ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT FACT SHEET – Proposed Final
General Permit Number: **AKG528000**
Seafood Processors Operating Onshore Facilities in Kodiak, Alaska

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Wastewater Discharge Authorization Program
555 Cordova Street; Anchorage, AK 99501

Public Comment Period Start Date: March 15, 2026
Public Comment Period Expiration Date: April 15, 2026

Alaska Online Public Notice System

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Reissuance of an Alaska Pollutant Discharge Elimination System (APDES) general permit for:

SEAFOOD PROCESSORS OPERATING ONSHORE FACILITIES IN KODIAK, ALASKA

The Alaska Department of Environmental Conservation (DEC or the Department) proposes to reissue APDES general permit AKG528000 to seafood processors operating onshore facilities in Kodiak, Alaska that discharge seafood waste to marine waters. The permit authorizes and sets conditions on the discharge of pollutants from authorized permittees to waters of the United States (U.S.). In order to ensure protection of water quality and human health, the permit places limits on amounts of pollutants that can be discharged from the facilities and outlines best management practices to which each facility must adhere.

This fact sheet explains the nature of potential discharges from seafood processing facilities and the development of the permit, including:

- Information on public comment, public hearing, and appeal procedures,
- A listing of proposed effluent limitations and other conditions,
- Technical material supporting the conditions in the permit, and
- Monitoring and reporting requirements in the permit

Public Comment

The proposed final permit will be made publicly available for a five-day applicant review. The applicant may waive this review period. After the close of the proposed final permit review period, the Department will make a final decision regarding permit issuance. A final permit will become effective 30 days after the Department's decision, in accordance with the state's appeals process at 18 AAC 15.185 – 15.340.

The Department will transmit the final permit, fact sheet (amended as appropriate), and the Response to Comments document to anyone who provided comments during the public comment period or who requested to be notified of the Department's final decision.

Informal Review and Adjudicatory Hearing

A person authorized under a provision of 18 AAC 15 may request an informal review of a contested decision by the Division Director in accordance with 18 AAC 15.185 and/or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. See DEC's "Appeal a DEC Decision" web page https://dec.alaska.gov/commish/review-guidance/ for access to the required forms and guidance on the appeal process. Please provide a courtesy copy of the adjudicatory hearing request in an electronic format to the parties required to be served under 18 AAC 15.200. Requests must be submitted no later than the deadline specified in 18 AAC 15.

Documents are Available

The permit, fact sheet, application, and related documents can be obtained by visiting or contacting DEC between 8:00 a.m. and 4:30 p.m. Monday through Friday at the addresses below. The permit, fact sheet, and other information are located on the Department's Wastewater Discharge Authorization Program website: https://dec.alaska.gov/water/wastewater/.

Alaska Department of Environmental Conservation; Division of Water; Wastewater Discharge Authorization Program office locations:

- 555 Cordova Street; **Anchorage**, AK 99501; (907) 269-6285
- Mail: P.O. Box 111800;
  In Person: 410 Willoughby Avenue, Suite 303; **Juneau**, AK 99801-1800; (907) 465-5180
- 610 University Avenue, Fairbanks, AK 99709; (907) 451-2183

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1.1 Legal Basis for Issuance of an APDES General Permit

Section 301(a) of the Clean Water Act (CWA) provides that the discharge of any pollutant is unlawful except in compliance with Sections 301, 302, 306, 307, 318, 402, and 404 of the CWA. In addition, as established in Alaska Administrative Code (AAC) 18 AAC 83.015, the discharge of any pollutant to surface water designated as waters of the U.S. in Alaska is unlawful except in accordance with an Alaska Pollutant Discharge Elimination System (APDES) permit.

Per 18 AAC 83.205, the Department may regulate categories or subcategories of point source discharges within an area through the use of a general permit when the sources:

- 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 the Department, are more appropriately controlled under a general permit than under individual permits.

Federal regulations found in Code of Federal Regulations (CFR) 40 CFR Part 408 establish Effluent Limitation Guidelines (ELGs) for seafood processors under a single category, "Canned and Preserved Seafood Processing Point Source Category." Seafood processing dischargers are further divided into subcategories when applying the ELGs found in 40 CFR Part 408 based on seafood species type and processing method.

The Department determined that it is appropriate to issue a general permit for onshore seafood processing facilities in Kodiak, as identified in Part 1.4. The sources have substantially similar operations, discharge the same types of wastes, are subject to the same water quality-based effluent limitations (WQBELs) and technology-based effluent limitations (TBELs), and have similar monitoring requirements.

1.2 Individual Permit

A permittee authorized to discharge under a general permit may request to be excluded from coverage by applying for an individual permit. This request shall be made by submitting APDES permit application Forms 1 and 2C, along with Form 2M (if requesting a mixing zone) with supporting documentation (e.g., modeling, antidegradation information, etc.) to DEC.

The Department may require any person authorized by a general permit to apply for and obtain an individual permit, or any interested person may petition the Department to take this action. Per 18 AAC 83.215, the Department may consider the issuance of an APDES individual permit when:

- The discharger is not in compliance with the terms and conditions of the APDES general permit.
- A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source.
- Effluent limitations guidelines are promulgated for point sources covered by the APDES general permit.
- A water quality management plan containing requirements applicable to a point source is approved.
- 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 the authorized discharge has either temporarily or permanently been reduced or eliminated.
- The single discharge, or the cumulative number of discharges, is/are significant contributor(s) of pollutants.

1.3 Permit Issuance History and Coverage Changes

1.3.1 Permit Issuance and Regulatory History

In 1998, the Environmental Protection Agency (EPA) issued the general permit AKG528000 for Seafood Processors Operating Shorebased Facilities in Kodiak, Alaska. The previous permit became effective on May 1, 1998 and expired on April 30, 2003.

On October 31, 2008, EPA approved the State of Alaska Department of Environmental Conservation's (DEC or Department) application to administer the National Pollutant Discharge Elimination System (NPDES) permitting and compliance program as the APDES Program. With EPA's approval of the state's application the Department was delegated the responsibilities of carrying out the applicable CWA NPDES program provisions. The Department developed regulations in the Alaska Administrative Code (AAC) to implement the APDES program (18 AAC 83). As established in 18 AAC 83.015, the discharge of any pollutant is unlawful except in accordance with an APDES permit.

Additionally, applicable 40 CFR Part 408 ELG regulations were promulgated in 1974 and 1975. The seafood ELGs provided for two primary categories of Alaskan processors, dependent on whether a processor operated at a "Remote" or a "Non-Remote" location. "Non-Remote" facilities were defined as those facilities located in "population or processing centers." The regulations provided a non-exclusive list of Alaskan locations considered to be "Non-Remote," including Anchorage, Cordova, Juneau, Ketchikan, Petersburg, and Kodiak. In "Non-Remote" locations, the ELGs are based on screening the processing solids from the seafood processing wastewaters and disposing of the screened solids by means other than discharging in the facility's effluent.

Shortly thereafter, the seafood processing industry petitioned EPA regarding Non-Remote standards being applicable to certain community locations (Anchorage, Cordova, Juneau, Ketchikan, Kodiak, and Petersburg). In 1980, EPA suspended the applicability of Non-Remote ELGs to some communities, leaving only Kodiak as a community required to meet Non-Remote ELGs. In 2013, EPA announced via the federal register a Notice of Data Availability (NODA) that EPA had gathered information from Alaskan seafood processing facilities and other publicly available sources of information regarding seafood processing waste disposal practices and options. The NODA provided preliminary results of EPA's analyses of updated data for the five petition locations (Anchorage, Cordova, Juneau, Ketchikan, and Petersburg) as well as preliminary analysis for possible additional locations (Dutch Harbor, Kenai Peninsula, and Sitka) being added to the list of Non-Remote locations. The NODA also provided preliminary indications of how these results may be reflected in EPA's final response to deny the petition for all of these locations.

As published on EPA's website (https://www.epa.gov/eg/seafood-processing-effluent-guidelines) , at this time EPA does not plan to take any action on amending the rule. EPA amended their website to say:

> "In July 2017, EPA decided not to amend subparts of the Canned and Preserved Seafood Processing Category related to certain onshore processors in Alaska. The Agency made this decision in light of the fact that all of the facilities subject to this rulemaking are located in the state of Alaska and EPA concludes that the State of Alaska will establish additional water pollution controls at these facilities if and where the State determines such controls are appropriate and necessary. EPA will continue to work with the state as they consider appropriate controls through their permitting actions. Under 40 CFR Part 408, the limitations for Anchorage, Cordova, Juneau, Ketchikan and Petersburg based upon grinding remain in effect."

On December 15, 2020, DEC reissued the general permit AKG528000, effective June 1, 2021 and expiring May 31, 2026.

1.3.2 Covered Facilities

Onshore seafood processing facilities located in Kodiak, Alaska are eligible for coverage under the permit. The permit provides coverage to permittees previously covered as well as offering coverage to new facilities. The permit will authorize discharges from onshore seafood processors and by-product recovery facilities. The

reissued permit has integrated effluent limits and required monitoring established in the 1998 AKG528000 permit.

At the time of the 1998 AKG528000 issuance, there were ten onshore processing facilities and one by-product recovery facility in operation in the Kodiak area. Currently, five processing facilities and one by-product recovery facility are in operation. The Department has determined these facilities are eligible for coverage under the AKG528000 permit. The existing Kodiak facilities are listed in Attachment F of the permit.

1.3.3 At Sea Discharges

The 1998 AKG528000 permit provided coverage for "At-Sea" discharges. The reissued permit does not continue this coverage. Permittees seeking to discharge "At-Sea" must seek coverage under APDES AKG523000, or through ocean dumping provisions. Seafood waste disposal activities located beyond territorial baseline fall under the legal jurisdiction of the EPA Ocean Dumping Act. Therefore, an applicant seeking to transport seafood processing waste from onshore facilities and dump "At-Sea" (beyond baseline) is instructed to contact EPA for more information regarding the Ocean Dumping Act and associated requirements.

1.4 Discharges Covered (Permit Part 1.2)

1.4.1 Seafood Processing Waste and Wastewaters

The permit authorizes the discharge of pollutants to waters of the U.S., subject to the limitations and conditions set forth herein, including seafood processing waste and wastewaters from seafood butchering, washed mince / washed paste commodity line production, and seafood by-product production into hydro-dynamically energetic waters with a high capacity of dilution and dispersion. The permit also provides coverage to catch transfer water (fish hold waste and wastewater, live tank water, refrigerated seawater, or brine) conveyed to the onshore seafood facility.

Additionally, the permit provides coverage for cleaning agents used in process areas where the permittee follows the manufacturer's use and disposal recommendations. This includes the use of disinfectants added to wash down water to meet applicable state and federal sanitation standards by facilitating waste removal while processing or sanitizing seafood processing areas.

Pollutants of concern associated with seafood processing wastewater discharges include: residues, biochemical oxygen demand (BOD), total suspended solids (TSS), and non-petroleum oil and grease (O&G). These pollutants result from waste solids (shell, bones, skin, scales, flesh, and organs), blood, body fluids, slime, stickwater, and oils and fats from by-product operations. Ammonia may be present due to natural degradation processes, refrigeration system leaks, and the use of quaternary ammonia cleaning compounds. Chlorine may be present due to use as a disinfectant. Other regulated parameters include pH and temperature. Settleable solids, total dissolved solids, and salinity were previously required to be monitored in the permit. DEC determined that those were not pollutants of concern, so that monitoring was removed from the permit.

1.4.2 Catch Transfer Water Discharges

The permit authorizes discharges of catch transfer water (delivering vessel fish hold waste and wastewater, live tank water, refrigerated seawater, or brine) conveyed to the onshore seafood facility.

Pollutants of concern in catch transfer water are the same as those in processing water.

1.5 Discharges Not Covered by the Permit (Permit Part 1.3)

All discharges to waters of the U.S. shall comply with state Water Quality Standards (WQS) found in 18 AAC 70. The discharge of any pollutants to waters of the U.S. that are not expressly included in the Notice of Intent (NOI) and authorized by the permit is not covered. Discharges not covered are those that may require coverage under other APDES permits.

1.5.1 Storm Water Discharges.

Both commingled and non-commingled industrial storm water discharge coverage is available under the 2020 APDES Multi-Sector General Permit (MSGP). The 2020 APDES MSGP contains provisions that require industrial facilities in 29 different industrial sectors to implement control measures and develop site-specific storm water pollution prevention plans (SWPPP) to comply with APDES requirements. APDES MSGP Part 1.2.1 states that to be eligible to discharge, a permittee shall have a storm water discharge associated with an identified primary industrial activity. The MSGP defines 'Primary Industrial Activity' as including any activities performed onsite which are identified by a list of primary SIC codes. The APDES MSGP lists two subsections of 'Food and Kindred Products' which seafood processors in Kodiak fall under. These include 'Sector U2 – SIC Codes 2074-2079 Fats and Oils Products (e.g., Animal and Marine Fats and Oils - SIC Code 2077)' as well as 'Sector U3 - SIC Codes 2091-2099 Miscellaneous Food Preparations and Kindred Products (e.g., Canned and Cured Fish and Seafoods - SIC Code 2091 & Prepared Fresh or Frozen Fish and Seafoods – SIC Code 2092).'

Seafood processing facility permittees discharging storm water must determine whether coverage under the 2020 APDES MSGP (or most recent version) is required. The AKG528000 permit requires the permittee to identify the facility's current MSGP authorization number or identify that the facility has submitted a No Exposure Certification. For commingled discharges, the 2020 APDES MSGP Permit Part 1.2.3.1 provides coverage if the storm water is commingled with a discharge authorized by a different APDES permit (in this case, the seafood discharge authorized under AKG528000).

Permittees may choose to keep storm water separate from seafood processing waste and wastewater or may choose to commingle those effluent streams. Seafood processing wastewaters commingled with storm water may contain pollutants that can cause harm to aquatic life and habitat. Therefore, the permit requires facilities to provide treatment to reduce pollutants from the wastewater and any commingled storm water to meet the limits in the permit prior to discharge. Facilities choosing to commingle storm water and seafood processing waste and wastewaters must screen the commingled wastewaters to 1.0 mm, as otherwise seafood processing waste and wastewaters would be left untreated. In this case, only the seafood processing waste and wastewaters portion of the commingled effluent stream would be covered under the AKG528000 permit. For the storm water portion of the commingled effluent stream, the permittee would need to determine whether coverage was needed under the MSGP.

Permittees should be aware that under the APDES MSGP Part 1.3, a seafood processing facility whose raw materials (seafood) or intermediate, by-product, final, or waste seafood processing products are not protected by storm water resistant shelter to prevent the seafood, seafood process products, or industrial areas from being exposed to rain, snow, snowmelt, or runoff does not qualify for a No Exposure Certification, and the permittee must obtain MSGP AKR060000 coverage and develop a SWPPP.

1.5.2 Domestic Wastewater Discharges.

All permitted facilities currently discharge domestic wastewater to the City of Kodiak Wastewater Treatment Facility; therefore, the 1998 AKG528000 coverage provided for domestic wastewater discharges has been removed.

1.5.3 Drinking Water Filter Backwash Discharges.

No facilities discharge drinking water treatment wastewaters; therefore, coverage is not provided in this permit.

1.5.4 Bilge Water Discharges.

The permit does not cover the discharge of vessel bilge waters, as these discharges are addressed in the 2018 Vessel Incidental Discharges Act (VIDA).

1.6 Prohibited Discharges (Permit Part 1.4)

General – As specified, discharges that violate the WQS are prohibited, including violations of narrative criteria for residues found in 18 AAC 70.020(b)(20). Seafood wastewaters at times may create floating scum and oil sheens that are not allowed. Additionally, seafood wastes and wastewaters have been observed to create attractive and/or nuisance conditions to both fish and wildlife species and existing users of the waterbody.

Interim, Finished, or Unused products - DEC has been made aware through review of Ocean Dumping, at-sea disposal logs, and noncompliance notifications that additives or other products other than raw or cooked seafood wastes have been disposed of in State waters. The discharge or disposal of these chemicals, food (e.g., sugars, salts) or food additives, and processed by-products (e.g., oils, hydrolysates, etc.) can severely alter the chemistry of the receiving water and are not authorized under the permit. Facilities that have previously been discharging these materials by vessel or through their outfalls are required to seek other permitted disposal methods. The discharge of seafood processing interim or finished by-products results in very high BOD and chemical oxygen demand (COD) pollutant loading. The restriction does not apply to by-product effluents meeting the terms of the permit.

Chemicals/additives used in the seafood processing lines (those not actively used in production or disinfection) such as sodium hydroxide, hydrochloric acid, aldehydes, or ketones may not be poured directly into wastewater discharge lines. Unmonitored and/or untreated discharges of these chemicals can lead to violations of WQS.

Hazardous or toxic substances – The WQS for toxic and other deleterious organic and inorganic substances for marine water uses are codified in 18 AAC 70.020(b) and as found in *Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances*, as amended through December 12, 2008. The permit requires compliance with these WQS; therefore, any toxic or hazardous substance discharges that may impair or violate WQS are prohibited.

Spoiled Seafood Waste – If a vessel delivers fish or other aquatic animals or plants to the permittee, or the permittee experiences a refrigeration system failure, and raw or processed seafood/plant products are "spoiled" due to temperature, histamine concentration, or decomposition, these materials are prohibited from being discharged. The accumulation of lactic acid in postmortem fish tissue leads to a pH decline.

1.7 Requesting Authorization (Permit Part 1.5)

A permittee shall apply electronically or by other approved means for coverage and authorization under the permit. A permittee wishing to apply for new coverage for a seafood processing facility shall submit a complete NOI and required attachments at least 90 days prior to the start of discharge. The 90-day notice is required to allow for adequate time for the Department to review the NOI and initiate necessary engineering review that may be required per 18 AAC 72.

The permit does not authorize any discharges from a facility unless the permittee has submitted a complete NOI as specified and has received DEC's written authorization to discharge under the permit, or has been notified in writing by DEC that they are covered under the permit as provided for in 18 AAC 83.210(h). The permittee may only discharge the pollutants authorized under the permit upon delivery of a written APDES authorization and the assignment of a site-specific APDES permit authorization number. The permittee shall retain a copy of the APDES authorization and the permit, as well as applicable inspection and monitoring records, at the facility.

Only facilities meeting the provisions of the permit will be provided an APDES AKG528000 written authorization. The Department's evaluation will include reviewing the facility's NOI, the required attachments, the receiving water characteristics, and the cumulative monitoring results.

1.8 Requirement to Submit a Complete Notice of Intent (Permit Part 1.6)

An applicant seeking coverage under the permit shall submit a complete and timely NOI (Attachments A & A-1), per 18 AAC 83.210(b), to fulfill the duty to apply for a permit. Permit Part 1.6 contains a list of required submittals. A discharger that fails to submit a complete NOI in compliance with the requirements of the permit

is not authorized to discharge under the general permit unless the Department determines that a NOI is not required for coverage under the general permit, as provided for in 18 AAC 83.210(g), or the Department notifies a discharger that it is covered by a general permit as provided for in 18 AAC 83.210(h).

DEC requires previous permit information, permittee information, billing contact information, owner information, and facility name and address/location information in order to accurately maintain facility permit records.

1.8.1 Line Drawing and Flow Volumes

The permit requires line drawings and approximate incoming flow volumes and effluent flow from the seafood processing lines and waste treatment systems. The line drawings assist DEC in understanding the flow of seafood processing facility wastewater. Additionally, the flow line drawings will assist permittees in identifying areas in which water usage may be decreased as an opportunity to decrease pollutant loading, as the longer distances and time the seafood waste spends in contact with water increase the pollutant loading that occurs.

Alaskan seafood processing has typically required large amounts of water, primarily for washing and cleaning purposes but also as media for storage, refrigeration, and cooking of seafood products before and during processing. In addition, water has been an important lubricant and transport medium in the various handling and processing steps of bulk seafood processing. Seafood processing wastewater has a high organic content, and subsequently a high BOD, because of the presence of blood, tissue, and dissolved proteins. It also typically has high nitrogen content (especially if blood is present) and phosphorus content. Detergents and disinfectants may also be present in the wastewater stream after application during facility cleaning activities. A range of chemicals are typically used for cleaning, including quaternary ammonia sanitizers/disinfectants, acids, alkalines, and neutral detergents. The disinfectants commonly used include chlorine compounds, hydrogen peroxide, ammonium salts, and formaldehyde. Other compounds also may be used for select activities (e.g., disinfection of fish meal processing equipment).

These chemicals and processes can lead to greater pollutant loading of the seafood processing effluents. As a result, the permit requires monitoring and reporting of chemicals and disinfectants used in the facility. The Annual Report requires a list of chemicals used and application rates, annual amounts used, and the use in the facility for those used differently than the manufacturers' recommended use.

The permit requires identifying all outfalls and types of wastewater discharged from each and providing monitoring results from all outfalls. In order to accurately model environmental impacts, the correct number and location of outfalls must be identified, along with the associated pollutant loading, flow, and depth associated with each outfall.

Requiring identification of all outfall lines and the types of wastewater effluent being discharged, along with the development and implementation of a robust Best Management Practices (BMP) Plan, should increase permit compliance and ultimately result in increased water quality protection.

1.9 Transfer of Authorization or Change in Location (Permit Part 1.8)

As found in 18 AAC 83.150, the permit requires the submittal of a Name Change/Notice of Transfer form when the information regarding ownership or permittee changes and requires submittal of an updated NOI if changes to management, authorized representative, or plant discharges, production levels, and/or treatment systems occur.

The permit allows for a transfer only for an authorized facility located at the site designated in the original NOI. Discharge authorization for a particular existing facility may not be transferred to the same permittee at a new facility location. Authorization under the permit is specific to the outfall(s), outfall-specific pollutants identified in the NOI, and specified outfall terminus location(s).

If a permittee permanently ceases discharging or moves seafood processing activities to a new facility or discharge location, the permittee shall submit a Notice of Termination (NOT) form for the former facility's

location within 30 days of ceasing discharge. The permittee shall apply for coverage for a new facility location by submitting a new NOI.

If a permittee intends to change the location of any outfall/outfall terminus, the permittee shall contact the Department and submit an updated NOI with the proposed new outfall location at least 90 days prior to moving the outfall and shall submit engineering documents as required under Permit Part 1.5.

Another permit requirement is that if a permittee identifies a broken, floating, or moved outfall, the permittee must submit a notice of noncompliance and update their NOI (if the outfall is not restored to its original location). The APDES permit program requires the outfall latitude and longitude location(s) be identified to the nearest 15 seconds (40 CFR §122.21(g)). The permit requires reporting outfall terminus latitude and longitude to +/- 50 feet, acknowledging recent changes in Global Positioning System (GPS) and Wide Area Augmentation System (WAAS) technology that have improved precision in determining outfall terminus location(s).

1.10 Continuation of an Expired General Permit (Permit Part 1.9)

The permit expires five years after the effective date. If the AKG528000 permit is not reissued prior to the permit's specified expiration date, it will be administratively continued in accordance with 18 AAC 83.155 and remain in force and effect for those permittees who have applied for continued coverage. In order to continue coverage, the permittee shall submit an updated NOI to the Department 180 days prior to the expiration of the permit requesting authorization for coverage under a reissued permit. Following a permittee's timely and complete submittal of an NOI, and receipt of a DEC APDES administrative continuation letter, the permittee is covered under administrative continuation until the permit is reissued or the authorization is terminated.

The permittee is required to abide by all limitations, monitoring, and reporting included in the permit when the permit enters administrative continuation until such time the permit is reissued or a NOT is submitted by the permittee and processed by the Department.

1.11 Termination of Permit Coverage (Permit Part 1.10)

If a permittee wants to terminate coverage, the permit requires the permittee to provide a NOT to DEC within 30 days following cessation of discharges.

2.0 Compliance History

The compliance histories of the facilities authorized by the 2020 AKG528000 permit were evaluated. Various instances of noncompliance with pH limitations, violations of the residues standard (floating foam and residues), and noncompliance with the ELGs were reported during the past five years.

Details regarding the compliance history of a specific facility can be found by visiting EPA's Enforcement & Compliance History Online (ECHO) at https://echo.epa.gov/. Permit Attachment F provides a list of permit numbers and facility names that can be used to search.

3.0 Effluent Limits and Monitoring Requirements

3.1 Basis for Permit Effluent Limits

In general, the CWA requires that the limits for a particular pollutant be the more stringent of either a TBEL or a WQBEL. A TBEL is set according to the level of treatment that is achievable using available technology. For industrial sources, the national ELGs in the form of TBELs are developed based on the demonstrated performance of a reasonable level of treatment that is within the economic means for specific categories of industrial facilities. A WQBEL is designed to ensure that the WQS of the waterbody are met and may be more stringent than a TBEL. The most stringent limitations of either TBELs or WQBELs will be selected as the final permit limitations.

3.2 Effluent Monitoring

In accordance with AS 46.03.110(d), the Department's permit may specify the terms and conditions under which waste material may be disposed. Monitoring and waste treatment and inspection requirements in a permit are required to determine compliance with effluent limitations. Monitoring may also be required to gather effluent and receiving water data to determine whether additional effluent limits are required and/or to monitor the effluent's impact on the receiving water quality.

The permittee is responsible for conducting monitoring and reporting results on discharge monitoring reports (DMRs) and in Annual Reports to the Department.

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. The permittee has the option of taking more frequent samples than the permit requires. If the permittee monitors any pollutant more frequently than the permit requires, they must use test procedures approved under 40 CFR Part 136, adopted by reference in 18 AAC 83.010. The additional monitoring results must be included in reported DMR data and/or on the Annual Report. All limits that require averaging of measurements shall be calculated using an arithmetic mean unless the Department specifies another method in the permit. Monitoring data must be reported even if the method detection limits (MDLs) are less than the effluent limits. The use of approved sampling and test methods as found in 40 CFR Part 136 is required.

3.3 General Requirements (Permit Part 2.1)

The AKG528000 permit contains limits based on both TBELs and WQBELs. The TBELs applicable to the Non-Remote seafood processing industrial sector are found in 40 CFR Part 408 - Canned and Preserved Seafood Processing Point Source Category.

The permit requires facilities to install flow meters, perform pre-installation outfall surveys, and monitor and report the operability of their seafood waste treatment systems. The following paragraphs discuss these requirements in more detail.

3.3.1 Flow (Permit Part 2.1.1 and Part 2.1.2)

The permit requires facilities to provide information regarding each outfall's discharge flow. The permit requires the installation of permanent devices (flow meter and totalizer) that continuously record flow for all outfalls except for those with intermittent flows. An internal monitoring location flow meter must be installed when internal monitoring is required. A device that allows only visual observation of instantaneous flows is inadequate for determining permit compliance.

The permit requires the identification of all outfalls, sampling locations, and types of wastewater discharged from each outfall.

Permit compliance inspections have often revealed multiple outfalls installed at a facility but only one outfall identified on the NOI. In order to accurately model environmental impacts, as well as fully disclose all wastewaters discharged at the facility, the correct number and location of all outfalls must be identified, along with the associated pollutant loadings, flow volumes, and terminus depths.

3.3.2 Pre-Installation / Pre-Discharge Survey Requirement (Permit 2.1.3 and Appendix G)

The permit includes a requirement to conduct a pre-biological survey prior to the placement of a new outfall, planned movement of an existing outfall, or the re-start of an existing facility outfall where no discharge has occurred in the past 12 months. The purpose of the survey is two-fold. First, the survey must demonstrate that the proposed placement of the outfall will not result in the discharge occurring into "living substrate." Living substrates have been identified as important marine habitat and are susceptible to impacts from human activities. Installation of seafood processing outfalls and possible subsequent burying of living substrate by seafood processing residues must be minimized. Thus, the permit will require the permittee to survey the seafloor for living substrates and place new outfalls outside these habitats. Lengthening of existing outfalls may

be required for facilities that have not been in operation for 12 months or more if the existing outfall terminus is found to be located in living substrate.

Permittees are required to identify whether the receiving water is hydro-dynamically energetic. The surveyor is required to report ambient tidal current velocity and direction and water chemistry in-situ on the day of the survey, including salinity, water temperature, density, turbidity, dissolved oxygen (DO), and pH. These receiving water quality monitoring parameters shall be taken on the same day the survey is performed and must be taken at the proposed outfall depth and discharge location.

3.3.3 Monitoring and Reporting Requirements (Permit Part 2.1.4)

Monitoring representative of waste stream flow is a permit requirement. Previous inconsistencies in monitoring times have resulted in possible pollutant parameter underreporting. Representative monitoring of the seafood processing wastewater discharge is required. The permittee will develop Quality Assurance Project Plan (QAPP) requirements that specify when the personnel are to perform given monitoring for different effluent streams and/or monitoring required under the permit. If permittees discharge out more than one outfall, each outfall must be monitored as established in the permit.

In order to accurately document and report effluent and receiving water sample results, permittees are required to clearly label each sample. The label shall identify the applicable pollutant parameter being monitored and which outfall number (e.g., Outfall 001, 002, etc.) the sample was taken for. For receiving water quality monitoring, the permittee shall label the sample with the applicable pollutant parameter being monitored, the location in the receiving water where the sample was taken (i.e., latitude/longitude), and the depth at which the sample was taken.

3.3.4 Treatment Limits Applicable to All Permittees (Permit Part 2.1.5 and Permit Table 2)

All permittees are required to meet effluent limits for temperature and pH. These effluent limits correspond to Alaska WQS found in 18 AAC 70.020(b) and are found in Permit Table 2. If a facility is authorized mixing zone(s), the effluent limits in Permit Table 2 for which a mixing zone is authorized are superseded by the corresponding modified effluent limits in the individual authorization to discharge. DEC will notify the permittee of any modified effluent limits when issuing an authorization to discharge under this general permit.

3.3.5 Outfall System Inspection (Permit Part 2.1.6)

All wastewaters originating from seafood processing operations are required to be treated by screening with fine mesh screens, or other equivalent technology, to meet established effluent limits. The requirement for fine screen mesh is found by reviewing the best practicable control technology currently available (BPT) found in the 1974 and 1975 Development Documents for Canned and Preserved Seafood Processing Effluent Limitations Guidelines. Alternative, recently developed treatment technologies may also be utilized. The applicability sections of the 1974 and 1975 40 CFR Part 408 Final Rules state that the production-based standards for Canned and Preserved Seafood Processing ELGs were established using an existing treatment technology (screening) for Non-Remote facilities. The development documents also mentioned several times that wastewater flow reduction was a major component in pollution reduction strategies. Research in seafood processing has documented reducing water usage as a key to reducing pollutant loading and benefiting product quality. Many seafood processing facilities in Alaska have integrated water usage reduction techniques.

The permit requires routine outfall inspection and condition reporting to be submitted with the seafloor survey. The inspection methods must be documented in the QAPP Plan and made available upon request. Permittees are required to report on cathodic protection remaining life and on outfall condition, including breaks and leaks. Permittees must also keep a log of outfall system repairs.

DEC compliance inspections and site visits have found that operational maintenance issues are often the cause of historical permit violations. It is intended that the outfall system survey be repeated at regular intervals (matching the seafloor surveys) to ascertain a deterioration rate and pattern, if any. This is a significant and useful tool to assist estimating the remaining life of the outfall pipe.

The purpose of the monitoring is to confirm permit compliance and implement operational corrections.

3.4 Special Discharge Limitations and Reporting Provisions

3.4.1 One nautical mile conditions (Permit Part 2.1.7):

If discharge occurs to Critical Habitat or Game Refuges, as identified on the Department's provided mapping, the permit requires special reporting. Permittees must report observations of injured or dead endangered or threatened species. Two examples include areas identified as Steller's eider concentration habitat areas and Western Steller sea lion habitat areas. The permit includes reporting the presence of endangered and threatened species during sea surface and shoreline monitoring. The monitoring is a result of early permit development interagency consultation processes. Additional information on these areas can be found on the DEC Seafood Processing Map as well as at the National Oceanic and Atmospheric Administration (NOAA) and United States Fish and Wildlife Services (USFWS) mapping websites.

The permit proposes to continue authorizing previously approved discharges for facilities discharging to or near these sensitive areas.

The permit requires that if permittees perform fueling activities within critical habitat areas that they comply with all federal and state spill prevention requirements and have written BMPs for spill response. Even small amounts of spilled fuel can contaminate large areas of water, making it uninhabitable for plants and animals.

3.4.2 Moored/Docked Vessels Providing Support (Processing or Freezing) (Permit Part 2.1.8)

All seafood processing discharges from moored/docked vessels providing support (processing or freezing) to the onshore facility must be routed to the onshore facility's waste treatment systems. A support vessel's sanitary wastewater is required to be routed to the local municipal domestic wastewater treatment facility. No discharges from support vessels are allowed, except those non-commingled ballast water discharges for the normal operation of the vessel.

Seafood Delivery Vessels

Typical seafood offloading systems include the use of a pump vacuum. These vacuum systems use hydraulic forces sending a mixture of catch transfer water and fish from the vessel to the seafood processing facility. At the end of offloading, the facility sends the catch transfer water through their seafood waste treatment system and outfall.

3.5 Seafood Processing Facilities (Permit Part 2.2 – Part 2.4)

EPA published ELGs for the Canned and Preserved Seafood Processing Point Source Category on July 30, 1975 specifying BPT, best conventional pollutant control technology (BCT), and existing and new source performance standards (NSPS) for seafood processing activities across the nation. The ELGs are codified at 40 CFR Part 408, adopted by reference at 18 AAC 83.010. ELGs were set forth for the degree of effluent reduction attainable through the application of the "Best Practicable Control Technology Currently Available" (BPT) and the "Best Available Technology Economically Achievable" (BAT) and had to be achieved by existing point sources by July 1, 1977 and July 1, 1983, respectively.

The ELGs for existing sources were based on the best identified primary or physical-chemical treatment technology that was currently available for discharge into navigable waterbodies by July 1, 1975, and there was a different set of ELGs for NSPS. The 1975 existing source technology available was generally represented by use of fine mesh screens and air flotation. The regulations for NSPS were established by the use of screening and BPCT on best identified, physical-chemical and secondary treatment and in-plant control as represented by significantly reduced water use and enhanced treatment efficiencies in existing systems as well as the ability to use any new treatment systems.

The permit incorporates NSPS limits that reflect effluent pollutant loading reductions that are achievable based on the use of BPCT. Through a survey conducted in 2018, it has been determined that all facilities in Kodiak are

"New Source" processors. New sources have the opportunity to install the best and most efficient production processes and wastewater treatment technologies at the time of construction or modification. As a result, NSPS should represent the most stringent controls attainable through the application of the BPCT for all pollutants (i.e., conventional, nonconventional, and toxic pollutants). The term "New source" is defined in the Permit's Appendix C. DEC will apply the term to newly constructed or reconstructed facilities as well as to new seafood processing equipment installed after 1975 in existing facilities. Further information can be found in Fact Sheet Appendix A (EPA New Source Memo).

Facilities in Kodiak are classified as 'Non-Remote' seafood processing facilities. The Non-Remote facilities are required to meet the Non-Remote TBELs / ELGs. The AKG528000 permit incorporates the ELGs and includes the application of best professional judgment (BPJ) TBELs to include screening at Non-Remote facilities. The screened solids are required to be processed into fish meal or into other by-product commodity lines. The 1998 AKG528000 permit allowed the permittees to use other solid waste discharge methods (e.g., ocean dumping) in order to meet permit limits if the by-product production facility was overloaded or offline. Facilities seeking to use this discharge method must now seek coverage under the APDES AKG523000 Offshore Seafood Processors in Alaska General Permit.

The ELG subcategories established in 1974/1975 applicable to this permit's seafood processing include (40 CFR Part 408 (subcategory in parentheses)): Non-Remote Alaskan crab meat processing (D), Non-Remote Alaskan whole crab and crab section processing (F), Non-Remote Alaskan shrimp processing (I), Alaskan hand-butchered salmon processing (P), Alaskan mechanized salmon processing (Q), Alaskan bottom fish processing (T), Alaskan scallop processing (AC), and Alaskan herring fillet processing (AE). Additional information regarding ELGs applied to the Kodiak facilities can be found in the NPDES 1998 AKG528000 General Permit Fact Sheet.

The CWA requires particular categories of dischargers to meet TBELs established by EPA. ELGs are regulations that establish national TBELs for a specific industrial category or subcategory. Where EPA has not yet developed guidelines for a particular industry or subcategory, permit conditions may be established using BPJ procedures (18 AAC 83.425, 18 AAC 83 Article 5, and 18 AAC 83.010).

When TBELs do not exist for a particular pollutant expected to be in the effluent, the Department shall still determine whether the pollutant may cause or contribute to an exceedance of a WQS for the waterbody. If a pollutant causes or contributes to an exceedance of a WQS, a WQBEL must be established.

Onshore seafood processors in Kodiak were previously covered under general permit AKG528000. Most of the 1998 AKG528000 permit effluent limits and monitoring requirements are incorporated in the permit by applying ELGs established in 40 CFR Part 408 and applying WQBELS.

The permit retains the requirement for all wastewaters originating from processing waters, including butchering, washed mince / washed paste commodity lines, and by-product commodity lines, to be treated by screening with fine mesh screens, or equivalent technology, to minimize the discharge of pollutants and meet the permit's ELG requirements. This BPJ requirement has been shown by facilities currently covered under the permit to be the most cost-effective relative to the environmental benefits achieved by the treatment technology.

The 1998 AKG528000 general permit limitation of fine mesh screen was developed through the application of BPJ TBELs. The 1998 AKG528000 permit Section 3.1 contained the following language:

> "Treatment of the butchering waste stream prior to discharge shall be accomplished through the use of fine mesh screening (1 mm) or equivalent technology. Seafood wastes shall not be pulverized, chopped, ground, or otherwise altered prior to screening and discharge through the facility's outfall."

The permit continues the requirement for the use of 1.0 mm fine mesh screening or equivalent technology.

It is important to note that the May 1, 1998 AKG528000 Fact Sheet (Section 6.2.2) mentioned incorporating the ELG requirements for the Non-Alaskan Mechanized Bottom Fish Processing Subcategory [40 CFR §408.222], and not using the ELG requirements for the Alaskan Bottom Fish Processing Subcategory. EPA's 1998 Fact

Sheet reasoning was that the Alaskan performance standards had been developed based on halibut being the dominant bottom fish species. Because other bottom fish are processed by the Kodiak facilities (e.g., cod, pollock, flounder, rockfish/red snapper, black cod/sable fish, flatfish/sole, and other whitefish species), limitations based on halibut alone did not adequately reflect actual bottom fish processing. Currently, the multi-species bottom fish processing usually involves more extensive butchering and mechanization than typical halibut processing alone. At the time of the 1998 AKG528000 permit issuance, it was determined that the ELG requirements for the Non-Alaskan Mechanized Bottom Fish Processing [40 CFR §408.222] subcategory were more appropriate for Non-Remote seafood processing facilities, and the Department concurs with continuing that determination and has applied the same ELGs in this permit. The Department did not apply the new source Non-Alaskan Mechanized Bottom Fish Processing performance standards found in 40 CFR §408.225. While all of the Alaska-specific new source performance standards were based only on reduced in-plant water use for processing operations, the Non-Alaskan Mechanized Bottom Fish Processing new source performance standards were based on reduced water use as well as the addition of dissolved air floatation treatment. EPA's 2013 NODA stated that EPA had not identified any new technologies (besides screening) in use for treating Alaskan seafood processing wastewaters. Thus, the Department has determined that it would be inappropriate to apply performance standards in this permit based on the use of dissolved air floatation treatment.

Some industry members have asserted that the Non-Alaskan Mechanized Bottom Fish Processing subcategory ELGs at 40 CFR §408.222 should not be applied to Kodiak processing facilities at all, since the processing done in Kodiak currently involves different processing methods, different species of fish, and different scales of operation than those studied during the ELG development. If the permittees believe the Department should develop an Alaska-specific mechanized bottom fish processing ELG for Kodiak using BPJ, to be applied in the next permit reissuance, they may collect data this permit term to support that analysis. The information that would be required is outlined in 40 CFR §125.3(d). The information provided must pertain to mechanized bottom fish processing only (not to wastewaters from commingled commodity line processing).

3.5.1 Butchering Production Descriptions, Discharge Limits, and Monitoring

Seafood processing facilities primarily convert raw seafood into a marketable form. Alaska's commercial fishing operations target a number of assemblages, including bottom fish (e.g., walleye pollock, Pacific cod, sablefish, rockfish species, and other species of flatfish); five species of salmon; herring; and shellfish (e.g., species of crab, shrimp, clams, scallops, abalone, sea urchins, and sea cucumbers).

Seafood processing facilities use a variety of techniques and equipment to produce marketable seafood products. Seafood processing can be described as the production of marketable seafood products and includes packaging whole fresh or frozen seafood for shipment, mechanical filleting, deboning processes, production of washed mince / washed paste products, and producing other seafood by-products. After butchering, the seafood processing wastes are screened and are processed into fish meal, fish oil, or other by-products. This converts much of the solid waste to marketable products. Additionally, since the early 1980s, newer seafood processing techniques have been introduced into facility commodity lines, such as washed mince / washed paste (formerly referred to in the 1998 AKG528000 permit as 'surimi') and salmon by-product (unwashed mince and washed mince), resulting in economic gains.

The reissued permit has replaced the term 'Surimi' with washed mince / washed paste.

At any particular seafood processing facility, the quantity and character of the seafood wastewaters varies considerably over the course of a year. Seafood processing effluent's pollutant loading varies by the distribution of available fishing stocks, the openings and closings of the fishing seasons, and the fishing quota allocations used to manage stocks. Generally, bottom fish and shellfish wastewaters constitute much of the pollutant discharges in the winter, early spring, and autumn while the discharge of salmon processing waste occurs primarily in the summer and fall (along with some bottom fish).

The timing of the salmon processing is closely tied to the period when each salmon species returns to spawn. The fishing season for each salmon species depends on the various management regions and the type of gear used but generally spans the period between June and September. The relatively short salmon fishing seasons

and large runs of fish result in short, but intense, periods of seafood wastewaters produced in this season by this commodity line.

Additional detailed descriptions of specific seafood processing facilities (e.g., salmon canning, fish meal production) are provided in EPA's 'Development Document for Effluent Limitation Guidelines and New Source Performance Standards for the Fish Meal, Salmon, Bottom Fish, Clam, Oyster, Sardine, Scallop, Herring, and Abalone Segment of the Canned and Preserved Fish and Seafood Processing Industry Point Source Category' (1975).

Unwashed mechanical or hand-scraping as deboning, a type of Butchering

Mechanical deboning involves grinding the seafood flesh and bone together and forcing the flesh/fillets through a fine screen or slotted surface of a mechanical deboner. The shearing action of the mechanical deboning process causes considerable cellular disruption.

Bone separators working on different principles are available commercially, but the kind most widely used for seafood is of comparatively simple design. Fish, or pieces of fish, are fed from a hopper to pass between a moving rubber belt and the outside of a revolving perforated drum of stainless steel. The flesh is forced through the perforations into the drum, from where it is expelled as a coarse mince by a fixed screw. Skin and bone are retained on the outside of the drum and removed continuously by a scraper blade.

Permit Limits and Requirements

The ELGs from 40 CFR Part 408 are applied in the permit, continued from the 1998 AKG528000 permit.

The permit includes the same O&G and TSS weekly monitoring schedule as the 1998 AKG528000 permit. Where sampling is required, unless otherwise noted, the permittee shall use Department-approved standard analytical methods found in 40 CFR Part 136 (most current version), adopted by reference at 18 AAC 83.010 (most current version that can analyze the sample parameters using a sufficiently sensitive MDL to levels less than the effluent limit. The permittee shall notify the Department if samples arrived outside hold times. The permit has effluent limits for BOD_5 for commodity lines other than washed mince / washed paste. The permit establishes BOD_5 monitoring for all commodity lines as a pollutant of concern.

The permit clarifies that compliance with the permit's butchering effluent limits (based on ELGs) for seafood processing operations will be based on facility effluent pollutant monitoring of the discharge after screening, the total discharge flow volumes (mgd) of butchering wastewaters, and the mass-based calculations that originate from all butchering seafood processing operations.

Effluent limitations from the ELGs are expressed in terms of pounds of TSS, O&G, and BOD_5 per 1,000 pounds of seafood processed (e.g., 14 lbs TSS/1,000 lbs raw salmon processed). If an authorized facility processes more than one commodity line, effluent limitations shall be calculated as mixed-commodity effluent limits, reflecting the commodity mix for the appropriate sampling period. The post-treatment effluent limits are based on the actual pounds of raw material processed on a commodity line on a daily and monthly average basis. Calculations are found in permit Appendix D. These calculations are consistent with the ELG final rule language stipulating that when a plant is subject to effluent limitations covering more than one subcategory, the plant's effluent limitation shall be the aggregate of the limitations applicable to the total production covered by each subcategory. The aggregate effluent limitation guideline number may vary over time as a function of the product mix.

A permit requirement is identifying on the DMRs the applicable monitoring results as compared to the effluent limits during each reporting period based on a single commodity and/or the mixed-commodity that was processed during the reporting period.

Permit Table 3 summarizes the effluent limits, and Permit Table 4 summarizes the monitoring schedule requirements for butchering effluent monitoring.

3.5.2 Washed Mince / Washed Paste Production, Effluent Requirements, and Monitoring

Washed mince / washed paste (most often produced in Alaska from Alaskan Pollock and salmon) is minced or paste fish flesh that is washed and processed to concentrate the protein. Various chemical additives are used to stabilize the product for frozen storage and adjust its pH.

While most frames and heads are sent to the fish meal plant in Kodiak facilities, the material lost in the wash water is typically discharged through the outfall pipe.

Typical Washed Mince / Washed Paste Pollutant Loading

The pollutant loading of wastes and wastewaters from washed mince / washed paste commodity line processing comes first from the removal of scales, guts, and heads, from which the raw product can be processed into fillets or sent to washed mince / washed paste commodity lines. Next, materials are leached from the mince / washed paste during the washing process. The high TSS, O&G, and BOD_5 generated during washed mince / washed paste seafood processing is a direct result of the intentional removal of these materials through washing of the seafood tissue.

The most common wastewater treatment in Alaska for washed mince / washed paste commodity line wastewaters has been drum screening with 0.5 mm to 1.0 mm size screen holes. The wastewaters produced by washed mince / washed paste production can be of such small particle size that this pollutant-laden effluent can pass through the wastewater treatment screens prior to discharge, thus resulting in increased pollutant loading to the receiving waters and potentially causing sea surface residues violations.

Several Alaskan facilities have used alternate wastewater treatment systems, including centrifuges, decanters, and very fine mesh screening systems. Other wastewater treatment systems that have been used for washed mince / washed paste wastewaters include Dissolved Air Flotation (DAF) and Bubble Air Floatation (BAF). These wastewater treatment systems have not been analyzed by EPA in an effort to update the ELGs for the seafood processing industry's production of washed mince / washed paste and thus have not been determined to be the most technically and economically viable across the spectrum of technologies available to Alaska's or other states' permittees. However, these wastewater treatment systems are shown to be superior to many methods currently in use for reducing pollutant loading. The above-described treatment technologies, as well as others, may be implemented if pollutant loading or water quality residues noncompliance issues are identified.

Washed Mince / Washed Paste Wastewater and Monitoring Requirements

In 1974, EPA established technology-based ELGs in 40 CFR Part 408 for Canned and Preserved Seafood Processing Point Sources. In establishing permit limitations, DEC first determined that TBELs had not been promulgated by EPA through ELG rule making for washed mince / washed paste commodity lines. If ELGs had been established, DEC would have applied the TBELs to the discharges and incorporated them into the permit.

In the 1998 permit, EPA required the 1.0 mm screening treatment technologies applicable to the mixed-commodity butchering waste and wastewaters be additionally applied to treat the washed mince / washed paste (surimi) commodity line's waste and wastewaters.

The permit proposes to continue the 1998 AKG528000 permit's washed mince / washed paste internal monitoring location to identify the effluent pollutant loading from the washed mince / washed paste commodity line(s).

The permittee is required to screen the washed mince / washed paste wastewater to 1.0 mm or less, equivalent to the final treatment screening technology installed, prior to analysis of BOD_5, O&G, and TSS. The screening is required to correspond to the screening that occurs at the seafood waste treatment system and thus provide a representative sample to be analyzed as if the internal monitoring location's wastewaters had already passed through the final screening.

Sampling required at the internal monitoring location shall be performed on the monitoring schedule found in Permit Table 5. Washed mince / washed paste internal monitoring is required to occur at a location prior to commingling with any other wastewater discharge stream(s).

At the time of writing this permit, only a single facility, Pacific Seafood Star of Kodiak, is producing washed mince / washed paste as a commodity line. The wastewater from the washed mince / washed paste commodity line commingles with the facility's butchering wastewaters. Therefore, the BOD_5, TSS, and O&G from the washed mince / washed paste commodity line must be measured separately from that of the butchering line. The previous permit required that the commingled wastewater and the washed mince / washed paste wastewater be monitored and that the washed mince / washed paste wastewater effluent load be subtracted from the commingled values to calculate the butchering wastewater effluent load. Per permittee request, this permit has changed the requirement to monitoring the BOD_5, TSS, and O&G in the washed mince / washed paste lines and the butchering lines separately prior to commingling so that no subtraction is necessary. In this case, the butchering effluent would need to be screened to 1.0 mm or less, equivalent to the final treatment screening technology installed, prior to analysis of BOD_5, O&G, and TSS.

The permit requires the pounds of each of the mass-based pollutants (BOD_5, TSS, and O&G) to be reported on the DMR (lbs/1,000 lbs seafood processed). The permittee is required to account for amounts of seafood processed into washed mince, washed paste, or the combination of these commodity lines, as well as associated flow volumes (mgd), separate from the butchering commodity lines. This reporting is required to enable the Department to accurately review and verify the required calculations and reported pollutants discharged. Example calculations are provided in Permit Appendix D.

3.5.3 By-product Production Effluent Requirements and Monitoring (Permit Part 2.4) for Fish Meal, Fish Oil, Fish Hydrolysate, and Other

There continues to be increased interest in starting by-product recovery facilities/commodity lines in seafood processing facilities. Currently in Kodiak, a single fish meal/fish oil plant processes all of the processors' offal and must comply with the effluent limits in Permit Table 6. Any new source by-product facilities or processing lines would also need to comply with these limits. By-product recovery/production lines include, but are not limited to: fish meal, fish oil, and fish hydrolysate. Permittees under the permit may be authorized to discharge by-product effluent under the permit if they perform the required effluent monitoring in Permit Table 7 and meet the effluent limits in Permit Table 6.

Description of Types of Seafood Processing By-products

Fish can be reduced to meal and oil in a number of ways. Common to all methods of practical importance are the following processing steps:

- heating
- pressing (or occasional centrifugation), which removes a large fraction of the liquids from the mass
- separation of the liquid into oil and water (stickwater)
- evaporation of the stickwater into a concentrate (fish solubles)
- drying of the solid material (press cake) plus added solubles, which removes sufficient water from the wet material to form a stable meal
- grinding the dried material to the desired particle size

The main first step of the process is cooking. Separation by pressing the coagulate yields a solid phase (press cake) as well as a liquid phase (press liquor) containing water and the rest of the solids. The main part of the sludge in the press liquor is removed by centrifugation in a decanter, and the oil is subsequently removed by centrifuge.

Stickwater, a valuable product, is concentrated through evaporation to a thick syrup. This material can be sold as "condensed fish solubles" or be further dehydrated by adding it back to the press cake for drying. The meals are then dried so that the moisture content is low enough to allow the meal to be stored and transported.

By-product Production Effluent Monitoring Requirements

Since permit limits (ELGs) are based on pounds of raw product processed, all raw product processed in the by-product processing facility/lines needs to be tracked by weight (lbs seafood received).

Each by-product processing line should be depicted in the permittee's BMP Plan using process waste and wastewater flow diagrams, which should be updated as process lines are added and/or subtracted. The flow diagrams should clearly depict how the permittee calculates total seafood raw product coming into a facility and any interim or final commodities produced and how the permittee calculates flows for reporting on DMRs and in the Annual Report.

Monitoring the effluent generated by the by-products' commodity lines (per Permit Table 7) will provide data to the Department to evaluate compliance with the ELGs (40 CFR §408.155) applied by EPA through BPJ during the last permit cycle and continued in this permit (Permit Table 6), and to evaluate potential pollutant loading effects on water quality. The ELG development document references "the reduction of oily species such as menhaden and anchovy for fish meal, oil, and solubles." The words "such as" suggest that other species processed into by-products, besides menhaden and anchovy, may be included in this subcategory, and EPA's study contemplated the same basic equipment and process steps yielding wastewater with the same conventional pollutants in similar concentrations and treatability as are found today in Alaskan fish meal processing.

The permittee is required to screen the by-product production wastewater to 1.0 mm or less, equivalent to the final treatment screening technology installed, prior to analysis of BOD_5, O&G, and TSS. The screening is required to correspond to the screening that occurs at the seafood waste treatment system and thus provide a representative sample to be analyzed as if the internal monitoring location's wastewaters had already passed through the final screening.

3.6 Other Outfalls (Permit Part 2.5)

Discussion of the 1998 Permit's "Non-process wastewaters" and Other Outfall Monitoring

Previously, "Non-process Wastewaters" stated:

> **1998 AKG528000 (2.4)** "Non-process wastewaters include non-contact cooling water, boiler water, freshwater pressure relief water, refrigeration condensate, water used to transfer seafood to the facility, live tank water, and other non-process water (except wastewater from floor drains). These wastewaters may be discharged without treatment to the receiving water through conveyances, provided that the discharges are in compliance with Alaska State Water Quality Standards."

Permittees interpreted the "Other Wastewaters" language found in the 1998 permit to allow the discharges of "Other Wastewaters" (or 'non-process' wastewater from multiple outfall configurations and discharge points), without monitoring. The seafood processing ELGs made no differentiation for these "Other Wastewater" discharges from seafood processing facilities.

DEC found permittees often made changes to seafood processing line and outfall configurations, which occasionally resulted in plumbing cross connections, grinding before screening, or other unanticipated routing. Non-process drain pipes would be cut off, reconnected, rerouted, or often left uncapped in seafood processing plants, discharging directly to the receiving water. Reconnected or rerouted storm water discharges were often found to be connected to seafood processing plant floor clean up drains, loading and unloading areas, seafood and fish transfer areas, and processing water drains that then were discharged directly to waters of the U.S. without passing through the correct waste treatment systems. The permit now requires the permittees to identify all outfalls and waste streams on the NOI.

The permit includes requirements that all outfalls, discharging any effluents to waters of the U.S., be monitored and BMPs implemented to treat the wastewaters to ensure permit requirements are met. Monitoring is required to ensure compliance with Alaska state WQS.

Permittees discharging wastewater to waters of the U.S from any outfall(s) other than the main seafood processing outfall are required to monitor the discharge as specified in Permit Table 8. Each separate outfall shall be monitored prior to discharge for all parameters established.

The permit proposes monitoring requirements applicable to the discharge from any outfall separate from the seafood processing main outfall or the by-product effluent's main outfall. If the permittee discharges from a single outfall line, the monitoring under this part does not apply. If the permittee has multiple discharge points (outfalls) that historically have been considered "other wastewaters" outfalls, or non-process wastewater outfalls, these outfalls are now required to be monitored.

The permit allows commingling of industrial storm water discharges as long as the permittee has obtained APDES MSGP coverage or has submitted No Exposure Certification under the 2020 APDES MSGP. Permit Table 8 monitoring is not applicable to non-commingled storm water discharges covered under the APDES MSGP permit or to non-commingled storm water outfalls where No Exposure Certifications have been submitted to the Department.

When catch transfer waters are accepted into the facility, they become part of the facility's process wastewaters, per the definition found in 18 AAC 83.990(54). Catch transfer water comes into direct contact with raw, unprocessed seafood and may contain significant amounts of solids and pollutant loading from blood, slime, and fish excrement. If these wastewaters are left untreated, receiving water pollutant loading increases. Therefore, the permit establishes that the screening treatment required prior to discharge is applicable to all effluents that have come into contact with seafood at the facility.

DEC acknowledges the industry concern that seafood waste treatment pumps often do not function as designed when large hydraulic loads (such as catch transfer flows) are forced through treatment pump systems. Sending the catch transfer waste streams through the currently-installed seafood waste treatment system is not the only way to meet the screening treatment requirements.

After a review of the Catch Transfer Water Treatment Practicability Reports and renewal NOIs submitted during the last permit term, DEC has determined that catch transfer water treatment is practicable and the permit no longer allows the option of not treating that waste stream.

Ammonia

Ammonia can be contained in wastewaters from these other outfalls. Facilities that use scrubbers may have DEC Air Quality permits that limit their output of NOx in an air stream. NOx can disassociate in water, and ammonia is then found in the wastewater stream. Ammonia may also be lost to wastewater by refrigeration activities, such as system leaks and purging.

WQS information for ammonia is located in the Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances (Toxics Manual), dated December 12, 2008, adopted by reference in 18 AAC 70.020(b).

Temperature

Discharging non-contact cooling water, retort water, boiler water blowdown, etc., has the potential to affect the temperature of the receiving water.

4.0 Receiving Waterbody

4.1 Limits and Monitoring Requirements

The permit requires monitoring procedures to determine compliance with WQS. The Department may require additional receiving water monitoring, which would be listed in an authorization, for site-specific purposes.

4.2 Sea Surface and Shoreline Monitoring (Permit Part 2.6.1)

Permittees are required to conduct visual sea surface and shoreline monitoring. The permit requires visual monitoring of the receiving water for all points of discharge and shoreline areas, including areas surrounding docks and piers and areas where the seafood processing waste and wastewater residues typically come ashore (if

any). The purpose of the monitoring is to record the occurrence and extent of films, foam, scum, or sheens (compliance with water quality criteria at 18 AAC 70.020(b)).

Historic EPA AKG528000 permit development records include the '1994 Ocean Discharge Criteria Evaluation for the NPDES General Permit for Alaskan Seafood Processors' as well as Federal Register entries granting Steller's eider threatened status in 1997 and establishing critical habitat in 2000. In 1997, EPA initiated the federal consultation process for the AKG528000 permit. Both the U.S. Department of the Interior and the USFWS requested that seafood processing facilities record the occurrence and numbers of Black-legged Kittiwake (Rissa tridactyla), Western Steller sea lions (Eumetopias jubatus), Steller's eiders (Polysticta stelleri), and Southwest Alaska Distinct Population northern sea otters (Enhydra lutris kenyoni) and record any incidents of injured or dead endangered or threatened species while performing the sea surface monitoring. In 2008, EPA and DEC established a workshare agreement to create a document titled 'Protected Areas in Alaska' that identified sensitive locations (e.g., wildlife refuges, critical habitat areas, harbors and bays, etc.) as well as the endangered and threatened species protected. This document identified protected areas and waters in or near Kodiak. Thus, endangered and threatened species monitoring is required to be conducted daily during sea surface and shoreline monitoring while processing is occurring.

4.3 Seafloor Surveys (Permit Part 2.6.2 and Appendix E)

The 1998 permit did not authorize a zone of deposit. This permit also does not authorize a zone of deposit, as surveys performed during the previous permit term did not show deposition at any of the facilities. Therefore, the Department does not expect that there will be detectable deposits but is requiring permittees to perform a seafloor survey once per permit term to verify this assumption and to confirm the continued integrity of the outfall.

The permit requires a seafloor survey be completed during the fourth year of the permit term. Permit Appendix E contains the Seafloor Survey Protocol, which provides acceptable approaches for performing seafloor surveys.

Permittees are required to sample for DO gases if bubbles are seen escaping from seafood waste deposit areas. DO samples are required to be taken within 12 inches of the seafloor near where gas(es) are escaping, which often occurs near the *Beggiatoa* mats and seafood waste pile decay. While it has been found that DO levels in marine water columns greater than 12 inches above the seafloor may be normal (8.5 or greater), the DO is affected in the water column directly above the seafood waste deposits (Unalaska Bay, 1998 - 2004, Akutan Bay, 2011) and in those areas within 12 inches above the *Beggiatoa* mats (or other bacterial mats) from seafood waste deposits. These bacterial colonies only appear at the sediment surface when DO concentrations in the benthic boundary layer drop below 1 mg/L.

The permit requires the identification of Beggiatoa mats and their approximate coverage area(s). Beggiatoa and other filamentous bacteria can use seafood waste as a food source. As the seafood wastes decay, oxygen is depleted in the water column directly above Beggiatoa mats. The bacteria may also be found around cold seeps, sulfur springs, areas where high levels of organic pollutant loading (other than seafood waste discharge) are occurring in the receiving water, and deep hydrothermal vents. Thus, if these features are found by the surveyor, it should be noted in the Seafloor Survey Report.

Continuous, Discontinuous, and Trace Coverage. The 1998 permit did not clearly define what level of seafood waste coverage (continuous, discontinuous, or trace deposits) on the seafloor had to be reported. The permit establishes clear data gathering and reporting protocols in permit Appendix E.

If a seafloor survey documents seafood waste deposits (residues), permittees must complete and submit an evaluation of source control and remediation options.

4.4 Water Quality Standards

The CWA Section 301(b)(1)(C) requires the development of limits in permits necessary to meet WQS. State regulations at 18 AAC 83.435 require that the conditions in APDES permits ensure compliance with the Alaska

WQS, which are codified in 18 AAC 70. The WQS are composed of use classifications, numeric and/or narrative water quality criteria, and an antidegradation policy. The use classification system designates the beneficial uses that each waterbody is expected to achieve. The numeric and/or narrative water quality criteria are the criteria deemed necessary by the State to support the use classification of each waterbody. The antidegradation policy ensures that the designated uses and existing water quality are maintained.

Waterbodies in Alaska are designated for all uses unless the waterbody has been reclassified under 18 AAC 70.230, listed under subpart 18 AAC 70.230(e). Some waterbodies in Alaska can also have site–specific water quality criterion per 18 AAC 70.235, such as those listed under 18 AAC 70.236(b).

The permit authorizes discharge to marine receiving waters of the state that are designated for all uses. The most stringent of the WQS for these uses shall be met. The designated use classes are: water supply (aquaculture, seafood processing, and industrial); water recreation (contact and secondary); growth and propagation of fish, shellfish, and other aquatic life; and harvesting for consumption of raw mollusks or other raw aquatic life.

The applicable WQS applied to the permit are in 18 AAC 70, amended August 9, 2025, with the exception of the residues standard. EPA has not approved the revised residues standard; therefore, the water quality criteria for residues at 18 AAC 70.020(b)(20), as revised through June 26, 2003, applies.

4.5 Mixing Zones

Mixing zones are DEC authorized areas where an effluent undergoes initial dilution. A mixing zone is an allocated impact zone in the receiving waterbody where water quality criteria can be exceeded as long as toxic conditions are prevented and the designated uses of the water as a whole are not impaired as a result of the mixing zone. All water quality criteria must be met at the boundary of the mixing zone.

In accordance with 18 AAC 70.240, DEC may authorize a mixing zone in a permit upon receipt of a complete application. Form 2M, and the associated information (including modeling) required by the form, serves as the mixing zone application under the general permit. The application provides information required by 18 AAC 70.240(a), including the information and available evidence necessary to demonstrate consistency with 18 AAC 70.240. Permittees may request modification to effluent limits, but the burden of proof for justifying a mixing zone rests with the applicant. The Department will consider mixing zone requests on a case-by-case basis, and the Department will, in its discretion, only authorize a mixing zone if it finds that available evidence reasonably demonstrates that the requirements of 18 AAC 70 will be met. New or modified mixing zones will be public noticed in accordance with 18 AAC 83.120. Based on data submitted during the previous permit term, DEC has determined that the discharges from some permittees cause, have the reasonable potential to cause, or contribute to an excursion above the water quality standards. The permit now requires these permittees, listed in Permit Attachment F, to submit mixing zone applications.

The regulations at 18 AAC 70.240 outline the criteria that must be met prior to the Department authorizing a mixing zone. These criteria include an analysis of the size of the mixing zone, treatment technology, existing uses of the waterbody, human consumption, spawning areas, human health, aquatic life, and endangered species. All criteria must be met in order to authorize a mixing zone. If criteria are not met, then a mixing zone is prohibited and effluent limits must be met at the end of the outfall line prior to discharge to the receiving waterbody.

As part of a mixing zone application, permittees must also submit Form 2G and include sufficient information for the Department to complete an antidegradation analysis and make findings under 18 AAC 70.016 (b), (c), and (d). Parameters limited in a mixing zone fall under the “new or expanded” definition under 18 AAC 70.990(75), as this includes “discharges that are regulated for the first time or discharges that are expanded such that they could result in an increase in permitted parameter load or concentration or other changes in discharge characteristics that could lower water quality or have other adverse environmental impacts.” A parameter limited for the first time under the reissued permit (with WQBELs associated with mixing zones that are higher

than the WQS) represents an increase from a previously unpermitted parameter load or concentration, and these parameters do lower water quality. Therefore, a complete antidegradation analysis for each requested mixing zone parameter, including the range of practicable alternatives that have the potential to prevent or lessen the degradation associated with the proposed discharge [18 AAC 70.016(c)(4)], is required.

The Department completes an antidegradation analysis for discharges subject to Department authorization under the 18 AAC 83 APDES program. When developing a permit, if the discharge will lower or potentially lower water quality of Tier 2 waters, the Department will conduct a Tier 2 antidegradation analysis for new or expanded discharges. A Tier 2 analysis is on a parameter-by-parameter basis. The definition of "new or expanded discharge" means, among other things, discharges that are regulated for the first time. The 18 AAC 83 definition of discharge is specific to "a pollutant." Therefore, if a single pollutant is being regulated for the first time in an APDES permit, an antidegradation analysis is required. Regulated for the first time for the permit means a parameter that has an effluent limit which is not included in the general permit upon the effective date. Permittees will be required to submit the analysis required under 18 AAC 70.016(c)(4) for each parameter for each outfall that a mixing zone and modified WQBEL is being requested for.

4.6 Water Quality Status of Receiving Water

The Department evaluated the waterbodies (including Kodiak Harbor, St. Paul Harbor, Gibson Cove, Near Island Channel, Women's Bay, and Woody Island Channel) proposed to be covered under this permit for impaired waterbody status.

Any part of a waterbody for which the water quality does not or is not expected to meet applicable WQS is defined as a "water quality limited segment" and placed on the state's impaired waterbody list. Section 303(d) of the CWA requires states to develop a Total Maximum Daily Load (TMDL) management plan for a waterbody determined to be water quality limited. The TMDL documents the amount of a pollutant a waterbody can assimilate without violating a state's WQS and allocates that load to known point sources and nonpoint sources.

The receiving waterbodies covered by the permit are not included in the Alaska's Final 2024 Integrated Water Quality Monitoring and Assessment Report as impaired waterbodies, nor are any of them listed as a CWA section 303(d) waterbody subject to a pending or approved TMDL. See the State of Alaska DEC Water Quality website for the most recent integrated report, (https://dec.alaska.gov/water/water-quality/integrated-report/).

The receiving water around various outfalls and at ambient locations was monitored during the previous permit term for nine parameters. DEC reviewed the collected data and determined that the limits and monitoring required in the permit are sufficient to protect water quality, so most of the parameters were removed from the monitoring requirement. Monitoring is still required for temperature, pH, and salinity. The water quality criteria for ammonia are dependent on these ambient values, so this monitoring will allow continued accurate characterization of ambient conditions and calculation of ammonia water quality criteria.

Receiving water monitoring (Permit Part 2.6.3) is required twice per year, in the summer season and winter season. Monitoring data is required to be submitted with the application for reissuance.

5.0 Other Permit Requirements

5.1 Quality Assurance Project Plan (QAPP) (Permit Part 2.8)

The permittee is required to develop QAPP sampling and other monitoring procedures to ensure that the monitoring data submitted is accurate and explains data anomalies if they occur. The permittee is required to develop and implement the QAPP within 60 days of authorization to discharge under the permit. A permittee with current authorization shall review and update the QAPP annually or more frequently, in compliance with the permit. The QAPP shall consist of standard operating procedures the permittee must follow for collecting, handling, storing, and shipping samples; conducting laboratory analysis; calculating limits; and reporting data. The QAPP shall be retained on site and made available to the Department upon request.

5.2 Best Management Practices (BMP) Plan (Permit Part 2.9)

In accordance with AS 46.03.110 (d), the Department may specify in a permit the terms and conditions under which waste material may be disposed or discharged. The permit requires the permittee to develop a BMP Plan in order to prevent or minimize the potential for the release of pollutants to waters of the U.S. through plant site runoff, spillage or leaks, or erosion. The permit contains certain BMP conditions that must be included in the BMP Plan. The BMP Plan must be kept on site and made available to the Department upon request.

A new permittee shall develop and implement a BMP Plan within 60 days of authorization to discharge under the permit. A previously permitted permittee shall review and update the BMP Plan. The BMP Plan shall be reviewed at least annually and be revised as needed, and the permittee shall ensure that the BMP Plan has been implemented.

Facilities may use BMPs, in addition to numerical effluent limitations, to control or abate the discharge of pollutants in accordance with 18 AAC 83.475. National policy requires 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, and that discharge or release of the pollution into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner. EPA's reassessment of the ELGs for seafood processors (EPA, 1980) recommended facility management directed towards total utilization of the raw materials and by-product recovery as a fundamental and central element of waste reduction. Materials accounting, audits of facility utilization of water and materials, and BMPs are often recommended as the profitable approach to waste management in seafood processing plants.

The NPDES program is based on the premise of permittee self monitoring and reporting based on specific performance objectives described in the permit (see CWA Section 308). As such, APDES permits are often crafted with stated performance objectives that must be met by the permittee and, as discussed in the Fact Sheet NPDES regulations at 40 CFR §122.44(k), allow for use of BMPs when numeric limits are infeasible.

Purged Ammonia from Refrigeration Systems. Ammonia can be lost to wastewater by various means, such as seafood processing, cleaning, and refrigeration system leaking and purging. Historically, seafood processing facilities have "purged" their refrigerant systems to remove the air and water from the refrigeration lines for proper system operation. Historically, DEC has found that purged ammonia refrigeration system wastewater has typically been placed in a barrel, diluted, and disposed into the effluent stream as a routine maintenance procedure. The ammonia can also enter the effluent stream through refrigeration transport lines' breaks or leaks. Therefore, the permit requires the permittee to develop BMPs that minimize refrigerant release and propose treatment and discharge plans. The BMPs must include how maintenance, purging, and wastewater disposal is handled at the facility. Finally, the permittee is required to develop plans for mitigating and reporting any ammonia accidental or emergency releases (not a covered discharge).

EPA developed a general handbook to assist industry in identifying and using BMPs and in developing and implementing materials accounting and BMP Plans (EPA, 1993). EPA also developed an industry-specific handbook to assist seafood processors in identifying and using BMPs and in developing and implementing materials accounting and BMP Plans. These documents are still available for permittees during BMP Plan development.

The BMP Plan must be amended whenever a change in the seafood processor or in the operation of the seafood processor occurs that materially increases the generation of pollutants and their release or potential release to the receiving water.

5.3 Annual Report (Permit Part 2.7)

The purpose of the Annual Report is to document the status of implementation of the permit's limitations and requirements, including:

- A self-assessment review of compliance with the permit conditions,
- An assessment of the progress towards achieving the measurable goals,

- A summary of results of monitoring information that has been collected and analyzed,
- A discussion of proposed process changes or improvements for the next permit year and submittal of an updated NOI, if needed,
- An assessment of the appropriateness of the selected BMPs along with a discussion of any changes to the BMPs or measurable goals, and
- Reference to any reliance on another entity (e.g. a fish meal plant for reducing seafood waste discharges) for achieving any measurable goal.

The permit includes a requirement in the Annual Report to provide a summary of any occurrences of leaks or breaks in the refrigerator condenser system or outfall. The permit also requires the permittee to provide a list of chemicals, disinfectants, cleaners, biocides, and food processing additives (salts, acids, bases, enzymes, etc.) used and discharged during the annual reporting period. If substances are not used per the manufacturer's recommended use and application rates, the report must include the total annual amounts used, dilution ratio during use, and what the product is used for. Permittees that do not use chemicals in their seafood processing operations (e.g. hand or mechanical filleting only) are not required to submit this list. Requiring industrial facilities to identify chemicals in their processing wastewater discharges is an integral part of the CWA.

5.4 Standard Conditions

Permit Appendix A contains standard regulatory language that must be included in all APDES permits. These requirements are based on the regulations and cannot be challenged in the context of an APDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements.

6.0 Antibacksliding

Regulations at 18 AAC 83.480 require that "effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit." Regulations at 18 AAC 83.480(c) also state that a permit may not be reissued "to contain an effluent limitation that is less stringent than required by effluent guidelines in effect at the time the permit is renewed or reissued."

The 1998 permit did not include mixing zones, and this permit allows permittees the option of applying for mixing zones. This could result in a relaxation of effluent limits, as under the current permit all WQS are required to be met at the point of discharge. Per CWA Section 303(d)(4)(B), limitations based on state WQS can only be relaxed where the action is consistent with the state's antidegradation policy. This requirement will be fulfilled through the application process for individual authorizations, as the permit requires permittees requesting a mixing zone to submit Form 2G and include sufficient information for the Department to complete an antidegradation analysis and make findings under
18 AAC 70.016 (b), (c), and (d).

All other effluent limits in the permit are at least as stringent as in the previously issued permit and are consistent with 18 AAC 83.480. Accordingly, no further backsliding analysis is required for this permit reissuance.

7.0 Antidegradation

Section 303(d)(4) of the CWA states that, for waterbodies where the water quality meets or exceeds the level necessary to support the waterbody's designated uses, WQBELs may be revised as long as the revision is consistent with the State's Antidegradation policy. The State's Antidegradation policy is found in the 18 AAC 70 WQS regulations at 18 AAC 70.015. The Department's approach to implementing the Antidegradation policy is found in 18 AAC 70.016 *Antidegradation implementation methods for discharges authorized under the federal Clean Water Act*. Both the Antidegradation policy and the implementation methods are consistent

with 40 CFR §131.12 and approved by EPA. This Part analyzes and provides rationale for the Department's decisions in the permit issuance with respect to the Antidegradation policy and implementation methods.

Using the policy and corresponding implementation methods, the Department determines a Tier 1 or Tier 2 classification and protection level on a parameter by parameter basis. A Tier 3 protection level applies to a Tier 3 designated water. At this time, no Tier 3 waters have been designated in Alaska.

Regulatory requirements of 18 AAC 70.015(a)(1) state that the existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected (Tier 1 protection level).

There are no marine waters covered under the general permit listed as impaired (Category 4 or 5) on DEC's most recent *Alaska's Final 2024 Integrated Water Quality Monitoring and Assessment Report*; therefore, no parameters have been identified where only the Tier 1 protection level would apply. Accordingly, this antidegradation analysis conservatively assumes that the Tier 2 protection level applies to all parameters, consistent with 18 AAC 70.016(c)(1).

Regulations at 18 AAC 70.015(a)(2) state that if the quality of water exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality must be maintained and protected, unless the Department authorizes a reduction in water quality (Tier 2 protection level). The Department may allow a reduction of water quality only after the specific analysis and requirements under 18 AAC 70.016(b)(5)(A-C), 18 AAC 70.016(c)(7)(A-F), and 18 AAC 70.016(d) are met. The Department's findings are as follows:

7.1 18 AAC 70.016(b)(5)

(A) *existing uses and the water quality necessary for protection of existing uses have been identified based on available evidence, including water quality and use related data, information submitted by the applicant, and water quality and use related data and information received during public comment;*

(B) *existing uses will be maintained and protected; and*

(C) *the discharge will not cause water quality to be lowered further where the department finds that the parameter already exceeds applicable criteria in 18 AAC 70.020(b), 18 AAC 70.030, or 18 AAC 70.236(b).*

Per 18 AAC 70.020 and 18 AAC 70.050, all marine waters are protected for all uses; therefore, the most stringent water quality criteria found in 18 AAC 70.020 and in the Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances (DEC 2008) apply and were evaluated. This will ensure existing uses and the water quality necessary for protection of existing uses of the receiving waterbody are fully maintained and protected.

The permit places limits and conditions on the discharge of pollutants. The limits and conditions are established after comparing TBELs and WQBELs and applying the more restrictive of these limits. The water quality criteria, upon which the permit effluent limits are based, serve the specific purpose of protecting the existing and designated uses of the receiving water. WQBELs are set equal to the most stringent water quality criteria available for any of the protected water use classes.

Pollutants of concern in seafood waste are primarily the biological wastes generated by processing raw seafood into a marketable form and the chemicals used for processing or cleaning processing equipment and fish containment structures in order to maintain sanitary conditions. Biological wastes are primarily seafood parts. The chemicals used for cleaning are primarily disinfectants, which shall be used in accordance with EPA specifications. Refrigerants used are generally ammonia and Freon. Monitoring for ammonia is a permit requirement to evaluate whether WQS are being met.

The general permit includes numeric or narrative effluent limits and BMPs addressing each of these pollutants of concern. The permit requires facilities to implement BMP Plans to minimize the production of waste and the

discharge of pollutants to waters of the U.S. to ensure that seafood processing facilities provide for the protection or attainment of existing and designated uses.

Part 1.4.1.8 of the permit requires that the discharge shall not cause or contribute to a violation of the WQS at 18 AAC 70. As previously stated, there are no marine waters covered under the general permit that are listed as impaired; therefore, no parameters were identified as already exceeding the applicable criteria in 18 AAC 70.020(b) or 18 AAC 70.030. Marine waters covered under the general permit are not listed under 18 AAC 70.236(b) as subject to site-specific criteria.

The Department concludes that the terms and conditions of the permit will be adequate to fully protect and maintain the existing uses of the water and that the findings under 18 AAC 70.016(b)(5) are met.

7.2 18 AAC 70.016(c)(7)(A –F) *If, after review of available evidence, the department finds that the proposed discharge will lower water quality in the receiving water, the department will not authorize a discharge unless the department finds that:*

7.2.1 18 AAC 70.016(c)(7)(A) the reduction of water quality meets the applicable criteria of 18 AAC 70.020(b), 18 AAC 70.030, or 18 AAC 70.236(b), unless allowed under 18 AAC 70.200, 18 AAC 70.210, or 18 AAC 70.240;

As previously stated, Part 1.4.1.8 of the permit requires that the discharge shall not cause or contribute to a violation of the WQS at 18 AAC 70. WQBELs are set equal to the most stringent water quality criteria available under 18 AAC 70.020(b) for any of the protected water use classes. Because of the nature of the permitted discharges, other pollutants are not expected to be present in the discharges at levels that would cause, have the reasonable potential to cause, or contribute to an exceedance of any Alaska WQS, including the whole effluent toxicity limit at 18 AAC 70.030. The Department will not authorize a discharge under the general permit to waters that have established or adopted site-specific criteria in the vicinity of the discharge. Currently, marine waters covered under the general permit are not listed under 18 AAC 70.236(b) as subject to site-specific criteria.

The permit does not authorize short term variances or zones of deposit under 18 AAC 70.200 or 18 AAC 70.210.

Except where a mixing zone has been authorized by the Department, all parameters at the point of discharge must meet the most stringent water quality criteria available for any of the protected water use classes. In addition, if a mixing zone is authorized, all water quality criteria must be met at the boundary of the mixing zone to ensure all criteria are met in the waterbody and the waterbody as a whole is protected. The water quality criteria in 18 AAC 70.020 is a legal basis for the permit effluent limits, of which serve the specific purpose of protecting the existing and designated uses.

The Department has determined that the reduction of water quality meets the applicable criteria of 18 AAC 70.020(b), 18 AAC 70.030, and 18 AAC 70.236(b), and that the finding is met.

7.2.2 18 AAC 70.016(c)(7)(B) each requirement under (b)(5) of this section for a discharge to a Tier 1 water is met;

See 18 AAC 70.016(b)(5) analysis and findings above.

7.2.3 18 AAC 70.016(c)(7)(C) point source and state-regulated nonpoint source discharges to the receiving water will meet requirements under 18 AAC 70.015(a)(2)(D); to make this finding the department will (i) identify point sources and state-regulated nonpoint sources that discharge to, or otherwise impact, the receiving water; and (ii) consider whether there are outstanding noncompliance issues with point source permits or required state-regulated nonpoint source best management practices, consider whether receiving water quality has improved or degraded over time, and, if necessary and appropriate, take actions that will achieve the requirements of 18 AAC 70.015(a)(2)(D); and (iii) coordinate with other state or federal agencies as necessary to comply with (i) and (ii) of this subparagraph;

The requirements under ***18 AAC 70.015(a)(2)(D)*** state:

(D) all wastes and other substances discharged will be treated and controlled to achieve

(i) for new and existing point sources, the highest statutory and regulatory requirements; and

(ii) for nonpoint sources, all cost-effective and reasonable best management practices;

The highest statutory and regulatory requirements are defined at ***18 AAC 70.015(d)***:

(d) For purposes of (a) of this section, the highest statutory and regulatory requirements are

(1) any federal technology-based effluent limitation identified in 40 C.F.R. 122.29 and 125.3, revised as of July 1, 2017 and adopted by reference;

(2) any minimum treatment standards identified in 18 AAC 72.050;

(3) any treatment requirements imposed under another state law that is more stringent than a requirement of this chapter; and

(4) any water quality-based effluent limitations established in accordance with 33 U.S.C. 1311(b)(1)(C) (Clean Water Act, sec. 301(b)(1)(C)).

The first part of the definition includes all federal TBELs. The permit requires permittees of seafood processing facilities to comply with 40 CFR Part 408, Canned and Preserved Seafood Processing Point Source Category. The effluent limitations guidelines (ELGs) set standards of performance for new sources and are incorporated in the permit.

The second part of the definition references the minimum treatment standards found at 18 AAC 72.050, which refers to domestic wastewater discharges only. The permit does not authorize the discharge of domestic wastewater (Permit Part 1.3.1). The permit requires support vessel sanitary wastewater to be routed to the local municipal domestic wastewater treatment facility. Therefore, a finding under this Part is not applicable.

The third part of the definition refers to treatment requirements imposed under another state law that are more stringent than 18 AAC 70. Other regulations beyond 18 AAC 70 that apply to this permitting action include 18 AAC 15 and 18 AAC 72. Neither the regulations in 18 AAC 15 and 18 AAC 72 nor another state law that the Department is aware of impose more stringent requirements than those found in 18 AAC 70.

The fourth part of the definition refers to WQBELs. A WQBEL is designed to ensure that the WQS of a waterbody are met and may be more stringent than TBELs. Section 301(b)(1)(C) of the CWA requires the development of limits in permits necessary to meet WQS by July 1, 1977. WQBELs included in APDES permits are derived from EPA-approved 18 AAC 70 WQS. APDES regulation 18 AAC 83.435(a)(1) requires that permits include WQBELs that can "achieve water quality standards established under CWA §303, including state narrative criteria for water quality." The permit requires compliance with the 18 AAC 70 WQS, including effluent limits for pH and temperature and monitoring for other applicable WQS pollutants.

The Department reviewed available information on known point source discharges to receiving waters covered under the permit and found that outstanding noncompliance issues are being addressed through compliance actions. There are no state regulated nonpoint sources that discharge to, or otherwise impact, the receiving waters covered under the permit.

After review of the methods of treatment and control and the applicable statutory and regulatory requirements, including 18 AAC 70, 18 AAC 72, and 18 AAC 83, the Department finds that the discharge authorized under this general permit meets the highest applicable statutory and regulatory requirements; therefore, the 18 AAC 70.016(c)(7)(C) finding is met.

7.2.4 ***18 AAC 70.016(c)(7)(D)(i-ii)*** *the alternatives analysis provided under (4)(C-F) of this subsection demonstrates that*

(i) a lowering of water quality under 18 AAC 70.015(a)(2)(A) is necessary; when one or more practicable alternatives that would prevent or lessen the degradation associated with the proposed discharge are identified, the department will select one of the alternatives for implementation; and

(ii) the methods of pollution prevention, control, and treatment applied to all waste and other substances to be discharged are found by the department to be the most effective and practicable;

The Department performed an alternatives analysis and found that temporary lowering of water quality to accommodate important economic development in the area is necessary. Alternatives were evaluated based on practicability, as defined at 18 AAC 70.990(48). Alternatives, such as ceasing discharge, sending seafood processing waste streams to the City of Kodiak's Wastewater Treatment Facility, and moving processing locations offshore were determined to be non-practicable. Therefore, discharge under the limitations and requirements of the permit is identified as the practicable alternative, and the 18 AAC 70.016(c)(7)(D)(i) finding is met.

As described in Part 4.5, if the permittee applies for a mixing zone a complete antidegradation analysis, including all information and findings under 18 AAC 70.016(c)(7)(D) and 18 AAC 70.016(c)(7)(E), is required. The complete antidegradation analysis will be public noticed with the mixing zone analysis and draft authorization.

Permit requirements include the implementation of BMPs, installation of flow meters, and ambient water quality monitoring to evaluate the need for updated limits in future permits.

The permit requires permittees of seafood processing facilities to follow prescribed BMPs to minimize pollutant discharges, as well as to comply with 40 CFR Part 408, Canned and Preserved Seafood Processing Point Source Category. The regulations at 40 CFR Part 408 require seafood processors to meet the ELGs as discussed in earlier parts of the Fact Sheet, including the mass-based effluent limitations for TSS and O&G and an allowable range for pH. These limitations are included as permit conditions. No mixing zones will be issued that conflict with the ELGs applied in the general permit. As part of the ELG process, EPA prepared a report in support of 40 CFR Part 408 titled 'Development Document for the Seafood Processing Industry Point Source Category,' which provides more documentation regarding treatment technologies used to develop the performance standards.

With the permit-required implementation of BMP controls and the requirement to meet ELGs and WQS, the methods of pollution prevention, control, and treatment applied to all waste and other substances to be discharged are found by the Department to be the most effective and practicable; therefore, the 18 AAC 70.016(c)(7)(D)(ii) finding is met.

7.2.5 ***18 AAC 70.016(c)(7)(E)*** *except if not required under (4)(F) of this subsection, the social or economic importance analysis provided under (4)(G) and (5) of this subsection demonstrates that a lowering of water quality accommodates important social or economic development under 18 AAC 70.015(a)(2)(A); and*

Commercial fishing is by far the largest private sector industry in Kodiak. Kodiak is consistently one of the top three fishing ports in the United States. The 2015 ex-vessel value of all fish coming into Kodiak was approximately $155.4 million, as compared to 2014 which was approximately $147.4 million, an increase of 5.15%. Volume in 2015 was approximately 527 million pounds, an increase from 2014 which was approximately 458 million pounds.

Kodiak is the center of fishing activities for the Gulf of Alaska. The fishery is among the most diverse in the state, with approximately 53 different seafood species being delivered and processed in Kodiak in 2015. Salmon has traditionally been the mainstay of Kodiak's fisheries. Because of the cyclical nature of the salmon fisheries, the annual volume and value of Kodiak's salmon catch varies greatly. Increased competition in world markets has also driven prices down. The ground fish (bottom fish) fishery has become increasingly important to Kodiak's economy.

The Department has determined that the operation of the seafood processing facilities and discharges authorized by the permit demonstrate that the lowering of water quality accommodates important economic development; therefore, the 18 AAC 70.016(c)(7)(E) finding is met.

7.2.6 ***18 AAC 70.016(c)(7)(F)*** *18 AAC 70.015 and this section have been applied consistent with 33 U.S.C. 1326 (Clean Water Act, sec. 316) with regard to potential thermal discharge impairments.*

Discharges authorized under the permit are not associated with a potential thermal discharge impairment; therefore, the finding is not applicable.

8.0 Other Legal Requirements

8.1 Ocean Discharge Criteria Evaluation

The Ocean Discharge Criteria establish guidelines for permitting discharges into the territorial seas, the contiguous zone, and the ocean.

EPA regulations, 40 CFR 125.122(b) and adopted by reference at 18 AAC 83.010(C)(8), state that discharges found to be in compliance with CWA section 303 WQS will be presumed to also be in compliance with CWA section 403 ocean discharge criteria. As such, EPA itself equated ocean discharge criteria with WQS, a fact it emphasized when promulgating ocean discharge criteria rules in 1980: "the similarity between the objectives and requirements of [state WQS] and those of CWA section 403 warrants a presumption that discharges in compliance with these [standards] also satisfy CWA section 403." (Ocean Discharge Criteria, 45 Fed. Reg. 65,943 (proposed Oct. 3, 1980) (codified at 40 CFR Part 125).) As with any permit, the CWA requires the general permit to contain any applicable TBELs, as well as limits and conditions necessary to meet applicable state WQS. State WQS apply in the territorial seas, defined in the CWA section 502(8) as extending three miles from the baseline (Pacific Legal Foundation v. Costle, 586 F.2d 650, 655-656 (9th Cir. 1978); Natural Resources Defense Council., Inc. v. U.S. EPA, 863 F.2d 1420, 1435 (9th Cir. 1988). Unlike ocean discharge criteria, however, state WQS trigger additional requirements under the CWA, including WQBELs requirements under section 302. Specifically, state WQS established pursuant to CWA section 303 are designed to preserve the quality of waters under State jurisdiction, including the territorial seas, and compliance with these standards should ensure protection of the uses for which the waters are designated with respect to pollutants for which standards have been established. The State of Alaska WQS protect all uses, and the permit requires authorized discharges to be in compliance with WQS. Therefore, discharges in compliance with the permit shall be presumed not to cause unreasonable degradation of the marine environment, for any of the pollutants or conditions specified.

8.2 Endangered Species Act

National Marine Fisheries Service (NMFS) is responsible for administration of the Endangered Species Act (ESA) for listed cetaceans, seals, sea lions, sea turtles, anadromous fish, marine fish, marine plants, and corals. All other species (including polar bears, walrus, and sea otters) are administered by the USFWS.

The ESA requires federal agencies to consult with NOAA, NMFS, and the USFWS if their actions could beneficially or adversely affect any threatened or endangered species. As a state agency, DEC is not required to consult with these federal agencies regarding permitting actions. However, DEC voluntarily contacted the agencies to notify them of the proposed permit issuance and to obtain listings of threatened and endangered species near the discharge. The permit has integrated specific monitoring and permit requirements applicable to those seafood processing facilities located near critical habitat areas. The permit requires permittees to collect data regarding threatened and endangered species during sea surface and shoreline monitoring activities.

DEC provided the USFWS a list of existing facilities and discharge locations on July 23, 2012, October 2015, and November – December 2016. DEC also provided discharge locations and discharge amounts of existing seafood processing facilities currently discharging to waters with listed critical area habitats within 3.0 miles. In an August 16, 2012 response, the USFWS indicated that discharges to waters in Kodiak and Chignik harbors

could present significant risk to Steller's eiders in those harbors and provided recommendations for authorizations discharging to those areas.

In 2016, the USFWS directed the Department to consult their Information for Planning and Consultation system (https://ecos.fws.gov/ipac) to obtain lists of threatened and endangered species within the jurisdiction of the USFWS in the discharge area. The Department used this website to gain an approximate determination that the area surrounding the discharges may contain endangered Short-tailed Albatross, threatened Steller's eiders, threatened northern sea otters, and critical habitat for northern sea otters.

In 2016, NOAA/NMFS directed the Department to consult their Critical Habitat Mapper at https://www.fisheries.noaa.gov/resource/map/national-esa-critical-habitat-mapper. The Department used this website to make an approximate determination that the area surrounding the discharges may contain endangered Steller sea lions, humpback whales, North Pacific right whales, and fin whales. Additionally, many of these discharges are located within 1.0 nautical mile of nesting seabird colonies identified to have 1,000 or more Black-legged Kittiwakes. Authorizations may incorporate site-specific water quality-based and threatened or endangered species-related requirements, as established in the permit.

This fact sheet and the permit will be submitted to the agencies for review during the public notice period, and any comments received from these agencies will be considered prior to issuance of the permit.

8.3 Essential Fish Habitat

Essential Fish Habitat (EFH) includes the waters and substrate (sediments, etc.) necessary for fish from commercially-fished species to spawn, breed, feed, or grow to maturity. The Magnuson-Stevens Fishery Conservation and Management Act (January 21, 1999) requires federal agencies to consult with NOAA when a proposed discharge has the potential to adversely affect (reduce quality and/or quantity of) EFH.

As a state agency, DEC is not required to consult with NOAA on EFH. However, DEC voluntarily contacted NOAA to notify them of the proposed permit issuance and to obtain listings of EFH in the area. NOAA has generally directed the Department to consult their EFH Mapper at https://www.habitat.noaa.gov/apps/efhmapper/ to obtain locations of EFH in the area of proposed discharges. The Department used this website to make an approximate determination that the area of proposed discharges could be EFH for all five species of Pacific salmon, skate, Pacific cod, sculpin, arrowtooth flounder, yellowfin sole, squid, walleye pollock, rock sole, and flathead sole.

Additionally, during permit development for a separate seafood processing general permit, AKG523000 Offshore Seafood Processors, NMFS and the Alaska Department of Fish and Game (ADF&G) provided comment that anchoring and discharge of seafood waste should not occur into or onto "living substrates," such as submerged aquatic vegetation, kelp, or eelgrass. This recommendation has been directly incorporated into a requirement to perform seafloor surveys prior to placements of new outfalls. The protocol can be found in Permit Appendix G to assist the permittee and DEC in determining that siting requirements are being met. The pre-discharge survey provides information to DEC regarding the existing benthos prior to installation of an outfall and/or prior to restarting discharge from a pre-existing outfall that has not operated in 12 months or more. The pre-discharge survey is due with submittal of the NOI, prior to installation or operation of an inactive outfall.

DEC will provide NMFS with copies of the permit and fact sheet during the public notice period. Any comments received from NMFS regarding EFH will be considered prior to issuance of the permit.

8.4 Permit Expiration

The permit will expire five years from the effective date of the permit, but it may be administratively continued.

9.0 References

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NMFS, 2005. *Final Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska* (Chapter 3). National Marine Fisheries Service, NOAA, Alaska Region. Available at https://www.fisheries.noaa.gov/resource/document/final-environmental-impact-statement-essential-fish-habitat-identification-and

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Appendix A – EPA 2006 Existing and New Source Memorandum

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MEMORANDUM **September 28, 2006**

OFFICE OF WATER

SUBJECT: **New Source Dates for Direct and Indirect Dischargers**

FROM: **Linda Boornazian, Director /s/**
Water Permits Division, Office of Wastewater Management
Office of Water

Mary Smith /s/
Engineering & Analysis Division, Office of Science & Technology
Office of Water

TO: **Regional Water Division Directors**

The Clean Water Act (CWA) requires the U.S. Environmental Protection Agency (EPA) to establish Federal standards of performance for new sources from which there are or may be discharges of pollutants for specified categories of sources. 33 U.S.C. § 1316 (Section 306). Section 306 requires a new source to meet a standard that reflects the greatest degree of effluent reduction that EPA determines can be achieved by application of the best available demonstrated technology, processes, operating methods, or other alternatives. 33 U.S.C. §1316. New facilities have the opportunity to install the best and most efficient production processes and wastewater treatment technologies. As a result, standards of performance for new sources should represent the most stringent controls attainable through the application of the best available control technology for all pollutants (i.e., conventional, non-conventional, and priority pollutants).

This memorandum summarizes EPA regulatory requirements for determining what sources are new sources. Specifically, this document provides a summary of relevant regulatory criteria for consideration in this determination as well as a listing of applicable new source dates used in making new source determinations.

The statutory provisions and EPA regulations contain legally binding requirements. This memorandum does not impose any new legally binding requirements on EPA, States or the regulated community. This memorandum does not confer legal rights or impose legal obligations upon any member of the public. In the event of a conflict between the discussion in this document and any statute or regulation, this document would not be controlling.

The general descriptions provided here may not apply to particular situations based upon the circumstances. Interested parties are free to raise questions and objections about the substance of this memorandum and the appropriateness of the application of this memorandum to a particular situation. EPA and other decision makers retain the discretion to adopt approaches on a case-by-case basis that differ from those described in this memorandum where appropriate.

Mention of trade names or commercial products does not constitute an endorsement or recommendation for their use.

1. What Are the Practical Effects of a New Source Determination?

After the effective date of any applicable new source standard of performance, the CWA prohibits the owner or operator of any new source from operating the source in violation of that standard. 33 U.S.C. §1316(e), §1317(d). The CWA requires EPA to establish new source performance standards (NSPS) in the case of "direct dischargers", or sources that discharge directly to waters of the United States. 33 U.S.C. §1316. For "indirect dischargers", or sources that introduce pollutants to POTWs, EPA must establish pretreatment standards for new sources (PSNS). The promulgation of NSPS should represent the most stringent controls attainable through the application of the best available demonstrated control technology for all pollutants. PSNS represent the most stringent controls attainable for pollutants that pass through, interfere with, or are other wise incompatible with the operation of POTWs. 67 Fed. Reg. 64219 (October 17, 2002). PSNS are generally issued at the same time as NSPS. 33 U.S.C. §1317(c). Both PSNS and NSPS are referred to individually or collectively as "new source standards" in this memorandum.

New sources face more immediate compliance deadlines than existing sources. When EPA establishes new technology-based effluent limitations, existing direct dischargers must comply with such standards when their NPDES permits are issued, reissued, or modified. In practice, this means, in the case of a direct discharger whose permit is reissued just before EPA promulgates new limitations, that the discharger may not be required to comply for up to five years. In the case of existing indirect dischargers, EPA generally requires compliance with new pretreatment standards within three years of publication of the standard. In comparison, after the effective date of a new source standard, the CWA stipulates that it is unlawful for any owner or operator to operate such a source in violation of those standards. 33 U.S.C. 1316(e) and 1317(d). For both direct and indirect dischargers, the regulations specify that new sources "shall install and have in operating condition, and shall 'start up' all pollution control equipment" required to meet applicable standards prior to commencing discharge. The regulations also indicate that the owner or operator of a new source must meet all applicable standards within "the shortest feasible time (not to exceed 90 days)." 40 CFR 122.29(d)(4), 40 CFR 403.6(b).

If construction results in a new source, the discharger will be affected differently depending on what changes occurred at the site. The discharger's entire facility may be subject to new source standards, or, if the new source is a new installation of process equipment at an existing facility, part of the facility may be subject to existing source standards and other parts of the facility subject to new source standards.

Additionally, it should be noted that EPA-issued NPDES permits for new sources are deemed major Federal actions subject to the National Environmental Policy Act's (NEPA's) requirements, 33 U.S.C. §1371(c)(1). See also, 40 CFR Part 6, Subpart F at 6.600 et seq.

2. New Source Dates - Regulatory Background

Under the CWA, any source, the construction of which is commenced after promulgation of NSPS or publication of proposed PSNS for most indirect dischargers applicable to the source, is a new source. 33 U.S.C. §1316(a)(2). The term "source" means any building, structure, facility or installation from which there is or may be a discharge of pollutants. Because the statute broadly defines "construction" as "any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises" (see Section 306(a) of the CWA), a number of activities may give rise to new source status. EPA's regulations provide specific criteria for determining when construction of a source is a new source. The new source criteria for direct dischargers, at 40 CFR 122.29(b), and for indirect dischargers, at 40 CFR 403.3(m), use essentially the same language. See Appendix A for the full regulatory text for both direct and indirect dischargers.

Perhaps the most fundamental step in determining whether a particular source is a new source is to determine whether its construction commenced after the applicable new source date. This step corresponds to the statutory definition of "new source" which includes within its scope "sources, the construction of which *commenced after the publication of proposed regulations*[1] *prescribing a standard of performance* ... if such standard is thereafter promulgated." (italics added) 33 U.S.C. §1316(a)(2). This step can be broken down into three separate questions: (a) did *construction* occur; (b) did construction *commence*; and (c) did construction commence *after the new source date*? The applicable new source date is the critical frame of reference in this step of the new source determination. New source dates are generally either the dates of the proposal of an applicable new source standard in the case of indirect dischargers, or the dates of promulgation in the case of direct dischargers. Appendix B includes a comprehensive listing of the applicable new source dates for each effluent guideline category.

[1] In practice, the new source dates are different depending on whether the source is a direct or indirect discharger. See Section 2.c for further discussion.

2.a. Did *construction* occur?

As previously noted, the CWA defines new sources as those *constructed* after the new source date (see, also, discussion below in 2.c). EPA emphasizes that a source, whether it is a direct or indirect discharger, may be either something as large-scale as a facility or something as small as a piece of equipment installed as part of an existing operation. The CWA defines "source" to include "any building, structure, facility, or installation" and defines construction to include "any placement, assembly, or installation of facilities and equipment." Thus, under the CWA, "construction" refers both to the construction of any building, structure, or facility, and to the installation of equipment. A "new source," then, is the placement, assembly or installation of facilities or equipment which commenced after the new source date and which satisfies the other regulatory criteria discussed below. As a consequence, a wide range of activities may potentially result in a new source classification. Throughout the remaining portions of this memorandum document, the words "facilities or equipment" will be used interchangeably with the term "source", and "building, structure, facility, or installation."

In addition, it is important to recognize that the "source" of a discharge from an industrial operation is the facility generating the discharge, not the system treating it. Mahelona v. Hawaiian Electric Company, Inc., 418 F. Supp 1328 (Aug. 27, 1976), 49 Fed. Reg. 38044 (Sept. 26, 1984). More specifically, the source of the discharge is the production or wastewater generating processes of the operation. The treatment system used to reduce pollutants in the waste stream, on the other hand, is not the source of the discharge. This distinction is significant for making new source determinations, especially for new construction at existing sites. Applying this approach, EPA has previously determined that a newly constructed facility is a new source even if its discharge is conveyed through an existing waste treatment system. 49 Fed. Reg. 38044 (Sept. 26, 1984). Similarly, in EPA's view, where an owner or operator makes changes only to its wastewater treatment systems, and no changes occur in the production or wastewater generating processes of the plant, the source should not be reclassified as a new source. Dischargers in the Centralized Waste Treatment (CWT) category are generally the exception to this principle. Unlike other industrial categories, because waste treatment *is* the industrial process for CWT facilities, new changes in treatment may very well trigger new source requirements.

EPA also points out that certain types of changes to the operation of a source are not considered construction for new source purposes, and therefore should not require that the source be reclassified as a new source. For instance, where the only change made is in the ownership or management of a source, without any associated changes to the internal processes of the operation, there is no new construction and, therefore, there is no new source.

2.b. Did construction *commence*?

The new source regulations explain that construction commences if an entity either undertakes or begins certain work as part of a continuous on-site construction program, or enters into contractual obligations to purchase facilities or equipment. 40 CFR 122.29(b)(4), 40 CFR 403.3(m)(3). EPA notes that the regulations recognize that construction commences not only after the traditional physical aspects of construction have begun, but also after the associated purchase orders or contracts have been agreed upon (see further discussion below). The initiation of either one of these activities represents triggering events for the new source analysis.

Physical Commencement of Construction

The new source regulations clarify what types of actual physical construction may signal the commencement of construction. One type of activity is the "placement, assembly, or installation of facilities or equipment." 40 CFR 122.29(b)(4)(i)(A), 40 CFR 403.3(m)(3)(i)(A). The other type of activity is "significant site preparation work, including clearing, excavation, or removal of existing buildings, structures, or facilities" related to the placement, assembly, or installation of facilities or equipment. The scope of the activities covered highlights the fact that the regulations capture not only the construction of a new or renovated building, structure, or facility, but also smaller scale activities, such as the installation of equipment (e.g., a new process tank).

It is also noteworthy that the new source regulations *do not* specify *new* facilities or *new* equipment being placed, assembled, or installed. Therefore, construction may commence if an entity reassembles old equipment or relocates it in a new location. For example, in certain circumstances, EPA has concluded that construction of a new source would commence when moving existing equipment into an existing building that did not previously have an industrial discharge to the sewer. 53 FR 40562 at 40602 (October 17, 1988).

Commencement of Construction by Purchase Contract

As noted previously, construction can sometimes commence at a point prior to the initiation of any placement, assembly, or installation of facilities or equipment, or of any related site preparation work. The new source regulations provide that construction may begin when the owner or operator has entered into a binding contractual obligation to purchase facilities or equipment intended to be used for operational purposes within a reasonable period of time. 40 CFR 122.29(b)(4)(ii), 40 CFR 403.3(m)(3)(ii). The initiation of a binding purchase contract is included as a triggering event because it may indicate the owner's or operator's intent to construct a source, represent a critical time in the commitment of resources towards construction, and, therefore, signal an opportunity to install more effective treatment or processes to meet a higher standard of performance.

There are some notable exceptions to this contract formation provision. The following types of contractual obligations do not cause the commencement of construction for new source purposes: options to purchase; contracts which can be terminated or modified without substantial loss; and contracts for feasibility, engineering, and design studies. 40 CFR 122.29(b)(4)(ii), 40 CFR 403.3(m)(3)(ii).

EPA emphasizes that the important moment in time for the discharger is the date construction commenced, and not the date on which the discharge of pollutants first occurs. (Note: The discharger is generally required to comply with the standards upon commencement of discharge.) This distinction is important, since the date construction commences occurs at a point in time prior to the date the discharge begins, and is consistent with the purpose of the new source requirements to incorporate new treatment technologies when the owner or operator has the opportunity to do so.

2.c. Did construction commence *after the new source date*?

To be considered a new source, the construction must have commenced after the applicable new source date. The new source dates are critical to the new source analysis. If construction commenced after the new source date, there is a possibility that the source could be considered a new source if it meets the regulatory criteria on 40 CFR 122.29(b) or 403.3(m)(1). However, if the construction begins before the new source date, the source will generally be considered an existing source, not subject to new source standards, unless there was other construction after the new source date which constitutes a "total replacement" or is "substantially independent from the existing source" (see 40 CFR 122.29(b)(ii) and (iii) and 40 CFR 403.3(m)(1)(ii) and (iii)). Similarly, if construction commenced before the new source date, and ends after the new source date, the source would generally be considered an existing source, unless there was other construction after the new source date which constitutes a total replacement or is substantially independent from the existing source.

New source dates are either the dates of proposal of an applicable new source standard in the case of indirect dischargers or the dates of promulgation in the case of direct dischargers. The statute provides that the date for purposes of determining whether a source is a new source is the date of publication of a proposed standard for all dischargers, as long as the standard is thereafter promulgated in accordance with section 306 (33 U.S.C. §1316(a)(2)). These dates may differ from the proposal date, however, depending on whether the source is a direct or indirect discharger. The new source date for direct dischargers is the date on which an applicable new source standard is promulgated.[2] EPA notes that the regulations specify the new source date is the date of *proposal* only if the standard is promulgated within 120 days. Because

[2] EPA regulations promulgated in 1985 provide that, for the purpose of judicial review, the time and date of EPA action in promulgation of a Federal Register notice is the date two weeks after the notice appears in the Federal Register (see 40 CFR 23.2). For that reason, EPA has added two weeks to the publication date for new source dates for direct discharge categories which have been promulgated since 1985.

EPA has rarely finalized these standards in fewer than 120 days, this provision has not often come into play. In comparison, EPA regulations provide that the new source date for indirect dischargers is the date on which the pretreatment standard for new sources is *proposed*. 40 CFR 403.3(m)(1). In addition, EPA has varied from this general rule of thumb in some instances when establishing new source dates for either direct or indirect dischargers for certain new or revised effluent guidelines. Refer to Appendix B.

If you have any questions, please feel free to contact Greg Schaner at (202) 564-0721 or Jan Pickrel at (202) 564-7904.

cc: Water Division Directors
Regions 1 - 10

APPENDIX A New Source Regulatory Text

APPENDIX B New Source Dates by Effluent Guideline Category

Appendix A
New Source Regulatory Text

1. Regulatory Definitions Applicable to Direct Dischargers

40 CFR 122.2

"New source means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced:

(a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or

(b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal."

40 CFR 122.29

"(a) *Definitions.* (1) *New source* and *new discharger* are defined in §122.2. [See Note 2.]

(2) *Source* means any building, structure, facility, or installation from which there is or may be a discharge of pollutants.

(3) *Existing source* means any source which is not a new source or a new discharger.

(4) *Site* is defined in §122.2;

(5) *Facilities or equipment* means buildings, structures, process or production equipment or machinery which form a permanent part of the new source and which will be used in its operation, if these facilities or equipment are of such value as to represent a substantial commitment to construct. It excludes facilities or equipment used in connection with feasibility, engineering, and design studies regarding the source or water pollution treatment for the source.

(b) *Criteria for new source determination.* (1) Except as otherwise provided in an applicable new source performance standard, a source is a "new source" if it meets the definition of "new source" in §122.2, and

(i) It is constructed at a site at which no other source is located; or

(ii) It totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

(iii) Its processes are substantially independent of an existing source at the same site. In determining whether these processes are substantially independent, the Director shall consider

such factors as the extent to which the new facility is integrated with the existing plant; and the extent to which the new facility is engaged in the same general type of activity as the existing source.

(2) A source meeting the requirements of paragraphs (b)(1) (i), (ii), or (iii) of this section is a new source only if a new source performance standard is independently applicable to it. If there is no such independently applicable standard, the source is a new discharger. See §122.2.

(3) Construction on a site at which an existing source is located results in a modification subject to §122.62 rather than a new source (or a new discharger) if the construction does not create a new building, structure, facility, or installation meeting the criteria of paragraph (b)(1) (ii) or (iii) of this section but otherwise alters, replaces, or adds to existing process or production equipment.

(4) Construction of a new source as defined under §122.2 has commenced if the owner or operator has:

(i) Begun, or caused to begin as part of a continuous on-site construction program:

(A) Any placement, assembly, or installation of facilities or equipment; or

(B) Significant site preparation work including clearing, excavation or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

(ii) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation with a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility engineering, and design studies do not constitute a contractual obligation under the paragraph.

(c) *Requirement for an environmental impact statement.* (1) The issuance of an NPDES permit to new source:

(i) By EPA may be a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969 (NEPA), 33 U.S.C. 4321 *et seq.* and is subject to the environmental review provisions of NEPA as set out in 40 CFR part 6, subpart F. EPA will determine whether an Environmental Impact Statement (EIS) is required under §122.21(l) (special provisions for applications from new sources) and 40 CFR part 6, subpart F;

(ii) By an NPDES approved State is not a Federal action and therefore does not require EPA to conduct an environmental review.

(2) An EIS prepared under this paragraph shall include a recommendation either to issue or deny the permit.

(i) If the recommendation is to deny the permit, the final EIS shall contain the reasons for the recommendation and list those measures, if any, which the applicant could take to cause the recommendation to be changed;

(ii) If the recommendation is to issue the permit, the final EIS shall recommend the actions, if any, which the permittee should take to prevent or minimize any adverse environmental impacts;

(3) The Regional Administrator, to the extent allowed by law, shall issue, condition (other than imposing effluent limitations), or deny the new source NPDES permit following a complete evaluation of any significant beneficial and adverse impacts of the proposed action and a review of the recommendations contained in the EIS or finding of no significant impact.

(d) *Effect of compliance with new source performance standards.* (The provisions of this paragraph do not apply to existing sources which modify their pollution control facilities or construct new pollution control facilities and achieve performance standards, but which are neither new sources or new dischargers or otherwise do not meet the requirements of this paragraph.)

(1) Except as provided in paragraph (d)(2) of this section, any new discharger, the construction of which commenced after October 18, 1972, or new source which meets the applicable promulgated new source performance standards before the commencement of discharge, may not be subject to any more stringent new source performance standards or to any more stringent technology-based standards under section 301(b)(2) of CWA for the soonest ending of the following periods:

(i) Ten years from the date that construction is completed;

(ii) Ten years from the date the source begins to discharge process or other nonconstruction related wastewater; or

(iii) The period of depreciation or amortization of the facility for the purposes of section 167 or 169 (or both) of the Internal Revenue Code of 1954.

(2) The protection from more stringent standards of performance afforded by paragraph (d)(1) of this section does not apply to:

(i) Additional or more stringent permit conditions which are not technology based; for example, conditions based on water quality standards, or toxic effluent standards or prohibitions under section 307(a) of CWA; or

(ii) Additional permit conditions in accordance with §125.3 controlling toxic pollutants or hazardous substances which are not controlled by new source performance standards. This includes permit conditions controlling pollutants other than those identified as toxic pollutants or hazardous substances when control of these pollutants has been specifically identified as the method to control the toxic pollutants or hazardous substances.

(3) When an NPDES permit issued to a source with a "protection period" under paragraph (d)(1) of this section will expire on or after the expiration of the protection period, that permit shall require the owner or operator of the source to comply with the requirements of section 301 and any other then applicable requirements of CWA immediately upon the expiration of the protection period. No additional period for achieving compliance with these requirements may be allowed except when necessary to achieve compliance with requirements promulgated less than 3 years before the expiration of the protection period.

(4) The owner or operator of a new source, a new discharger which commenced discharge after August 13, 1979, or a recommencing discharger shall install and have in operating condition, and shall "start-up" all pollution control equipment required to meet the conditions of its permits before beginning to discharge. Within the shortest feasible time (not to exceed 90 days), the owner or operator must meet all permit conditions. The requirements of this paragraph do not apply if the owner or operator is issued a permit containing a compliance schedule under §122.47(a)(2).

(5) After the effective date of new source performance standards, it shall be unlawful for any owner or operator of any new source to operate the source in violation of those standards applicable to the source."

2. Regulatory Definitions Applicable to Indirect Dischargers

40 CFR 403.3(m)

(1) The term New Source means any building, structure, facility or installation from which there is or may be a Discharge of pollutants, the construction of which commenced after the publication of proposed Pretreatment Standards under section 307(c) of the Act which will be applicable to such source if such Standards are thereafter promulgated in accordance with that section, provided that:

(i) The building, structure, facility or installation is constructed at a site at which no other source is located; or

(ii) The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

(iii) The production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.

(2) Construction on a site at which an existing source is located results in a modification rather than a New Source if the construction does not create a new building, structure, facility or installation meeting the criteria of paragraphs (m)(1)(ii) or (m)(1)(iii) of this section, but otherwise alters, replaces, or adds to existing process or production equipment.

(3) Construction of a new source as defined under this paragraph has commenced if the owner or operator has:

(i) Begun, or caused to begin as part of a continuous onsite construction program:

(A) Any placement, assembly, or installation of facilities or equipment; or

(B) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

(ii) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph." *[40 CFR § 403.3(m)]*

Appendix B
New Source Dates
by Effluent Guideline Category

EPA has promulgated regulations under the Clean Water Act (CWA) that establish effluent limitations guidelines for existing sources, standards of performance for new sources and pretreatment standards for new and existing sources. EPA has codified these regulations at 40 CFR. Subchapter N. EPA has published effluent guidelines for 56 major industrial categories (over 450 subcategories) since the passage of the 1972 CWA. These regulations limit the discharge of pollutants to surface waters by point source dischargers ("direct dischargers"). These regulations also limit the introduction of pollutants into publicly owned treatment works (POTWs) by industrial users ("indirect dischargers"). The CWA and EPA regulations define when a source is a "new source." A discharger is defined as a "new source" in CWA sections 306(a)(2) and 307(c) and 40 CFR 122.2 (for direct dischargers) and 403.3(m) (for indirect dischargers). In general, a facility is a "new source" if it commences construction after either the date of promulgation of pretreatment standards for new sources applicable to an indirect discharger or the date of publication of a proposed pretreatment standards for new sources applicable to an indirect discharger.

The table below lists new source dates for direct or indirect dischargers based on regulatory definitions. In some cases, effluent guidelines in 40 CFR Chapter I, Subchapter N, specify New Source Dates, and these dates are reported in the table below. If dates are not specified in the rule language, EPA relied on the regulatory definitions of "New Source," which are cited above. Pretreatment regulations state that the New Source date for indirect dischargers is the date on which EPA publishes the proposed rule, as long as the proposed standard is later finalized (40 CFR 403.3(m)). For direct dischargers, 40 CFR 122.2 states that the New Source date is the proposal date if the standard is finalized within 120 days after its proposal; otherwise, the New Source date is the "promulgation date." According to February 1985 EPA regulations, the "promulgation date" is the date on which the rule is promulgated for the purposes of judicial review, which is two weeks after the rule appears in the Federal Register (see 40 CFR 23.2). Prior to February 1985, the date on which the final rule was published was considered the promulgation date.

This document is not a regulation itself, nor does it substitute for any requirements under the CWA or EPA's regulations. Thus, it does not impose legally binding requirements on EPA, states or the regulated community. While EPA has made every effort to ensure the accuracy of this table, dischargers' obligations are determined, in the case of direct dischargers, by the terms of their NPDES permit and the CWA and EPA's regulations, and, in the case of indirect dischargers, by permits or equivalent control mechanisms issued to POTW industrial users and the CWA and EPA regulations. Nothing in this document changes any statutory or regulatory requirement. In the event of a conflict between the discussion in this memorandum and any permit or regulation, this document would not be controlling.

40 CFR Part	Category	New Source Date for Direct Dischargers	New Source Date for Indirect Dischargers
467	Aluminum Forming	Subparts A-F: 10/24/83	Subparts A-F: 11/22/82
427	Asbestos Manufacturing	Subparts A-K: 10/30/73[1]	Not Applicable
461	Battery Manufacturing	Subparts A-G: 3/9/84	Subparts A-G 11/10/82
407	Canned and Preserved Fruits and Vegetables Processing	Subparts A-H: 3/21/74	Not Applicable

[1] The rule was finalized within 120 days of its October 30, 1973, proposal (38 FR 22606).

40 CFR Part	Category	New Source Date for Direct Dischargers	New Source Date for Indirect Dischargers
408	Canned and Preserved Seafood Processing	Subparts A-J, N: 6/26/74 Subparts O-AG: 12/1/75	Not Applicable
458	Carbon Black Manufacturing	Subparts A-D: 1/9/78	Subparts A-D: 5/18/76
411	Cement Manufacturing	Subparts A-C: 2/20/74	Not Applicable
437	Centralized Waste Treatment (CWT)	Subparts A-D: 1/5/01	Subparts A-D: 1/13/99
434	Coal Mining	Subparts B-E, H 5/4/84[2] Subpart G 2/22/02[3]	Not Applicable
465	Coil Coating	Subparts A-C: 12/1/82 Subpart D: 11/17/83	Subparts A-C: 1/12/81 Subpart D: 2/10/83
412	Concentrated Animal Feeding Operations (CAFO)	Subparts A-B: 2/14/74 Subparts C-D: 4/14/03[4]	Subpart B: 9/7/73
451	Concentrated Aquatic Animal Production	Subparts A-B: 9/7/04	Not Applicable
468	Copper Forming	Subpart A: 8/15/83	Subpart A: 11/12/82
405	Dairy Products Processing	Subparts A-L: 5/28/74	Not Applicable
469	Electrical and Electronic Components	Subparts A-B: 4/8/83 Subparts C-D: 12/14/83	Subparts A-B: 8/24/82 Subparts C-D: 3/9/83
413	Electroplating	Not Applicable[5]	See Metal Finishing[6]
457	Explosives Manufacturing	Not Applicable	Not Applicable
424	Ferroalloy Manufacturing	Subparts A-C: 2/22/74	Not Applicable
418	Fertilizer Manufacturing	Subparts A-D: 4/8/74 Subpart E: 1/16/76 Subparts F-G: 10/7/74[7]	Subparts A-D:[8] 12/7/73 Subpart E: 1/16/76 Subparts F-G: 10/7/74

[2] The New Source date is specified in 40 CFR 434.11(j)(1).
[3] The New Source date is specified in 40 CFR 434.11(j)(1).
[4] New Source date derived from the 10-year protection period (see 40 CFR 412.35(d) and 412.43(d)).
[5] Direct dischargers formerly regulated under Part 413 are now regulated under Part 433 (metal finishing).
[6] Pretreatment categorical standards in Part 413 currently apply only to job shop electroplaters and independent printed circuit board manufacturers that were in existence before the New Source date for Part 433 (metal finishing). Job shop electroplaters and independent printed circuit board manufacturers that are "New Sources" must comply with PSNS in Part 433. Except for these "existing" job shop electroplaters and independent printed circuit board manufacturers, all other operations formerly subject to Part 413 are now subject to Part 433.

40 CFR Part	Category	New Source Date for Direct Dischargers	New Source Date for Indirect Dischargers
426	Glass Manufacturing	Subpart A: 1/22/74 Subparts B-D: 2/14/74 Subparts E-G: 2/14/74 Subparts H, J-M: 1/16/75	Subparts H, K-M: 8/21/74
406	Grain Mills	Subparts A-J: 12/4/73[9]	Subparts A: 12/4/73
454	Gum and Wood Chemicals	Not Applicable	Not Applicable
460	Hospitals	Not Applicable	Not Applicable
447	Ink Formulating	Subpart A: 7/28/75	Subpart A: 2/26/75
415	Inorganic Chemicals	Subparts B-F, H, K-N, P, Q, T, V, W, AJ [$CuSO_4$ manufacturing], AH, AP, AU [$NiSO_4$ manufacturing], BB: 6/29/82 Subparts AJ [except $CuSO_4$ manufacturing], AU [except $NiSO_4$ manufacturing], BL - BO: 8/22/84	Subparts B - F, H, K-N, P, Q, V, AH, AJ [$CuSO_4$ manufacturing], AP, AU [$NiSO_4$ manufacturing], BB: 7/24/80 Subparts T, AA, AC, AE, AI, AJ [except $CuSO_4$ manufacturing], AL, AN, AQ, AR, AU [except $NiSO_4$ manufacturing],AX, BC, BH, BK-BO: 10/25/83
420	Iron and Steel Manufacturing	Subparts A & B: 11/18/02[10] Subpart C: 5/27/82 Subpart D, Semi-Wet: 10/31/02 Subpart D, Other: 5/27/82 Subparts E-L: 5/27/82 Subpart M: 10/31/02	Subparts A & B: 11/18/02[11] Subpart C: 1/7/81 Subpart D, Semi-Wet: 12/27/00 Subpart D, Other: 1/7/81 Subparts E-F,H-J,L: 1/7/81 Subpart M: 12/27/00
445	Landfills	Subparts A-B: 2/2/00	Not Applicable

[7] The rule was finalized within 120 days of its October 7, 1974, proposal.
[8] Section 41 8.46 (the PSNS under Subpart D) was suspended until further notice, at 40 FR 26275, June 23, 1975, effective July 20, 1975.
[9] The rule was finalized within 120 days of its December 4, 1973, proposal (38 FR 33438).
[10] Date specified in 40 CFR 420.14(a)(2), 420.16(a)(2), 420.24(b), and 420.26(a)(2).
[11] See previous footnote.

40 CFR Part	Category	New Source Date for Direct Dischargers	New Source Date for Indirect Dischargers
425	Leather Tanning and Finishing	Subparts A, B, D-I: 11/23/82 Subpart C: 4/4/88	Subpart A, B, D-I: 7/2/79 Subpart C: 1/21/87
432	Meat and Poultry Products	Subparts A-D: Small Facilities: 2/28/74[12] Others: 9/22/04 Subparts E-I: Small Facilities: 1/3/75[13] Others: 9/22/04 Subpart J-L: 9/22/04	Not Applicable
433	Metal Finishing	Subpart A: 7/15/83	Subpart A: 8/31/82
464	Metal Molding and Casting	Subparts A-D: 11/13/85	Subparts A-D: 11/15/82
438	Metal Products and Machinery	Subpart A: 6/12/03[14]	Not Applicable
436	Mineral Mining and Processing	Not Applicable	Not Applicable
471	Nonferrous Metals Forming and Metal Powders	Subparts A-J: 9/6/85	Subparts A-J: 3/5/84
421	Nonferrous Metal Manufacturing	Subparts B-I (except molybdenum acid plants), K-M: 3/8/84 Subparts N-AE, molybdenum acid plants in subpart I: 10/4/85 Subpart J: 2/4/88	Subparts B-I (except molybdenum acid plants), K-M: 2/17/83 Subparts N-AE, molybdenum acid plants in subpart I: 6/27/84 Subpart J: 1/22/87
435	Oil and Gas Extraction[15]	Subparts C (Onshore), D (Coastal), and E (Agriculture & Wildlife): 3/4/93 Subparts A and D (Synthetic-Based Drilling Fluids): 2/5/01	Subpart D: 2/17/95

[12] The 2004 Amendment did not revise NSPSs for small meat products facilities in Subparts A-I, so the 2004 New Source date does not affect these facilities.
[13] See previous footnote.
[14] Date specified in 40 CFR 438.15.
[15] See promulgated standards at 40 CFR 58 FR 12505 and 66 FR 6850 for complete information on the applicability of New Source standards.

40 CFR Part	Category	New Source Date for Direct Dischargers	New Source Date for Indirect Dischargers
440	Ore Mining and Dressing	Subparts A-F, J, M 12/3/82	Not Applicable
414	Organic Chemicals, Plastics, and Synthetic Fibers	Subparts B-H: 11/19/87	Subparts B-H: 3/21/83
446	Paint Formulating	Subpart A: 7/28/75	Subpart A: 2/26/75
443	Paving and Roofing Materials (Tars and Asphalt)	Subparts A-D: 7/28/75	Subparts A-D: 1/10/75
455	Pesticide Chemicals	Subparts A-B: 10/12/93 Subparts C, E: 11/20/96	Subparts A-B: 4/10/92 Subparts C, E: 4/14/94
419	Petroleum Refining	Subparts A-E: 10/18/82	Subparts A-E: 12/21/79
439	Pharmaceutical Manufacturing	Subparts A-D: 11/20/98[16]	Subparts A-D: 5/2/95
422	Phosphate Manufacturing	Subparts D-F: 6/23/76	Not Applicable
459	Photographic	Not Applicable	Not Applicable
463	Plastics Molding and Forming	Subparts A-C: 12/17/84	Not Applicable
466	Porcelain Enameling	Subparts A-D: 11/24/82	Subparts A-D: 1/27/81
430	Pulp, Paper, and Paperboard	Subparts B, E: 6/15/98[17] Subparts A, C, D, F, G, I-L: 11/18/82	Subparts B, E: 12/17/93 Subparts A, C, D, F, G, I-L: 1/6/81
428	Rubber Manufacturing	Subparts A-D: 2/21/74 Subparts E-J: 1/10/75	Subparts E-K: 8/23/74
417	Soap and Detergents Manufacturing	Subparts A-S: 4/12/74	Subpart Q: 12/26/73 Subparts O,P,R: 2/20/75
423	Steam Electric Power Generation	11/19/82[18]	10/14/80
409	Sugar Processing	Subpart A: 1/31/74 Subparts B, C: 12/7/73[19]	Not Applicable

[16] New Source date derived from the 10-year protection period (see 40 CFR 439.15(c), 439.35(c), and 439.45(b)).
[17] Date specified in 40 CFR 430.25(b) and 430.55(b). Refer to these sections for additional information regarding the applicability of NSPSs.
[18] NSPS promulgated were not removed via the 1982 regulation; therefore wastewaters generated by Part 423-applicable sources that were New Sources under the 1974 regulations are subject to the 1974 NSPS. The New Source date for the 1974 regulations was 10/8/1974.
[19] The rule was finalized within 120 days of its December 7, 1973, proposal (38 FR 33846).

40 CFR Part	Category	New Source Date for Direct Dischargers		New Source Date for Indirect Dischargers	
410	Textile Mills	Subparts A-I:	9/2/82	Not Applicable	
429	Timber Products Processing	Subparts A-P:	1/26/81	Subparts F-H:	10/31/79
442	Transportation Equipment Cleaning	Subparts A-D:	8/28/00	Subparts A-C:	6/25/98
444	Waste Combustors	Subpart A:	2/10/00	Subpart A:	2/6/98