attained, sea surface monitoring is necessary. Sea surface monitoring is required daily. Logs of this monitoring must be kept on-board the vessel and submitted at the request of EPA or ADEC.

VII. OTHER REQUIREMENTS

A. National Environmental Policy Act [42 U.S.C. 4321 et seq.]

Under the National Environmental Policy Act of 1969 (NEPA), major federal actions that could significantly affect the quality of the environment must undergo an environmental review. The Council on Environmental Quality (CEQ) established regulations for implementing NEPA in 40 CFR 1500. EPA established regulations to govern its compliance with NEPA in 40 CFR 6. EPA's NEPA compliance responsibilities include the "cross-cutting" statutes, i.e., Endangered Species Act, National Historic Preservation Act, the Executive Order on Environmental Justice, and Executive Orders on wetlands, floodplains, farmland, and biodiversity. The NEPA compliance program requires analysis of information regarding potential impacts, development and analysis of options to avoid or minimize impacts; and development and analysis of measures to mitigate adverse impacts.

Pursuant to CWA 301, new source performance standards (NSPS) were promulgated by EPA in 1975 for categories of discharges covered under the Proposed Permit. In accordance with CWA 511(c)(1), NPDES permits for new sources are subject to the provisions of NEPA. In accordance with 40 CFR 122.29(c) and 40 CFR 6 Subpart F [40 CFR 122.49(g)], EPA prepared an Environmental Assessment and determined that the issuance of the general NPDES permit for Offshore Alaskan seafood processors

would not significantly affect the quality of the human environment within the context of NEPA (EPA and Limno Tech 2008).

In compliance with EPA headquarter's guidance for re-issued NPDES permits, the EPA Region 10 NEPA Compliance Program has evaluated the proposed changes to general NPDES permit AKG524000. EPA Region 10 has determined a finding of no significant impacts.

B. Standard Permit Provisions

Parts VII and VIII of the Proposed Permit contains standard regulatory language that must be included in all NPDES permits. Since that language is a recitation of existing regulations, it is not open for comment and cannot be challenged in the context of this permitting action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements.

C. Coastal Zone Management Act [16 U.S.C. 1451 et seq.]

The Coastal Zone Management Act and its implementing regulations [15 CFR 930] prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State Coastal Zone Management program, and the State or its designated agency concurs with the certification [40 CFR 122.49(d)]. EPA has considered Coastal Zone Management Plans obtained from the State office and individual Coastal Zone Management districts in the Alaska Coastal Zone Management Consistency Document (EPA 2008b) and determined that the Proposed Permit will comply with the State Coastal Zone Management Program. EPA has submitted the Proposed Permit and the Coastal Zone Management Program Consistency Document to the State of Alaska, Office of the Governor, Division of Governmental Coordination, to ensure that the Proposed Permit complies with the State Coastal Zone Management Program.

D. Endangered Species Act [16 U.S.C. 1531 et al.]

Section 7 of the Endangered Species Act requires Federal agencies to consult with NOAA Fisheries and the U.S. Fish and Wildlife Service (USFWS) if their actions have the potential to either beneficially or adversely affect any threatened or endangered species. A list of endangered and threatened species and species of concern was requested for the State of Alaska, and EPA prepared a biological evaluation as required by ESA.

In the case of the "endangered and threatened" Steller sea lion, major haulouts as well as rookeries and adjacent nearshore waters have been designated as "critical habitats". The

Proposed Permit does not authorize discharges within 3 nautical miles of rookeries and major haulouts designated as critical habitats by NMFS, the responsible agency.

The Proposed Permit does not authorize discharges within 1 NM of designated critical habitat for the Steller's eider or spectacled eider, including nesting, molting and wintering units. During breeding season (May through August) Steller's and spectacled eider nesting critical habitat units are located on the Yukon-Kuskokwim Delta and North Slope. Molting habitat (July through October) for Steller's eiders includes Izembek Lagoon, Nelson Lagoon and Seal Islands. Molting habitat for spectacled eider includes Ledyard Bay and Norton Sound. Wintering habitat (October through March) for Steller's eider includes Nelson Lagoon, Izembek Lagoon, Cold Bay, Chignik Lagoon and several other locations along the Aleutian Islands. Wintering habitat for spectacled eider is in the Bering sea between St. Lawrence and St. Matthews Islands. For complete lists and maps of Steller's eider and spectacled eider critical habitat see Appendices A and B.

EPA has evaluated other species designated as endangered or threatened and found that the discharges authorized by the Proposed Permit will not affect them (EPA 2008a).

EPA informally consulted with NMFS and USFWS. The recommended protection measures for the species of concern prohibit alterations of limited, high quality habitat occupied and utilized during mating, birthing and raising young from discharges of pollutants by Offshore Alaskan seafood processors. EPA has concluded that the discharges authorized by the Proposed Permit are not likely to have an adverse effect on any endangered or threatened species or its critical habitat.

EPA is requesting concurrence from NMFS and USFWS on the draft permit and will consider their comments in the final permit decision. EPA will initiate consultation should new information reveal effects not previously considered, should the activities be modified in a manner beyond the scope of the original opinion, or should the activities affect a newly listed species.

E. Marine Mammal Protection Act [16 U.S.C. 1361 et seq.]

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. With the exception of subsistence use for Alaskan natives, a moratorium has been placed on the taking (harass or kill) marine mammals in Alaska.

The Proposed Permit provides for "buffer zones" around the rookeries and haulouts of Steller sea lions, northern fur seals and walruses. These protected water resources and special habitats are excluded from coverage under the Proposed Permit.

In addition, EPA has provided that no discharge of uncooked fish processing waste residues occurs during the months of November, December, January, February and March in Orca Inlet where sea otters, which are protected under the Marine Mammal Protection Act, are attracted to the discharge and waste deposit as a food source.

F. Essential Fish Habitat (EFH)

The Magnuson-Stevens Fishery Management and Conservation Act requires EPA to consult with NOAA Fisheries when a proposed discharge has the potential to adversely affect an EFH. The EFH regulations define an adverse effect as "any impact which reduces quality and/or quantity of EFH...[and] 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." NOAA Fisheries may recommend measures for attachment to the federal action to protect EFH; such recommendations are advisory, not proscriptive, in nature.

EPA has tentatively determined that the issuance of this Proposed Permit will cause minimal effects upon EFH species and habitat in the vicinity of seafood processor discharges of processing wastewater and waste solids. The water quality parameters dissolved oxygen, floating and suspended waste residues, color, turbidity, temperature, pH, fecal coliform bacteria, and total residual chlorine may exceed Alaska Water Quality Standards within the State-authorized 100 ft mixing zone. Mixing zones only apply in State waters which are defined as those waters from the shore extending out three miles. Mixing zones are not authorized outside of State waters. EPA requests that NMFS issue a "general concurrence" for this Permit issuance.

A general concurrence identifies specific types of Federal actions that may adversely affect EFH, but for which no further consultation will generally be required. In order to issue a general concurrence, NMFS must determine, after coordinating with the appropriate Fishery Management Council(s) and reviewing public comment, that the actions are (1) similar in nature and similar in their impact on EFH, (2) do not cause greater than minimal adverse effects on EFH when implemented individually, and (3) do not cause greater than minimal cumulative adverse effects on EFH. NMFS requires (1) a written description of the nature and approximate number (annually or by some other appropriate time frame) of the proposed actions, (2) an analysis of the effects of the actions on EFH and associated species and their life history stages, including cumulative effects, and (3) the Federal agency's conclusions regarding the magnitude of such effects.

This fact sheet, the Proposed Permit, biological evaluation, environmental assessment and the Seafood ODCE have been submitted to NMFS for review prior to the public notice period. Additional information will be provided to NMFS as needed during the consultation. Any recommendations received from NMFS regarding EFH will be considered for incorporation into this Proposed Permit prior to final issuance of the Permit.

If NMFS, after coordinating with the appropriate Fishery Management Council(s), determines that a General Concurrence is appropriate, it will provide EPA with a written statement that further consultation is not required for the permitting activities specified in the General Concurrence.

G. State Certification

Section 401 of the Act, 33 USC 1341, requires EPA to seek a certification from the State that the conditions of the Proposed Permit are stringent enough to comply with State water quality standards.

H. Presidential oversight of federal regulations [Executive Order 12866]

The Office of Management and Budget (OMB) has exempted this action from the review requirements of Executive Order 12866 providing for presidential oversight of the regulatory process pursuant to Section 6 of that order.

I. Paperwork Reduction Act [44 U.S.C. 3501 et seq.]

EPA has reviewed the requirements imposed on regulated facilities in the Proposed Permit under the Paperwork Reduction Act. Most of the information collection requirements have already been approved by the OMB in submissions made for the NPDES permit program and the previous general NPDES permit for seafood processors in Alaska.

J. The Regulatory Flexibility Act [5 U.S.C. 553 et seq.]

After review of the facts presented in the notice of intent, Proposed Permit and fact sheet, the Administrator of EPA certifies, pursuant to the provisions of 5 U.S.C. 605(b), that this general NPDES permit will not have a significant impact on a substantial number of small entities. Moreover, the Proposed Permit reduces a significant administrative burden on regulated sources.

VIII. REFERENCES

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