



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3188

WATER DIVISION

MEMORANDUM

SUBJECT: Endangered Species Act Section 7(d) Determination with Respect to the Issuance of the 2019 NPDES General Permit for Offshore Seafood Processors in Alaska

FROM: Daniel D. Opalski, Director *Angela Chung*
Water Division, EPA Region 10 *for*

TO: The File

The EPA has determined that the issuance of the 2019 National Pollutant Discharge Elimination System (NPDES) General Permit for Offshore Seafood Processors in Alaska (2019 Permit) pending completion of consultation with the National Marine Fisheries Service (NMFS) is consistent with Section 7(d) of the Endangered Species Act (ESA).

After initiation of consultation, Section 7(d) of the ESA prohibits a Federal agency from making irreversible or irretrievable commitments of resources that have the effect of foreclosing the formulation or implementation of reasonable and prudent alternatives which would not violate Section 7(a)(2) of the Endangered Species Act.

On June 4, 2019, EPA completed informal consultation with U.S. Fish and Wildlife Service (FWS). However, the EPA's consultation with the National Marine Fisheries Service (NMFS) is ongoing, and the Agency does not expect to complete consultation until after the EPA issues the 2019 Permit. The central species of concern in this consultation process is the Western Distinct Population Segment (DPS) of the Steller Sea Lion (SSL), which has been listed as endangered. More information about the consultation process and 2019 Permit is provided in the Background and Consultation with NMFS section below.

The previous permit expired on February 28, 2019. Since the previous permit is expired, no new Permittees may apply for coverage under the administratively continued status. Therefore, in order to ensure that any potential new Permittee can obtain permit coverage, the EPA must ensure that the current permit is available. The EPA initiated ESA consultation by sending an initial biological evaluation (BE) to NMFS over a year ago. As discussed further below, the EPA most recently sent a revised BE to NMFS that utilized the best available scientific information to evaluate threats to the Western DPS of the SSL and concluded that the permit action is not likely to adversely affect the species. After working with NMFS for over a year to refine the 2019 Permit and adding enhancements to the Permit to further mitigate impacts to SSLs within the action area, the EPA has decided to issue the 2019 Permit while completion of consultation with NMFS is pending. Once consultation is completed, the EPA will consider additional permit modification that may be warranted to further protect the Western DPS SSL, if any.

This memorandum provides background information on the EPA's consultation with NMFS and the rationale for the EPA's Section 7(d) consistency determination.

Background and Consultation with NMFS

The issuance of the 2019 Permit will replace the expired 2009 Permit. In the 2009 Permit, the EPA applied the Seafood Processing Effluent Limitation Guidelines (ELGs) in 40 CFR Part 408 for "remote" Alaskan locations to the offshore Alaskan seafood processors. The ELGs require processors to "grind solid seafood processing wastes to 0.5 inch or smaller in any dimension prior to discharge." This provision was in the 2009 Permit, which was the first issuance of a separate NPDES permit for offshore seafood processors in Alaska. Prior to the 2009 Permit, the provision was in the combined EPA shore-based/onshore/offshore NPDES permit for Alaska seafood processors.

In 2013, the Freezer Longline Coalition petitioned the EPA regarding the grinding requirement which prompted the EPA to review the administrative record for the development of the remote Alaska Seafood Processing ELGs. After reviewing the record, the EPA found that at the time the ELGs were promulgated, the offshore seafood processing industry was in its infancy. Thus, this part of the sector was not evaluated when determining what was technologically and economically feasible. The EPA concluded that the remote Alaska shore-based seafood processing ELGs, which include the half inch size requirement, were not applicable to offshore seafood processors. As such, there are no applicable ELGs for the offshore seafood processing sector in Alaska.

To investigate the possible effects of not grinding seafood waste before discharge, the EPA conducted a literature review, spoke with professionals in the field of water quality in the Bering Sea and Gulf of Alaska, and spoke with representatives from FWS and NMFS. Based on this research, the EPA concluded that impacts to the seafloor, water column, nutrient balances, and dissolved oxygen levels would be insignificant if the EPA discontinued the grinding requirement in offshore Alaska waters. The Bering Sea is a uniquely dynamic and well-oxygenated system, with a thriving benthic crab fishery. Instead, any ecological impacts related to discharging unground seafood waste would likely occur at the surface. Results of the investigation concluding that impacts to the seafloor and water quality from the discharge of whole or ground fish are expected to be fairly minimal were documented in a letter dated August 4, 2016 from the EPA to the Freezer Longline Coalition.

The EPA found that while grinding has been shown to increase the rate of settling and dispersion, the overall effects of discontinuing the grinding requirement in the Alaskan Ocean is likely to be minimal for the following reasons:

- The offshore waters of the Bering Sea and Gulf of Alaska provide for highly turbulent and rapid mixing of the effluent. The combination of wind, tide and water depth greatly increases mixing and dispersion of discharges both whole and ground. This also minimizes concentrated oxygen consumption, sedimentation of solids, and potential impact on sea life and water quality.

- There is expected to be some removal of material from the water column by consumption or transformation (decay or loss).
- This Permit includes a BMP requiring vessels to be moving while discharging unless doing so would compromise the safety of the vessel. This BMP is expected to promote the dispersion of wastes and minimize accumulation on the sea floor.
- The 2009 ODCE included a modeling study which estimated the depth of accumulation at the sea floor from discharging ground effluent to be 0.5 centimeters deep.

In March 2018, Congress passed the Omnibus Agreement for Remainder of Fiscal Year 2018 (FY18 Omnibus) which contained the following recommendation regarding the implementation of the Alaska Seafood Processing ELGs in onshore and offshore Alaskan waters:

Under a Clean Water Act general permit, onshore seafood processors in Alaska are allowed to grind and discharge seafood waste. The permit requires that all seafood waste be ground to a size of no more than one-half inch in any dimension. Unfortunately, in some instances, the best available technology is unable to achieve a half inch grind dimension on a consistent basis due to the malleable nature of fish waste. The Agency should develop a policy to ensure that fish processors using the best available technology and/or best conventional practice will be considered in compliance. Additionally, processing vessels operating in waters off-shore of Alaska are subject to the same one-half inch grinding requirement even though there are no documented water quality issues that require such grinding. The Agency should exempt offshore processing vessels from the requirement.

On July 10, 2018, the EPA sent NMFS an initial BE for the Permit and requested informal ESA consultation, stating that the permit action was not likely to adversely affect ESA-species under NMFS jurisdiction. At the time of initiation of consultation, the EPA had completed its re-evaluation of the grinding requirement and was preparing to propose a draft Permit that would authorize the discharge of whole (unground) fish waste across all waters in the action area. The EPA did however include measures in the Permit that would mitigate impacts to ESA-listed species. Following the request for informal consultation, NMFS expressed concerns that the permit action would increase take of the endangered Western DPS of SSLs by attracting animals to discharged whole fish waste (a primary prey species of the SSL), disrupting foraging behaviors, and increasing the likelihood of direct interactions with vessels and fishing gear.

As a result of NMFS' expressed concerns, the EPA considered the imposition of a permit requirement for all vessels to grind seafood waste (using a system designed and operated to grind to 0.5 inch or less) if discharging within SSL critical habitat areas. However, operators of smaller processing vessels that discharge less waste than the larger factory trawlers (i.e., freezer longliners as opposed to catcher processors) in Alaska expressed safety, economic, and logistical concerns if grinding was required in SSL critical habitat. Consequently, the EPA explored options to provide an exemption to smaller vessels. The EPA conducted an analysis using 2014 - 2016 annual report data and found that over the three reporting years, 83.3 percent of the total seafood processing discharge volume was attributable to

vessels that discharged more than 10 million pounds per year. Consequently, the EPA determined that if a conditional grinding requirement were included in the permit using 10 million lbs/yr as the threshold, it could be reasonably expected that the bulk of permitted discharge would be subject to grinding requirements if operating in SSL critical habitat areas. The EPA shared this analysis with NMFS on February 20, 2019, and subsequently revised the Draft Permit prior to public notice to include a conditional grinding requirement under which only vessels that discharge more than 10 million lbs/yr would be subject to grinding requirements if discharging in SSL critical habitat areas.

On March 31, 2019, NMFS provided the EPA with SSL project stressors and suggested mitigation measures. The EPA included those mitigation measures in the Fact Sheet for the Permit and made the Fact Sheet, draft Permit, Ocean Criteria Discharge Evaluation (ODCE), and associated draft Permit forms available for public comment from March 25, 2019 to May 9, 2019. The EPA received three sets of public comments from the Freezer Longline Coalition, the At-Sea Processors Association, and the Groundfish Forum. The comments indicated general support for the permit, as proposed, however, the Freezer Longline Coalition opposed inclusion of any SSL mitigation measures in the Final Permit.

On June 1, 2019, NMFS provided the EPA with draft Reasonable and Prudent Measures (RPMs) and a draft Incidental Take Statement. In addition, NMFS has relayed to the EPA that the draft RPMs that were provided to the Agency are the only RPMs that would be set forth in a biological opinion (BO). However, NMFS also explained to the EPA that it would not be able to provide the EPA with a final BO and Incidental Take Statement by the date in which the EPA intended on issuing the Permit. As a result of this communication, the EPA has included the draft RPMs in the Permit, which has resulted in changes to the Sea Surface Visual Monitoring Requirements in the Permit, and a change to the Effluent Limitation Requirement concerning grinding.

The chronology below summarizes the EPA's engagement with NMFS throughout the Permit development process.

Chronology

- July 10, 2018: the EPA requested informal ESA consultation with NMFS and provided a Biological Evaluation (BE) with not likely to adversely affect determinations for all ESA-species identified by NMFS.
- August 20, 2018: NMFS acknowledged receipt of EPA's request.
- February 20, 2019: EPA shared analysis with NMFS regarding percentage of vessels and percentage of discharge in relation to 10 million/lb threshold.
- March 11, 2019: Conference call with NMFS to discuss implications of conditional grinding requirement on SSLs.
- March 13, 2019: NMFS provided the EPA with SSL project stressors and suggested mitigation measures.
- March 25, 2019 – May 9, 2019: the EPA published Federal Register Notice and took public comments on the Draft Permit. NMFS' suggested mitigation measures for SSLs were included in the Fact Sheet for public comment.

- April 1, 2019: the EPA sent a revised BE to NMFS which included information about the conditional grinding requirement in SSL critical habitat area, as well as a new request for informal consultation.
- April 8, 2019: NMFS Alaska sent EPA informal comments on the revised BE.
- May 2019: the EPA received public comments from the Freezer Longline Coalition, the At-Sea Processors Association, and the Groundfish Forum. The Freezer Longline Coalition opposed inclusion of any SSL mitigation measures in the Final Permit.
- May 21, 2019: The EPA sent NMFS a BE that was revised in response to NMFS' informal comments, as well as draft language reflecting enhancements to the Sea Surface Visual Monitoring Requirements in the Permit.
- June 1, 2019: NMFS sent the EPA draft Reasonable and Prudent Measures (RPMs) and Terms and Conditions for the Incidental Take Statement for their ESA section 7 consultation.

EPA's Rationale for Section 7(d) Determination

The EPA's decision to issue this permit is consistent with Section 7(d) of the ESA because in taking the action, EPA is not making any irreversible or irretrievable commitment of resources which has the effect of foreclosing either the formulation by NMFS, or the implementation by EPA, of any reasonable and prudent alternative measures that might be determined after the consultation to be necessary to comply with Section 7(a)(2) of the ESA. See 16 U.S.C. 1536 § 7(d). Although the EPA has no reason to believe that the permit is likely to jeopardize listed species or adversely modify critical habitat, and specifically, adversely impact the Western DPS SSL, if further consultation with NMFS were to reveal new information that the EPA determines warrants modification to the permit to protect listed species or critical habitat, the EPA has authority to take appropriate action to modify the permit pursuant to 40 CFR §122.62(a)(2). Thus, EPA's issuance of the permit does not involve an irreversible or irretrievable commitment of resources since the permit can be modified. Moreover, the EPA does not believe that issuing this permit pending the completion of consultation poses risks of impacts to Western DPS SSLs. The following sections explain in more detail elements of EPA's rationale for making a Section 7(d) determination.

Biological Evaluation and Best-Available Information

In the revised BE, the EPA thoroughly documents SSL life history and ecology, population trends and risks, critical habitat areas, behaviors, and direct and indirect threats associated with fishing activities, while also discussing prudent measures that must be taken by Permittees as a result of the 2019 Permit requirements to minimize impacts to the SSLs, and specifically the Western DPS SSL, in the action area. The EPA has received qualitative, anecdotal information from NMFS that unground discharges are more likely to attract SSLs and lead to increased take. However, to date, the EPA has not found or been presented with conclusive information affirming that unground fish waste is more attractive to SSLs. Further, in comments received on the draft Permit, the EPA received anecdotal information from the industry that SSLs are rarely encountered when fishing and processing are occurring in the permit action area., The EPA relied on the best-available scientific information to evaluate any potential/probable impacts to the Western DPS SSL, and came to the determination that the permit action is not likely to

adversely affect the species. Further, the Permit requires Permittees to provide the EPA with information/data during the Permit cycle that will help better characterize any interaction between SSLs and the discharge, and inform future permit issuance decisions. As previously noted, should information come to light that merits reconsideration of this determination, the EPA may modify the permit.

Measures in the Permit to Minimize Impacts to SSLs and other ESA-listed Species

Grinding Requirements for Certain Vessels Discharging in SSL Critical Habitat: Prior to receipt of NMFS' draft RPMs, the draft Permit required:

“If discharging in Steller sea lion critical habitat, permittees that discharge greater than 10 million pounds of seafood processing waste per annual report year must send all solid seafood processing wastes through a properly maintained and operating grinder system. The grinding system must be designed and operated to grind solids to 0.5 inch or smaller prior to discharge. A Permittee is determined to discharge greater than 10 million pounds according to their annual discharge as reported in their NOI. Critical habitat areas are designated by NMFS and identified in 50 CFR § 226.202 and Tables 1 and 2 to 50 CFR § 226.”

Based on EPA's analysis of permit data from 2014 – 2016, the EPA learned that while approximately 65% of vessels discharged less than 10 million pounds annually, approximately 80% of the fish waste was discharged from vessels that discharge more than 10 million pounds annually, leading the EPA to the conclusion that the bulk of the discharge would be ground across the permit action area under 2019 Permit requirements.

As a result of NMFS' draft RPMs, the 2019 Permit also includes the following additional Effluent Limitation Requirement in waters where the Western DPS SSL occurs:

“In all waters west of 144° west longitude, the discharge of any unground waste must cease whenever Steller sea lion(s) occur within 250 meters in any direction of the vessel(s). Discharge of unground waste may not resume until no Steller sea lions have been observed within 250 meters of the vessel for at least 15 consecutive minutes following the cessation of discharge of unground waste.”

Sea Surface Visual Monitoring Requirements (Section VI.C of Permit): Prior to receipt of NMFS' draft RPMs, the draft Permit included a daily sea surface visual monitoring program to record potential interactions between the discharge and ESA-listed species, including SSLs. However, as a result of the draft RPMs provided by NMFS, the sea surface visual monitoring program in the 2019 Permit has been modified to include a SSL-specific monitoring program with the following conditions:

- For all vessels in all areas, for any period of time that unground seafood waste is being discharged, vessels must:
 - Record the date and start and stop time of discharge(s);
 - Record the geographic coordinates of the vessel at the start and stop time of discharge(s);
 - Make observations within the 250 meter radius hemisphere astern of the vessel;

- Record the number, date, time, and location of observed Steller sea lions;
- Record whether Steller sea lions were engaged in foraging behavior(s) within the 250 meter radius;
- Record any lethal and non-lethal interactions between Steller sea lions and fishing gear, indicating the nature of the interaction, the date, time, and location of the contact, the number of animals interacting with the gear, the outcome of the interaction, the behavior of animals during the interaction, and whether entanglement or entrapment in gear either occurred or was suspected to have occurred; and
- Report all instances of aggressive behavior of Steller sea lions towards humans or vessels, noting the date, time, location, number of animals involved, and the nature and outcome of the aggressive interaction.

Observers may be vessels captain(s) or crew member(s) provided the individual(s) have a clear view of the waters astern of the vessel and are able to discern Steller sea lions at a distance of 250 meters

Unauthorized Discharges and SSLs (Section III.B of Permit): The Permit does not authorize the discharge of pollutants into certain waters that overlap with NMFS-designated critical habitat areas, including a discharge prohibition within 3 NM of a rookery or major haul-out area of the SSL as designated by NMFS in 50 CFR § 226.202 and Tables 1 and 2 to Part 226. This prohibition creates a buffer around important breeding and resting sites of the SSL.

Annual Reporting Requirements (Section VI.B of Permit): The Annual Report must include information about the number of days where discharge occurs in SSL critical habitat, which will provide the Agency with information about how often vessels operate and discharge within SSL critical habitat, and inform future permit issuance decisions.

Best Management Plan Requirement (Section VI.A): Permittees must prepare a best management plan to prevent or minimize the generation and discharge of wastes and pollutants from vessels.

Moving While Discharging (Section VI.A.j): Vessels must be discharging while moving unless doing so would jeopardize safety. This requirement will help to ensure that discharged seafood wastes are dispersed and do not form consolidated masses on the surface or in the water column that SSLs and other ESA-listed species may be attracted to.

Summary: On June 1, 2019, NMFS provided the EPA with draft RPMs and a draft Incidental Take Statement. The purpose of RPMs is to minimize the extent and the amount of incidental take. NMFS has relayed to the EPA that the draft RPMs that were provided to the Agency are the only RPMs that would be set forth in a biological opinion (BO). However, NMFS also explained to the EPA that it would not be able to provide the EPA with a final BO and Incidental Take Statement by the date in which the EPA intended on issuing the Permit. As a result of this communication, the EPA has included the draft RPMs in the Permit, which has resulted in changes to the Sea Surface Visual Monitoring Requirements in the Permit, and a change to the Effluent Limitation Requirement concerning grinding in SSL critical habitat.

Since the EPA is including the draft RPMs into the Permit and since NMFS has indicated that these are the only RPMs in the Permit, the EPA believes that inclusion of these provisions will significantly reduce the likelihood of a take of SSL. Moreover, since the EPA can modify the permit if additional RPMs or reasonable and prudent alternatives (RPAs) are included in the final BO, the EPA's decision to move forward with issuing the Permit does not foreclose the implementation of any alternatives that may result from the completion of ESA consultation.

Conclusion

As detailed above, in light of the EPA's BE, the substantial protections included in the 2019 Permit to mitigate impacts to ESA species, the inclusion of NMFS' draft RPMs in the Permit, the lack of interim risks of concern, and the EPA's ability to modify the permit should new information become available, the EPA has determined that issuance of the 2019 Permit is consistent with Section 7(d) of the ESA.

Attachment

1. *Excerpt from the Draft Incidental Take Statement for the Biological Opinion on EPA's Proposed Reissuance of General Permit AKG524000 for Offshore Seafood Processors in Alaska 5/31/19*

**Excerpt from the Draft Incidental Take Statement for the Biological Opinion on
EPA's Proposed Reissuance of General Permit AKG524000
for Offshore Seafood Processors in Alaska
5/31/19**

Reasonable and Prudent Measures (RPMs)

“Reasonable and prudent measures” are nondiscretionary measures to minimize the amount or extent of incidental take (50 CFR 402.02). The RPMs included below, along with their implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed action. NMFS concludes that the following RPMs are necessary and appropriate to minimize or to monitor the incidental take of western DPS Steller sea lions resulting from the proposed action.

1. EPA must implement a monitoring and reporting program that allows NMFS to evaluate the amount or extent of interactions between listed species and vessels operating under this proposed permit.
2. EPA must include a condition in the proposed permit that reduces exposure of western DPS Steller sea lions to unground waste.

Terms and Conditions

“Terms and conditions” implement the RPMs (50 CFR 402.14). These must be carried out for the exemption in section 7(o)(2) to apply.

In order to be exempt from the prohibitions of section 9 of the ESA, EPA or any permittee must comply with the following terms and conditions, which implement the RPMs described above and the mitigation measures set forth in Section 2.1.2 of this opinion. EPA or any permittee has a continuing duty to monitor the impacts of incidental take and must report the progress of the action and its impact on the species as specified in this incidental take statement (50 CFR 402.14).

Partial compliance with these terms and conditions may result in more take than anticipated, and may invalidate this take exemption. These terms and conditions constitute no more than a minor change to the proposed action because they are consistent with the basic design of the proposed action.

- 1) To carry out RPM #1, EPA must undertake the following:
 - a) Include in the permit a condition requiring that the prescribed sea surface visual monitoring must include provisions that require permittees or their designee to observe the waters within the 250 m radius hemisphere astern of the vessel throughout periods of discharge, reporting the date, time, starting and stopping geographic coordinates, and time of each observation effort, the number of sea lions observed within that 250 m radius zone, and whether sea lions were observed engaged in foraging behavior while in that zone. Accounts of sea lion lethal and non-lethal interactions with fishing gear must also be recorded, indicating the nature of the interaction, the date, time, and location of the contact, the number of animals interacting with the gear, and the outcome of the

interaction, including sea lion behavior during and following gear interaction and whether entanglement or entrapment in gear occurred or was suspected to have occurred. All instances of aggressive behavior of sea lions towards vessels and humans must also be reported, noting the date, time, location, number of animals involved, and the nature and outcome of the aggressive interaction. Observers addressing this term and condition (1a) may be captains or crew members provided they have a clear view of the waters astern of the vessel, and are able to visually discern sea lions at a distance of 250 m.

- b) Prepare and submit annual monitoring reports that summarize information gathered in response to term and condition 1a for each calendar year. These reports will be submitted along with a queryable digital database containing all observer data described in term and condition 1a. Reports for each calendar year must be provided to the NMFS AKR Protected Resources Division by March 31 of the subsequent year.

- 2) To carry out RPM #2, EPA must undertake the following:

Include in the permit a condition requiring that, in waters west of 144° west longitude, the discharge of unground waste must cease whenever Steller sea lions occur within 250 meters of vessels operating under this proposed permit. Observers carrying out RPM #1 must monitor for Steller sea lion presence within 250 m of the vessel in any direction, and order the immediate cessation of discharge of unground waste until no Steller sea lions have been observed within 250 m of the vessel for at least 15 consecutive minutes following the cessation of discharge of unground waste.

The taking of any marine mammal in a manner other than that described in this ITS must be reported immediately to the NMFS Protected Resources Division at 907-271-5006 and to greg.balogh@noaa.gov.

In the event that serious injury or death of Steller sea lions associated with the implementation of the proposed permit exceeds the take authorized for this action (see Table 3), EPA must immediately reinitiate consultation with NMFS.